

ANEXOS

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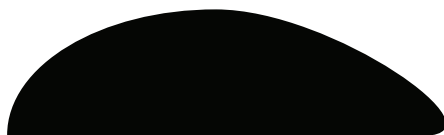
ANEXO A - NORMAS DE IDENTIDADE

Aqui serão apresentadas as principais regras e normas recomendadas para o uso da identidade da plataforma FLOCK. Este manual serve para consulta rápida de parâmetros técnicos a serem usados. O conceito e a decisão das escolhas é feita no **Capítulo 4 - Desenvolvimento projectual** da tese que este documento complementa.

FORMA

Pretendendo criar a metáfora de bando de pássaros, com uma dualidade simbólica para livros abertos, procurou-se definir formas simples e elegantes, que simulassem uma hierarquia de pássaros em pleno vôo.

A forma básica usada para esse efeito é apresentada seguidamente.



Para criar a semelhança correcta a pássaros e livros, unem-se duas formas básicas invertidas horizontalmente da seguinte forma.



De forma a aproximar as formas ao conceito pretendido, aplica-se às duas formas um rotação de -10° e 10° respectivamente.



Para a segundo elemento aplica-se uma rotação de -20° e 20° respectivamente.

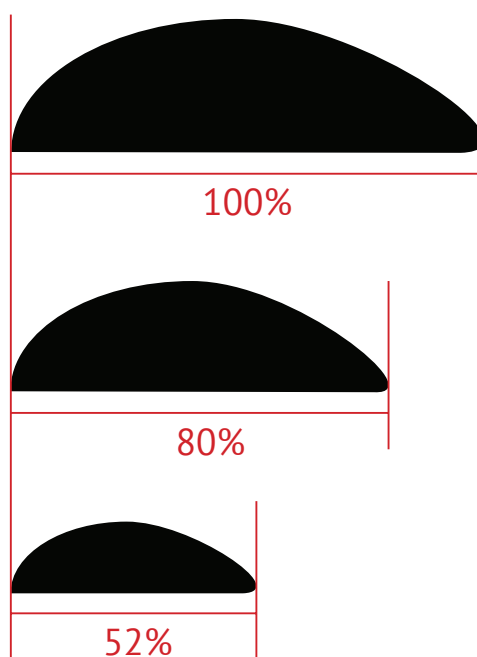


Para o terceiro elemento aplica-se uma rotação de -30° e 30° respectivamente.



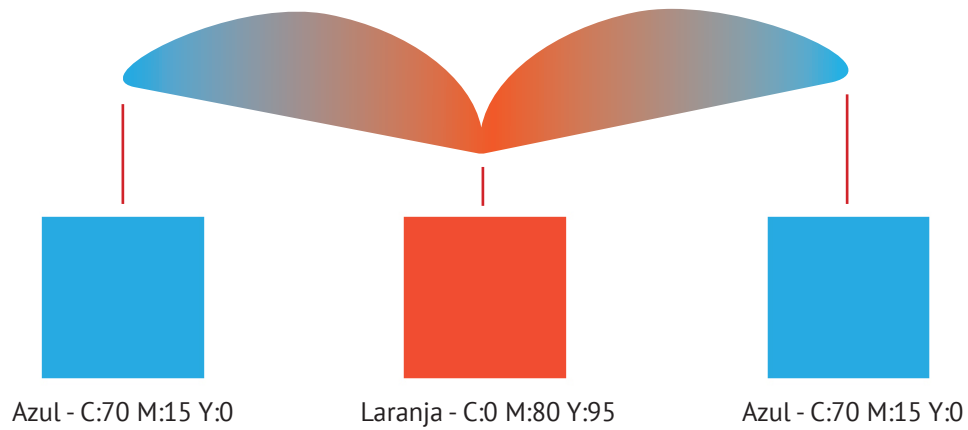
TAMANHOS

O tamanho das em unidades das formas é livre, mas as proporções entre os elementos é fixa. Se o primeiro tiver uma largura de 100 píxeis, a segunda deverá ter 80 píxeis e a terceira 52 píxeis.



COR

As cores escolhidas estão dispostas em gradiente da seguinte forma.

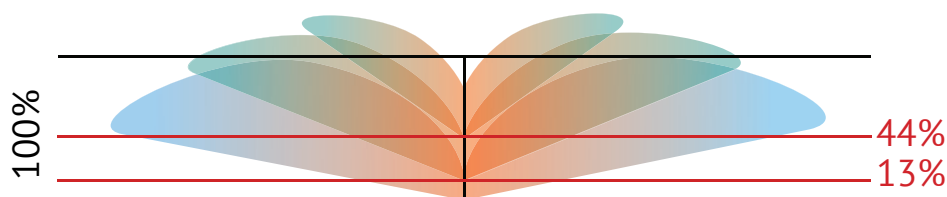


A disposição é igual em todos os elementos, independente das suas rotações. A todas as cores é aplicada uma transparência de 50%.



COMPOSIÇÃO

Tal como no tamanho, também a posição de todos os elementos é relativa à posição do primeiro elemento. Considere-se que o primeiro elemento tem uma altura de 100 píxeis então o segundo elemento deverá estar a uma elevação de 13 píxeis relativas à base do primeiro elemento, o terceiro elemento deverá ter uma elevação de 44 píxeis. Todos os elementos devem ser alinhados ao centro.



TIPOGRAFIA

O tipo de letra a ser sempre utilizado é o tipo Nunito. Deverá sempre ser usada o estilo Regular com um tom cinzento-escuro (C:69 M: 63Y:62 K:58).

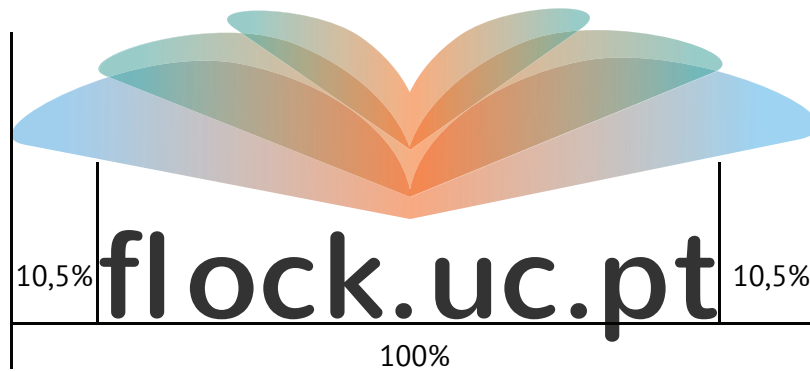
nunito

O nome que acompanha a identidade deverá sempre ser **flock.uc.pt**.

flock.uc.pt

Devido a ser usado única e exclusivamente para identidade gráfica da plataforma, não existe um tamanho fixo de caracteres. Assim o tamanho dos caracteres deve ser proporcional ao tamanho do elemento principal, deixando sempre uma margem horizontal de 10,5% em ambos os lados, e uma distância da base do elemento principal ao início da caixa de texto de 8% (da altura do primeiro elemento). A caixa de texto deve estar alinhada ao centro com os restantes elementos

O tipo de letra pode ser descarregado gratuitamente em: <http://www.google.com/webfonts/specimen/Nunito>.



FUNDOS CROMÁTICOS

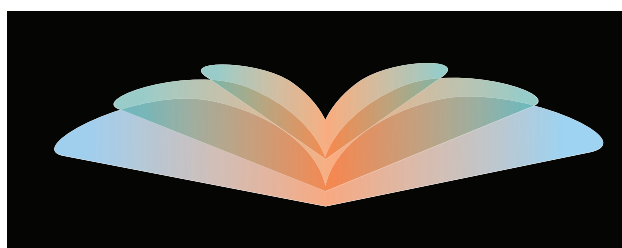
A identidade está otimizada para funcionar sobre um fundo de branco, embora a sua aplicação também possa ser concretizada num fundo mais escuro, como o preto, sendo apenas necessário alterar a cor do tipo de lettrar para branco. O seu uso em fundos coloridos é não é aconselhado, pois o facto de a identidade possuir mudanças de cores em gradientes pode resultar na completa falta de legibilidade da mesma.



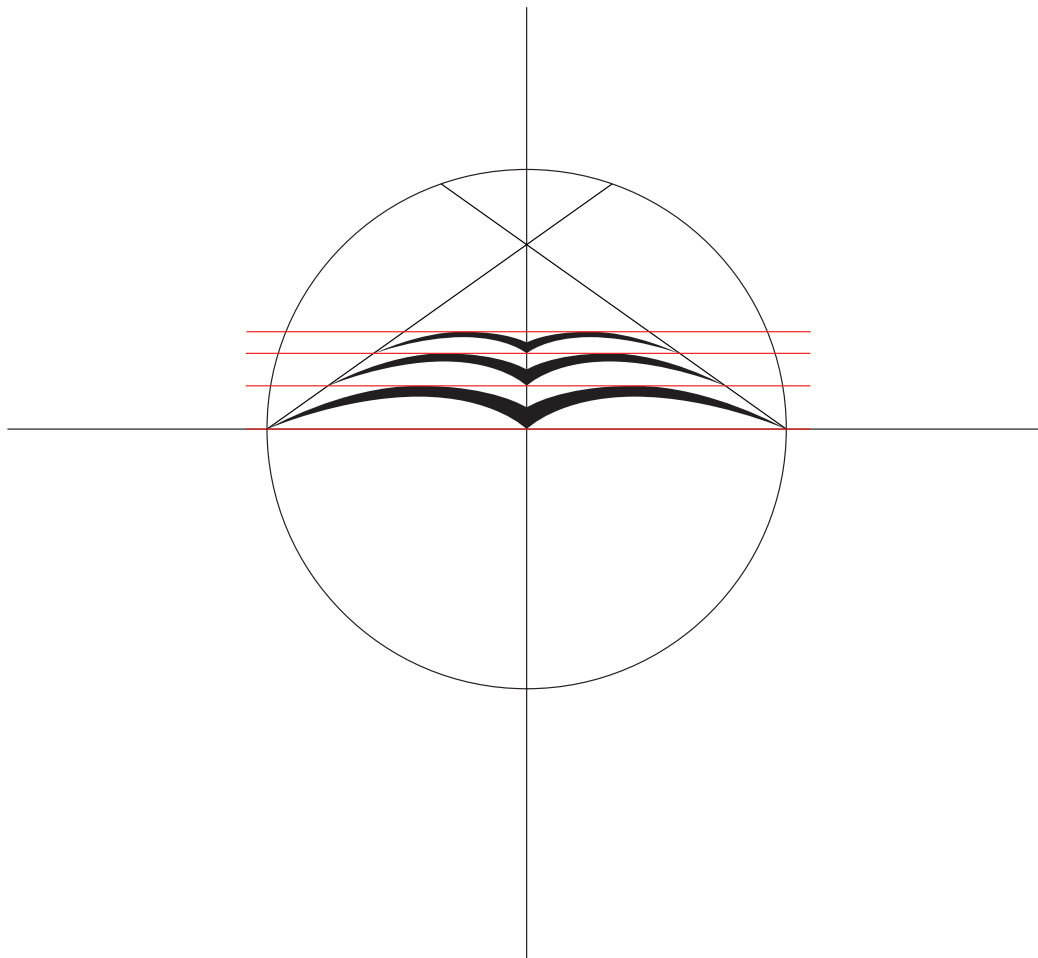
Em fundos completamente pretos é aconselhável o uso de um filtro branco com a mesma forma que a composição dos elementos, de forma evitar que a transparência das cores se misture com o fundo. No entanto essa aplicação é possível e válida.



O uso da composição sem o tipo de letra em uso também é uma possibilidade.



ANEXO B - IDENTIDADE DA PLATAFORMA (EXTRAS)



aller FLOCK
Flock
flock

droid FLOCK
Flock
flock

enriqueta FLOCK
Flock
flock

latin modern FLOCK
Flock
flock

liberation FLOCK
Flock
flock

yanone FLOCK
Flock
flock

FLOCK



flock

flock



flock



flock



FLOCK



flock



flock



flock







FLOCK.UC.PT



FLOCK.UC.PT



FLOCK.UC.PT



FLOCK.UC.PT

ANEXO C - DOCUMENTOS CSS E PHP

VERSION.PHP

```
<?php
// This file is part of Moodle - http://moodle.org/
//
// Moodle is free software: you can redistribute it and/or modify
// it under the terms of the GNU General Public License as published by
// the Free Software Foundation, either version 3 of the License, or
// (at your option) any later version.
//
// Moodle is distributed in the hope that it will be useful,
// but WITHOUT ANY WARRANTY; without even the implied warranty of
// MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
// GNU General Public License for more details.
//
// You should have received a copy of the GNU General Public License
// along with Moodle. If not, see <http://www.gnu.org/licenses/>.

/**
 * Theme version info
 *
 * @package theme
 * @subpackage flock
 * @copyright Miguel Delgado - FCTUC
 * @license http://www.gnu.org/copyleft/gpl.html GNU GPL v3 or later
 */

defined('MOODLE_INTERNAL') || die;

$plugin->version = 2012072200; // The current module version (Date:
YYYYMMDDXX)
$plugin->requires = 2011070100; // Requires this Moodle version
$plugin->component = 'theme_flock'; // Full name of the plugin (used for
diagnostics)
$PLUGIN->MATURITY = MATURITY_BETA;
$PLUGIN->RELEASE = '2';
```

SETTINGS.PHP

```
<?php

defined('MOODLE_INTERNAL') || die;

if ($ADMIN->fulltree) {

// Fullscreen Toggle
$name = 'theme_flock/width';
$title = get_string('width','theme_flock');
$description = get_string('widthdesc', 'theme_flock');
$default = 960;
$choices = array(960=>get_string('fixedwidth','theme_flock'), 97=>get_string('variablewidth','theme_flock'));
$setting = new admin_setting_configselect($name, $title, $description, $default, $choices);
$settings->add($setting);

// Gap Toggle
$name = 'theme_flock/gap';
$title = get_string('gap','theme_flock');
$description = get_string('gapdesc', 'theme_flock');
$default = 70;
$choices = array(70=>get_string('yesgap','theme_flock'), 45=>get_string('nogap','theme_flock'));
$setting = new admin_setting_configselect($name, $title, $description, $default, $choices);
$settings->add($setting);

// Graphic Wrap (Background Image)
$name = 'theme_flock/backimage';
$title=get_string('backimage','theme_flock');
$description = get_string('backimagedesc', 'theme_flock');
$setting = new admin_setting_configtext($name, $title, $description, '', PARAM_URL);
$settings->add($setting);

// Graphic Wrap (Background Position)
$name = 'theme_flock/backposition';
$title = get_string('backposition','theme_flock');
$description = get_string('backpositiondesc', 'theme_flock');
$default = 'no-repeat';
$choices = array('no-repeat'=>get_string('backpositioncentred','theme_flock'), 'no-repeat fixed'=>get_string('backpositionfixed','theme_flock'), 'repeat'=>get_string('backpositiontilled','theme_flock'));
$setting = new admin_setting_configselect($name, $title, $description, $default, $choices);
```

```

$settings->add($setting);

// Menu background colour setting
$name = 'theme_flock/backcolor';
$title = get_string('backcolor','theme_flock');
$description = get_string('backcolordesc', 'theme_flock');
$default = '#ffffff';
$previewconfig = NULL;
$setting = new admin_setting_configcolourpicker($name, $title, $description,
$default, $previewconfig);
$settings->add($setting);

// Logo file setting
$name = 'theme_flock/logo';
$title = get_string('logo','theme_flock');
$description = get_string('logodesc', 'theme_flock');
$setting = new admin_setting_configtext($name, $title, $description, '',
PARAM_URL);
$settings->add($setting);

// Menu background colour setting
$name = 'theme_flock/menubackcolor';
$title = get_string('menubackcolor','theme_flock');
$description = get_string('menubackcolordesc', 'theme_flock');
$default = '#333333';
$previewconfig = NULL;
$setting = new admin_setting_configcolourpicker($name, $title, $description,
$default, $previewconfig);
$settings->add($setting);

// Menu hover background colour setting
$name = 'theme_flock/menuhovercolor';
$title = get_string('menuhovercolor','theme_flock');
$description = get_string('menuhovercolordesc', 'theme_flock');
$default = '#f42941';
$previewconfig = NULL;
$setting = new admin_setting_configcolourpicker($name, $title, $description,
$default, $previewconfig);
$settings->add($setting);

// Profilebar custom block title setting

$name = 'theme_flock/profilebarcustomtitle';
$title = get_string('profilebarcustomtitle','theme_flock');
$description = get_string('profilebarcustomtitledesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);

```

```
$settings->add($setting);

// Profilebar custom block setting

$name = 'theme_flock/profilebarcustom';
$title = get_string('profilebarcustom','theme_flock');
$description = get_string('profilebarcustomdesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtmleditor($name, $title, $description,
$default);
$settings->add($setting);

// Email url setting

$name = 'theme_flock/emailurl';
$title = get_string('emailurl','theme_flock');
$description = get_string('emailurldesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Copyright setting

$name = 'theme_flock/copyright';
$title = get_string('copyright','theme_flock');
$description = get_string('copyrightdesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Disclaimer setting

$name = 'theme_flock/disclaimer';
$title = get_string('disclaimer','theme_flock');
$description = get_string('disclaimerdsc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtmleditor($name, $title, $description,
$default);
$settings->add($setting);

// Facebook url setting

$name = 'theme_flock/facebook';
$title = get_string('facebook','theme_flock');
$description = get_string('facebookdesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
```

```

$default);
$settings->add($setting);

// Twitter url setting

$name = 'theme_flock/twitter';
$title = get_string('twitter','theme_flock');
$description = get_string('twitterdesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Google+ url setting

$name = 'theme_flock/googleplus';
$title = get_string('googleplus','theme_flock');
$description = get_string('googleplusdesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Flickr url setting

$name = 'theme_flock/flickr';
$title = get_string('flickr','theme_flock');
$description = get_string('flickrdesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Picasa url setting

$name = 'theme_flock/picasa';
$title = get_string('picasa','theme_flock');
$description = get_string('picasadesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Tumblr url setting

$name = 'theme_flock/tumblr';
$title = get_string('tumblr','theme_flock');
$description = get_string('tumblrdesc', 'theme_flock');

```

```
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Blogger url setting

$name = 'theme_flock/blogger';
$title = get_string('blogger','theme_flock');
$description = get_string('bloggerdesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// LinkedIn url setting

$name = 'theme_flock/linkedin';
$title = get_string('linkedin','theme_flock');
$description = get_string('linkedindesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// YouTube url setting

$name = 'theme_flock/youtube';
$title = get_string('youtube','theme_flock');
$description = get_string('youtubedesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

// Vimeo url setting

$name = 'theme_flock/vimeo';
$title = get_string('vimeo','theme_flock');
$description = get_string('vimeodesc', 'theme_flock');
$default = '';
$setting = new admin_setting_configtext($name, $title, $description,
$default);
$settings->add($setting);

}
```


LIB.PHP

```
<?php
```

```
function flock_process_css($css, $theme) {

    // Set the width
    if (!empty($theme->settings->width)) {
        $width = $theme->settings->width;
    } else {
        $width = null;
    }
    $css = flock_set_width($css,$width);

    // Set the gap
    if (!empty($theme->settings->gap)) {
        $gap = $theme->settings->gap;
    } else {
        $gap = null;
    }
    $css = flock_set_gap($css,$gap);

    // Set the menu background color
    if (!empty($theme->settings->menubackcolor)) {
        $menubackcolor = $theme->settings->menubackcolor;
    } else {
        $menubackcolor = null;
    }
    $css = flock_set_menubackcolor($css, $menubackcolor);

    // Set the menu hover color
    if (!empty($theme->settings->menuhovercolor)) {
        $menuhovercolor = $theme->settings->menuhovercolor;
    } else {
        $menuhovercolor = null;
    }
    $css = flock_set_menuhovercolor($css, $menuhovercolor);

    // Set the background image for the graphic wrap
    if (!empty($theme->settings->backimage)) {
        $backimage = $theme->settings->backimage;
    } else {
        $backimage = null;
    }
    $css = flock_set_backimage($css, $backimage);

    // Set the graphic position
```

```

if (!empty($theme->settings->backposition)) {
    $backposition = $theme->settings->backposition;
} else {
    $backposition = null;
}
$scss = flock_set_backposition($scss,$backposition);

    // Set the background color
if (!empty($theme->settings->backcolor)) {
    $backcolor = $theme->settings->backcolor;
} else {
    $backcolor = null;
}
$scss = flock_set_backcolor($scss, $backcolor);

    // Set the background image for the logo
if (!empty($theme->settings->logo)) {
    $logo = $theme->settings->logo;
} else {
    $logo = null;
}
$scss = flock_set_logo($scss, $logo);

return $scss;
}

function flock_set_width($scss, $width) {
    $tag = '[[setting:width]]';
    $widthmargintag = '[[setting:widthmargintag]]';
    $replacement = $width;
    if (is_null($replacement)) {
        $replacement = '960';
    }
    if ( $width == "960" ) {
        $scss = str_replace($tag, $replacement.'px', $scss);
        $scss = str_replace($widthmargintag, ($replacement+5).'px',
$scss);
    }
    if ( $replacement == "97" ) {
        $scss = str_replace($tag, $replacement.'%', $scss);
    }
    return $scss;
}

function flock_set_gap($scss, $width) {
    $tag = '[[setting:gap]]';

```

```

$replacement = $width;
if (is_null($replacement)) {
    $replacement = '70';
}
if ( $width == "70" ) {
    $css = str_replace($tag, $replacement.'px', $css);
}
if ( $replacement == "45" ) {
    $css = str_replace($tag, $replacement.'px', $css);
}
return $css;
}

```

```

function flock_set_menubackcolor($css, $menubackcolor) {
    $tag = '[[setting:menubackcolor]]';
    $replacement = $menubackcolor;
    if (is_null($replacement)) {
        $replacement = '#333333';
    }
    $css = str_replace($tag, $replacement, $css);
    return $css;
}

```

```

function flock_set_menuhovercolor($css, $menuhovercolor) {
    $tag = '[[setting:menuhovercolor]]';
    $replacement = $menuhovercolor;
    if (is_null($replacement)) {
        $replacement = '#f42941';
    }
    $css = str_replace($tag, $replacement, $css);
    return $css;
}

```

```

function flock_set_backimage($css, $backimage) {
    global $OUTPUT;
    $tag = '[[setting:backimage]]';
    $replacement = $backimage;
    if (is_null($replacement)) {
        $replacement = $OUTPUT->pix_url('graphics/default',
'theme');
    }
    $css = str_replace($tag, $replacement, $css);
    return $css;
}

```

```

function flock_set_backposition($css, $backposition = 'no-repeat', $tag =
'[[setting:backposition]]'){

```

```

if($backposition == "no-repeat" || $backposition == "no-repeat fixed" ||
$backposition == "repeat"){
$css = str_replace($tag, $backposition, $css);
}
return $css;
}

function flock_set_backcolor($css, $backcolor) {
    $tag = '[[setting:backcolor]]';
    $replacement = $backcolor;
    if (is_null($replacement)) {
        $replacement = '#ffffff';
    }
    $css = str_replace($tag, $replacement, $css);
    return $css;
}

function flock_set_logo($css, $logo) {
    global $OUTPUT;
    $tag = '[[setting:logo]]';
    $replacement = $logo;
    if (is_null($replacement)) {
        $replacement = $OUTPUT->pix_url('graphics/logo', 'theme');
    }
    $css = str_replace($tag, $replacement, $css);
    return $css;
}

```

LIB.PHP

```
<?php
```

```
$THEME->name = 'flock';
```

```
////////////////////////////////////  
// Name of the theme. Most likely the name of  
// the directory in which this file resides.  
////////////////////////////////////
```

```
$THEME->parents = array('base','canvas');
```

```
////////////////////////////////////  
// Which existing theme(s) in the /theme/ directory  
// do you want this theme to extend. A theme can  
// extend any number of themes. Rather than  
// creating an entirely new theme and copying all  
// of the CSS, you can simply create a new theme,  
// extend the theme you like and just add the  
// changes you want to your theme.  
////////////////////////////////////
```

```
$THEME->sheets = array('core');
```

```
////////////////////////////////////  
// Name of the stylesheet(s) you've including in  
// this theme's /styles/ directory.  
////////////////////////////////////
```

```
$THEME->enable_dock = false;
```

```
////////////////////////////////////  
// Do you want to use the new navigation dock?  
////////////////////////////////////
```

```
$THEME->editor_sheets = array('editor');
```

```
////////////////////////////////////  
// An array of stylesheets to include within the  
// body of the editor.  
////////////////////////////////////
```

```
$THEME->layouts = array(  
    'base' => array(  
        'file' => 'general.php',
```

```
    'regions' => array('side-pre', 'side-post'),
    'defaultregion' => 'side-pre',
),
'standard' => array(
    'file' => 'general.php',
    'regions' => array('side-pre', 'side-post'),
    'defaultregion' => 'side-pre',
),
'course' => array(
    'file' => 'general.php',
    'regions' => array('side-pre', 'side-post'),
    'defaultregion' => 'side-pre'
),
'coursecategory' => array(
    'file' => 'general.php',
    'regions' => array('side-pre', 'side-post'),
    'defaultregion' => 'side-pre',
),
    'incourse' => array(
        'file' => 'general.php',
        'regions' => array('side-pre', 'side-post'),
        'defaultregion' => 'side-pre',
    ),
'frontpage' => array(
    'file' => 'general.php',
    'regions' => array('side-pre', 'side-post'),
    'defaultregion' => 'side-pre',
    'options' => array('langmenu'=>true),
),
'admin' => array(
    'file' => 'general.php',
    'regions' => array('side-pre'),
    'defaultregion' => 'side-pre',
),
'mydashboard' => array(
    'file' => 'general.php',
    'regions' => array('side-pre'),
    'defaultregion' => 'side-pre',
    'options' => array('langmenu'=>true),
),
'mypublic' => array(
    'file' => 'general.php',
    'regions' => array('side-pre'),
    'defaultregion' => 'side-pre',
),
'login' => array(
    'file' => 'general.php',
```

```

    'regions' => array(),
    'options' => array('langmenu'=>true),
),
'popup' => array(
    'file' => 'embedded.php',
    'regions' => array(),
    'options' => array('nofooter'=>true, 'noblocks'=>true, 'nonavbar'=>true),
),
'frametop' => array(
    'file' => 'general.php',
    'regions' => array(),
    'options' => array('nofooter'=>true),
),
'maintenance' => array(
    'file' => 'general.php',
    'regions' => array(),
    'options' => array('nofooter'=>true, 'nonavbar'=>true),
),
'embedded' => array(
    'theme'=>'canvas',
    'file' => 'embedded.php',
    'regions' => array(),
    'options' => array('nofooter'=>true, 'nonavbar'=>true),
),
// Should display the content and basic headers only.
'print' => array(
    'file' => 'general.php',
    'regions' => array(),
    'options' => array('nofooter'=>true, 'nonavbar'=>false, 'noblocks'=>true),
),
'report' => array(
    'file' => 'general.php',
    'regions' => array(),
),
);

```

```

$THEME->csspostprocess = 'flock_process_css';

```

THEME_FLOCK.PHP

```
<?php
$string['pluginname'] = 'Flock';
$string['region-side-post'] = 'Right';
$string['region-side-pre'] = 'Left';
$string['choosereadme'] = 'Flock é um theme de 3 colunas desenvolvido
para o 2.1+';

$string['configtitle'] = 'flock theme';

$string['width'] = 'Width';
$string['widthdesc'] = 'Choose whether your site is displayed as a fixed with
of 960px or a fluid width of 100%.';
$string['fixedwidth'] = 'Fixed Width (Recommended)';
$string['variablewidth'] = 'Fluid Width (Experimental)';

$string['backimage'] = 'Background Image';
$string['backimagedesc'] = 'Change the background image in the graphic
wrap. Paste the URL of the image you want to use in here.';

$string['backposition'] = 'Background Image Position';
$string['backpositiondesc'] = 'Choose between a centred image or a tiled
image.';
$string['backpositioncentred'] = 'Centred';
$string['backpositionfixed'] = 'Centred (Fixed)';
$string['backpositiontiled'] = 'Tiled';

$string['backcolor'] = 'Background Colour';
$string['backcolordesc'] = 'Change the colour of the background. (This is the
area either side of the main content and does not affect the main content
area)';

$string['logo'] = 'Logo';
$string['logodesc'] = 'Change the logo of this theme by entering the URL to
a new one (i.e., http://www.somesite/logo.png). There is currently a max
width of 200px. A transparent .png will work best.';

$string['menubackcolor'] = 'Menu Background Colour';
$string['menubackcolordesc'] = 'Change the colour of the menu bar.';

$string['menuhovercolor'] = 'Menu Hover Colour';
$string['menuhovercolordesc'] = 'Change the colour of linked items on the
menu bar.';

$string['disclaimer'] = 'Disclaimer';
$string['disclaimerdesc'] = 'The content from this textarea will be displayed
```


in the footer of every page.’;

```
$string['copyright'] = 'Copyright';  
$string['copyrightdesc'] = 'The name of your organisation.’;
```

```
$string['email'] = 'Email';  
$string['emailurl'] = 'Email URL';  
$string['emailurldesc'] = 'Enter the URL of your email service.’;
```

```
$string['profilebarcustomtitle'] = 'Profile Bar Custom Block Title';  
$string['profilebarcustomtitledesc'] = 'Title for custom Profile Bar block’;
```

```
$string['profilebarcustom'] = 'Profile Bar Custom Block’;  
$string['profilebarcustomdesc'] = 'Add text, images or HTML to be displayed  
within the Profile Bar.’;
```

```
$string['facebook'] = 'Facebook URL';  
$string['facebookdesc'] = 'Enter the URL of your Facebook page. (i.e http://  
www.facebook.com/mycollege)’;
```

```
$string['twitter'] = 'Twitter URL';  
$string['twitterdesc'] = 'Enter the URL of your Twitter feed. (i.e http://www.  
twitter.com/mycollege)’;
```

```
$string['googleplus'] = 'Google+ URL';  
$string['googleplusdesc'] = 'Enter the URL of your Google+ profile. (i.e http://  
plus.google.com/107817105228930159735)’;
```

```
$string['flickr'] = 'Flickr URL';  
$string['flickrdesc'] = 'Enter the URL of your Flickr page. (i.e http://www.  
flickr.com/mycollege)’;
```

```
$string['picasa'] = 'Picasa URL';  
$string['picasadesc'] = 'Enter the URL of your Picasa page. (i.e http://  
picasaweb.google.com/107817105228930159735)’;
```

```
$string['tumblr'] = 'Tumblr URL';  
$string['tumblrdesc'] = 'Enter the URL of your Tumblr page. (i.e http://  
mycollege.tumblr.com)’;
```

```
$string['blogger'] = 'Blogger URL';  
$string['bloggerdesc'] = 'Enter the URL of your Blogger page. (i.e http://www.  
blogger.com/mycollege)’;
```

```
$string['linkedin'] = 'LinkedIn URL';  
$string['linkedindesc'] = 'Enter the URL of your LinkedIn profile. (i.e http://  
www.linkedin.com/company/mycollege)’;
```

```
$string['youtube'] = 'YouTube URL';  
$string['youtubedesc'] = 'Enter the URL of your YouTube channel. (i.e http://  
www.youtube.com/mycollege)';
```

```
$string['vimeo'] = 'Vimeo URL';  
$string['vimeodesc'] = 'Enter the URL of your Vimeo channel. (i.e http://  
www.vimeo.com/mycollege)';
```

EMBEDDED.PHP

```
<?php echo $OUTPUT->doctype() ?>
<html <?php echo $OUTPUT->htmlattributes() ?>>
<head>
<title><?php echo $PAGE->title ?></title>
<link rel="shortcut icon" href="<?php echo $OUTPUT->pix_url('favicon',
'theme')?>" />
<?php echo $OUTPUT->standard_head_html() ?>
</head>
<body id="<?php p($PAGE->bodyid) ?>" class="<?php p($PAGE->bodyclasses)
?>">
<?php echo $OUTPUT->standard_top_of_body_html() ?>

<div id="page-wrapper" class="embedded">
<div id="page">

<!-- END OF HEADER -->

<div id="content" class="clearfix">
<?php echo core_renderer::MAIN_CONTENT_TOKEN ?>
</div>

<!-- START OF FOOTER -->
</div>
</div>
<?php echo $OUTPUT->standard_end_of_body_html() ?>
</body>
</html>
```

FOOTER.PHP

```
<div class="footer_block">
<h4>©<?php
echo date("Y"); echo " "; echo $PAGE->theme->settings->copyright; ?></h4>
<?php
echo $OUTPUT->login_info();
echo $OUTPUT->standard_footer_html();
?>
</div>
```

```
<div class="footer_block">
<?php if ($hasdisclaimer) {?><h4><?php echo get_string('disclaimer', 'theme_
flock');?></h4> <?php } else {}?>
<?php if ($hasdisclaimer) {echo $PAGE->theme->settings->disclaimer;} else
{}?></div>
```

```
<div class="footersocial" id="footersocial">
<h4>Social Networks</h4>
<ul>
```

```
<?php if ($hasfacebook) {?><a href="<?php echo $PAGE->theme->settings-
>facebook;?> "><li></li></a> <?php } else {}?>
<?php if ($hastwitter) {?><a href="<?php echo $PAGE->theme->settings-
>twitter;?> "><li></li></a> <?php } else {}?>
<?php if ($hasgoogleplus) {?><a href="<?php echo $PAGE->theme->settings-
>googleplus;?> "><li></li></a> <?php } else {}?>
<?php if ($hasflickr) {?><a href="<?php echo $PAGE->theme->settings-
>flickr;?> "><li></li></a> <?php } else {}?>
<?php if ($haspicasa) {?><a href="<?php echo $PAGE->theme->settings-
>picasa;?> "><li></li></a> <?php } else {}?>
<?php if ($hastumblr) {?><a href="<?php echo $PAGE->theme->settings-
>tumblr;?> "><li></li></a> <?php } else {}?>
<?php if ($hasblogger) {?><a href="<?php echo $PAGE->theme->settings-
>blogger;?> "><li></li></a> <?php } else {}?>
<?php if ($haslinkedin) {?><a href="<?php echo $PAGE->theme->settings-
>linkedin;?> "><li></li></a> <?php } else {}?>
<?php if ($hasyoutube) {?><a href="<?php echo $PAGE->theme->settings-
>youtube;?> "><li></li></a> <?php } else {}?>
```

```
<?php if ($hasvimeo) {?><a href="<?php echo $PAGE->theme->settings->vimeo;?> "><li></li></a> <?php } else {}?>
```

```
</ul>  
</div>
```



```
<div class="profilepic" id="profilepic">
<?php echo '<a href="'. $CFG->wwwroot.'/user/view.php?id='.$USER->id.'&course='.$COURSE->id.'">firstname.' '.$USER->lastname.'" alt="'. $USER->firstname.' '.$USER->lastname.'" /></a>';
?>
```

```
</div> <?php
echo '<div class="profilename" id="profilename">';
echo '<a href="'. $CFG->wwwroot.'/user/view.php?id='.$USER->id.'&course='.$COURSE->id.'">'.$USER->firstname.'</a>';
?>
```

```
<a id="imageDivLink" href="javascript:toggle5('profilebar', 'imageDivLink');"></a>
```

```
<?php
```

```
echo '</div>'; // end of headerwrap
?>
```

```
</div>
```

```
<div class="profilebar" id="profilebar" style="display: none;">
```

```
<div id="profilebar_inner">
```

```
<div class="profilebar_block">
```

```
<h4><?php
```

```
if ($hasprofilebarcustom) {
```

```
echo $PAGE->theme->settings->profilebarcustomtitle;
```

```
} ?></h4>
```

```
<div class="profilebar_block_inner">
```

```
<?php
```

```
if ($hasprofilebarcustom) {
```

```
echo $PAGE->theme->settings->profilebarcustom;
```

```
} ?>
```

```
</div>
```

```
</div>
```

```
<div class="profilebar_events">
```

```
<h4><?php echo get_string('upcomingevents', 'calendar'); ?></h4>
```

```
<?php include ('upcoming.php'); ?>
```

```
</div>
```

```
<div class="profilebar_account">
```

```
<h4><?php echo get_string('mymoodle', 'my'); ?></h4>
```

```
<div class="profileoptions" id="profileoptions">
```

```
<table width="100%" border="0">
```

```
<tr>
```

```
<td valign="top"> <ul>
<a href="<?php echo $CFG->wwwroot; ?>/my"><li>&nbsp;<?php echo get_
string('mycourses');?></li></a>
<a href="<?php echo $CFG->wwwroot; ?>/user/profile.php"><li>&nbsp;<?php echo get_string('viewprofile');?></li></a>
<a href="<?php echo $CFG->wwwroot; ?>/user/editadvanced.php"><li>&nbsp;<?php echo get_string('editmyprofile');?></li></a>
<a href="<?php echo $CFG->wwwroot; ?>/user/files.php"><li>&nbsp;<?php echo get_string('myfiles');?></li></a>
</ul></td>
<td valign="top"><ul>
<a href="<?php echo $CFG->wwwroot; ?>/calendar/view.
php?view=month"><li>&nbsp;<?php echo get_string('calendar', 'calend
ar');?></li></a>
<?php if ($hasemailurl) {?><a href="<?php echo $PAGE->theme->settings-
>emailurl;?> "><li>&nbsp;<?php echo get_string('email', 'theme_flock');?></li></
a> <?php } else {?>
<a href="<?php echo $CFG->wwwroot; ?>/login/logout.php"><li>&nbsp;<?php echo get_string('logout');?></li></a>
</ul></td>
</tr>
</table>
</div>
</div>
<div class="profilebarclear">
</div></div>
<?php ?>
```


UPCOMING.PHP

```
<?php
global $USER, $CFG, $SESSION;
$cal_m = optional_param( 'cal_m', 0, PARAM_INT );
$cal_y = optional_param( 'cal_y', 0, PARAM_INT );
require_once($CFG->dirroot.'/calendar/lib.php');

$filtercourse = array();
if (empty($this->instance)) { // Overrides: use no course at all
$coursesshown = false;
} else {
$coursesshown = $this->page->course->id;
}
/ Being displayed at site level. This will cause the filter to fall back to auto-
detecting// the list of courses it will be grabbing events from.
$filtercourse = calendar_get_default_courses();
list($courses, $group, $user) = calendar_set_filters($filtercourse);

$defaultlookahead = CALENDAR_DEFAULT_UPCOMING_LOOKAHEAD;
if (isset($CFG->calendar_lookahead)) {
$defaultlookahead = intval($CFG->calendar_lookahead);
}
$lookahead = get_user_preferences('calendar_lookahead', $defaultlookahead);
$defaultmaxevents = CALENDAR_DEFAULT_UPCOMING_MAXEVENTS;
if (isset($CFG->calendar_maxevents)) {
$defaultmaxevents = intval($CFG->calendar_maxevents);
}
$maxevents = 3;
$events = calendar_get_upcoming($courses, $group, $user, $lookahead,
$maxevents);

$upcomingoutput = calendar_get_block_upcoming($events, 'view.php?vie
w=day&course='.$coursesshown.'&');

echo $upcomingoutput;

?>
```

GENERAL.PHP

```
<?php
$hasheading = ($PAGE->heading);
$hasnavbar = (empty($PAGE->layout_options['nonavbar']) && $PAGE->has_navbar());
$hasfooter = (empty($PAGE->layout_options['nofooter']));
$hassidepre = $PAGE->blocks->region_has_content('side-pre', $OUTPUT);
$hassidepost = $PAGE->blocks->region_has_content('side-post', $OUTPUT);
$showsidepre = $hassidepre && !$PAGE->blocks->region_completely_docked('side-pre', $OUTPUT);
$showsidepost = $hassidepost && !$PAGE->blocks->region_completely_docked('side-post', $OUTPUT);

$custommenu = $OUTPUT->custom_menu();
$hascustommenu = (empty($PAGE->layout_options['nocustommenu']) && !empty($custommenu));
$haslogo = (!empty($PAGE->theme->settings->logo));
$hasdisclaimer = (!empty($PAGE->theme->settings->disclaimer));
$hasmailurl = (!empty($PAGE->theme->settings->emailurl));
$hasprofilebarcustom = (!empty($PAGE->theme->settings->profilebarcustom));
$hasfacebook = (!empty($PAGE->theme->settings->facebook));
$hastwitter = (!empty($PAGE->theme->settings->twitter));
$hasgoogleplus = (!empty($PAGE->theme->settings->googleplus));
$hasflickr = (!empty($PAGE->theme->settings->flickr));
$haspicasa = (!empty($PAGE->theme->settings->picasa));
$hastumblr = (!empty($PAGE->theme->settings->tumblr));
$hasblogger = (!empty($PAGE->theme->settings->blogger));
$haslinkedin = (!empty($PAGE->theme->settings->linkedin));
$hasyoutube = (!empty($PAGE->theme->settings->youtube));
$hasvimeo = (!empty($PAGE->theme->settings->vimeo));

$bodyclasses = array();
if ($showsidepre && !$showsidepost) {
    $bodyclasses[] = 'side-pre-only';
} else if ($showsidepost && !$showsidepre) {
    $bodyclasses[] = 'side-post-only';
} else if (!$showsidepost && !$showsidepre) {
    $bodyclasses[] = 'content-only';
}
if ($hascustommenu) {
    $bodyclasses[] = 'has_custom_menu';
}

echo $OUTPUT->doctype() ?>
<html <?php echo $OUTPUT->htmlattributes() ?>>
```

```

<head>
  <title><?php echo $PAGE->title ?></title>
  <link rel="shortcut icon" href="<?php echo $OUTPUT->pix_url('favicon',
'theme')?>" />
  <?php echo $OUTPUT->standard_head_html() ?>

</head>
<body id="<?php p($PAGE->bodyid) ?>" class="<?php p($PAGE->bodyclasses.'
.join(' ', $bodyclasses) ?>">
<?php echo $OUTPUT->standard_top_of_body_html() ?>
<div id="menuwrap">
<div id="menuwrap960">
<div id="homeicon">
<a href="<?php echo $CFG->wwwroot; ?>" class="homeiconlink">

<?php if ($haslogo) {
?>

img src="<?php echo $PAGE->theme->settings->logo;?>" />

  <?php   }
  else { ?>
    

  ?php   } ?>
</a>
</div>
<?php

if (!isloggedin()) {
}
elseif ($hascustommenu) { ?>
<div id="menuitemswrap"><div id="custommenu"><?php echo
$custommenu; ?></div></div>

<?php } ?>
<?php include('profileblock.php')
?>
</div></div>
<div id="page-header"></div>
<div id="contentwrapper">
<!-- start OF moodle CONTENT -->
<div id="page-title"><div id="page-title-inner"><?php echo $PAGE->title ?>
</div></div>

<div id="jcontrols_button">
<div class="jcontrolsleft">
<?php if ($hasnavbar) { ?>

```

```
<div class="navbar clearfix">
<div class="breadcrumb"> <?php echo $OUTPUT->navbar(); ?></div>

</div>
<?php } ?>
</div>
<div id="ebutton">
<?php if ($hasnavbar) { echo $PAGE->button; } ?>
</div>
</div>

<div id="page-content">
<div id="region-main-box">
<div id="region-post-box">
<div id="region-main-wrap">
<div id="region-main">
<div class="region-content">
<div id="mainpadder">
<?php echo core_renderer::MAIN_CONTENT_TOKEN ?>
</div>
</div>
</div>
</div>
</div>

<?php if ($hassidepre) { ?>
<div id="region-pre" class="block-region">
<div class="region-content">

<?php echo $OUTPUT->blocks_for_region('side-pre') ?>
</div>
</div>
<?php } ?>

<?php if ($hassidepost) { ?>
<div id="region-post" class="block-region">
<div class="region-content">

<?php echo $OUTPUT->blocks_for_region('side-post') ?>
</div>
</div>
<?php } ?>

</div>
</div>
</div>
<!-- END OF CONTENT -->
</div>
```

```
<br style="clear: both;">
<div id="page-footer"></div>
<?php if ($hasfooter) { ?>
<div id="footerwrapper">
<div id="footerinner">
<?php include('footer.php')?>

</div>
<div id="themeorigin"><a href="http://moodle.org">moodle.org</a></div>
</div>

<?php } ?>
<?php echo $OUTPUT->standard_end_of_body_html() ?>
</body>
</html>
```

EDITOR.CSS

```
<html,body {
    font-family: Verdana, sans-serif;
}
```

AUTOHIDE.CSS

/** To hide the icons we are using opacity as display:none makes the buttons inaccessible.

FILTER attributes should apply to IE so long as the strict doctype is served. Use Filter: none on clear to protect PNG alphas.

Tweak the top opacity values to get “ghost” icons rather than hiding them**/

/* Major portions of code written by Mark Ward (original author).
Modifications and additions / forks by Mark Johnson and Danny Wahl.
This CSS was compiled (I interleaved the code) by Frankie Kam
- April 2012*/

```
.block .header .commands a img,  
.path-course-view .section .content li .commands a img,  
.path-course-view .section .content .summary a img.icon.edit{  
    opacity: 0.01;  
    filter: alpha(opacity=1);  
    -o-transition: opacity 0.5s linear 0.3s;  
    -moz-transition: opacity 0.5s linear 0.3s;  
    -webkit-transition: opacity 0.5s linear 0.3s;  
    transition: opacity 0.5s linear 0.3s;  
}
```

```
.path-course-view .section .left.side a img,  
.path-course-view .section .right.side a img,  
.path-course-view .section .right.side div img  
{  
    opacity: 0.01;  
    filter: alpha(opacity=1);  
}
```

```
.path-course-view .section:hover .right.side img,  
.path-course-view .section:hover .left.side img,  
.path-course-view .section .right.side a:focus img,  
.path-course-view .section .left.side a:focus img,  
.ie.path-course-view .section .right.side a:active img,  
.ie.path-course-view .section .left.side a:active img  
{  
    opacity:1;  
    filter: none;  
}
```

```
.block:hover .header .commands a img,  
.block .header .commands a:focus img,  
.ie .block .header .commands a:active img,  
.path-course-view .section .content li:hover .commands a img,
```

```

.path-course-view .section .content li .commands a:focus img,
.ie.path-course-view .section .content li .commands a:active img,
.path-course-view .section:hover .content .summary a img.icon.edit,
.path-course-view .section .content .summary a:focus img.icon.edit,
.ie.path-course-view .section .content .summary a:active img.icon.edit{
    opacity:1;
    filter: none;
    -o-transition: opacity 0.3s;
    -moz-transition: opacity 0.3s;
    -webkit-transition: opacity 0.3s;
    transition: opacity 0.3s;
}

.path-course-view .section .content li {
    padding: 3px;
    border: 1px solid #fff;
}

.editing .section .content li:hover {
    border: 1px dashed #ff6666;
}

/** some feedback to tell user we are in editing mode **/
/*
.editing.path-course-view div.content{
    border: 2px #caa dotted;
    box-shadow: #caa 0px 0px 10px;
}
*/

.path-course-view .section .content .section_add_menus{
    /* background-color: #caa; */ /* Disabled by Frankie Kam */
    padding: .1em 0;
}

/* The below section code was provided by Danny Wahl - April 2012*/
/* It hides thee Add Resources and Add Activity selection dropdown lists
until a
    mouseover is done. A very nice effect! This greatly complements the work
done
    by Mark Ward and Mark Johnson.
*/

.editing .block .section_add_menus, /* Add Resource/Activity dropdowns in
blocks */
.editing .section .section_add_menus, /* Add Resource/Activity dropdowns */
.editing .sitetopic .section_add_menus /* Front Page Site Topic Add resource/
activity dropdowns */ {

```

```

visibility: hidden;
filter: alpha(opacity=0);
opacity: 0;
-webkit-transition: opacity 0.5s linear 0s;
-moz-transition: opacity 0.5s linear 0s;
-ms-transition: opacity 0.5s linear 0s;
-o-transition: opacity 0.5s linear 0s;
transition: opacity 0.5s linear 0s; /* half-second fade in */
}

.editing .block:hover .section_add_menus,
.editing .section:hover .section_add_menus,
.editing .sitetopic:hover .section_add_menus {
    visibility: visible;
    filter: none;
    opacity: 1;
}

/** some feedback to tell user we are in editing mode **/
.path-course-view .section .content .section_add_menus{
    background-color: #ffcccc;
    padding: .1em 0;
    border: 1px #ff6666 solid;
}

.section.main .commands,
.section.main .section_add_menus{
visibility:hidden;
}
.section.main:hover .commands,
.section.main:hover .section_add_menus{
visibility:visible;
}

.editing div#jcontrols_button {
background : #ffcccc;
}

```


CORE.CSS

```
/html,body {
font-family: Verdana, sans-serif;
background:[[setting:backcolor]] url([[setting:backimage]]) center top
[[setting:backposition]] !important;
color:#333;
margin:0;
padding:0;
}
```

```
html a:hover,body a:hover {
text-decoration:underline;
color:[[setting:menuhovercolor]];
}
```

```
html a,body a,html a:visited,body a:visited {
color:#333;
}
```

```
td.maincalendar table.calendartable th,table.rolecap .header,.generaltable
.header,.forumheaderlist .header,.files .header,.editcourse .header,.logtable
.header,#attempts .header,table#categoryquestions th {
background:#f9f9f9 !important;
font-size:11px;
font-weight:200;
text-decoration:none;
color:#333 !important;
border-top:1px solid #ccc !important;
/* padding:5px; */
}
```

```
#headerwrap {
height:85px;
width:[[setting:width]];
margin-left:auto;
margin-right:auto;
clear:both;
background:transparent;
}
```

```
#page-header {
height:0;
}
```

```
#page-title {
background:#fff;
width:100%;
```

```
overflow:hidden;
}
```

```
#page-title-inner {
font-size:18px;
text-transform:uppercase;
font-weight:400;
color:#333;
padding:8px 0 0 6px;
background:#fff;
width:100%;
overflow:hidden;
}
```

```
#logowrap {
height:80px;
float:left;
margin-left:0;
margin-right:auto;
}
```

```
#logo {
float:left;
margin-top:10px;
margin-left:0;
}
```

```
div.langmenu {
float:right !important;
display:inline !important;
line-height:28px !important;
font-size:9px;
margin:0 0 0 5px !important;
padding:0 !important;
}
```

```
#ebutton {
width:auto;
float:right;
text-align:right;
margin-top:4px;
margin-right:10px;
}
```

```
.clearer {
clear:left;
}
```

```
#profileblock {
float:right;
text-align:right;
max-width:500px;
right:0;
}
```

```
#profilepic {
text-align:right;
float:right;
display:inline;
margin:2px 2px -2px;
}
```

```
#profilepic img {
width:38px;
height:38px;
border:1px solid #fff;
}
```

```
#profilelogin {
text-align:right;
width:390px;
margin-right:0;
margin-top:auto;
float:right;
height:45px;
}
```

```
#profilelogin ul li {
padding-left:10px;
padding-right:0;
display:inline;
margin-right:0;
color:#aeaeae;
}
```

```
.profilelogin .loginform {
width:7em;
margin-left:4px;
display:inline;
background:#f9f9f9;
border:1px solid #ccc;
color:#333;
padding:4px;
}
```

```
#profilename {
```

```
text-align:right;
width:150px;
margin-right:0;
margin-top:auto;
margin-bottom:auto;
float:right;
}
```

```
#profilename ul li {
padding-left:10px;
padding-right:0;
display:inline;
margin-right:0;
}
```

```
.profilename .loginform {
width:5em;
margin-left:4px;
display:inline;
font-size:0.8em;
}
```

```
.profilename,.profilename a {
text-decoration:none;
font-size:12px;
text-transform:uppercase;
font-weight:400;
line-height:45px !important;
cursor:pointer !important;
border-right:none !important;
border-top:none !important;
border-bottom:none !important;
color:#fff !important;
margin:0 !important;
}
```

```
#profilebar {
background:url([[pix:theme|profile/black95]]);
width:100%;
clear:both;
font-size:12px;
font-weight:200;
color:#fff;
position:relative;
}
```

```
#profilebar table{
background-color:transparent !important;
```

```
}
```

```
#profilebar_inner {  
margin-right:auto;  
margin-left:auto;  
width:[[setting:width]];  
}
```

```
#profilebar h4 {  
font-size:12px;  
text-transform:uppercase;  
font-weight:400;  
color:#fff;  
margin:0 !important;  
padding:8px 0 10px 10px;  
}
```

```
#profilebar .block {  
border:0 !important;  
background:transparent !important;  
margin:0 !important;  
padding:0 !important;  
}
```

```
#profilebar .block_action {  
display:none !important;  
}
```

```
#profilebar .event a:hover,a:visited {  
color:#fff;  
text-decoration:none;  
}
```

```
#profilebar .date {  
font-size:0.85em;  
font-style:italic;  
font-weight:400;  
margin-left:20px;  
}
```

```
#profilebar hr {  
height:1px;  
color:#ccc;  
background-color:#ccc !important;  
border:none;  
border-style:none;  
}
```

```
.profilebar_block_inner {  
overflow:hidden;  
padding:10px;  
}
```

```
.profilebar_block,.profilebar_events,.profilebar_account {  
float:left;  
min-height:160px;  
overflow:hidden;  
padding:10px;  
}
```

```
.profilebar_block,.profilebar_events {  
width:250px;  
}
```

```
.profilebar_account {  
width:398px;  
}
```

```
#profileoptions ul li {  
padding-left:0;  
padding-right:0;  
list-style-type:none;  
margin-right:0;  
}
```

```
.profileoptions a:hover {  
background-color:transparent;  
color:#fff;  
text-decoration:none;  
}
```

```
.profileoptions li:hover {  
background:[[setting:menuhovercolor]];  
text-decoration:none;  
}
```

```
.profilebarclear {  
clear:both;  
padding-bottom:5px;  
}
```

```
#contentwrapper {  
width:[[setting:width]];  
margin-left:auto;  
margin-right:auto;
```

```
margin-bottom:15px;
top:[[setting:gap]];
clear:both;
float:none;
position:relative;
}
```

```
#page-content {
clear:both;
background:#fff;
}
```

```
.breadcrumb {
text-transform:uppercase;
font-weight:700;
font-size:0.9em;
margin-left:7px;
}
```

```
.breadcrumb a {
color:#369 !important;
}
```

```
.breadcrumb ul {
color:#666;
line-height:35px;
}
```

```
.arrow,.arrow_button input {
color:#aaa;
}
```

```
div#jcontrols_button {
width:100%;
margin-left:auto;
margin-right:auto;
clear:both;
background:#fff;
height:35px;
border-bottom:#eee 1px solid;
}
```

```
div.jcontrolsleft {
margin-left:0px;
font-weight:600;
font-size:13px;
float:left;
min-width:100px;
```

```
max-width:45%;
overflow:hidden;
height:35px;
}
```

```
div.jcontrolsright {
float:right;
min-width:50%;
height:35px;
margin-right:15px;
}
```

```
.jcontrolsright .logininfo {
line-height:30px;
font-size:11px;
font-weight:200;
text-align:right;
}
```

```
.jcontrolsright .logininfo a {
color:#555;
}
```

```
div.jcontrolsright div.singlebutton,div.jcontrolsright div.forumsearch {
margin:5px 0 0;
}
```

```
#footerwrapper {
background:#eee repeat-x left top;
width:[[setting:width]];
margin:[[setting:gap]] auto 10px;
}
```

```
#footerinner {
margin-left:auto;
margin-right:auto;
border-top:1px solid #ccc;
color:#999;
height:70px;
font-size:10px;
padding:10px;
}
```

```
#footerinner a {
color:#999;
}
```



```
.breadcrumb li a,.breadcrumb li,.breadcrumb li a:visited {
font-weight:200;
text-decoration:none;
color:#666;
font-size:12px;
}
```

```
.breadcrumb li a:hover {
text-decoration:none;
color:#333;
}
```

```
div#jcontrols_button span.arrow.sep {
font-size:1px;
color:#dadada;
display:inline-block;
width:16px;
}
```

```
#page-content #region-main {
padding:2px !important;
}
```

```
#mainpadder {
padding:10px;
}
```

```
.block {
border:0;
background:#fff;
margin:0 !important;
padding:5px;
}
```

```
.block div.header {
padding-top:0 !important;
min-height:33px;
height:auto !important;
background:#eee;
margin:0 !important;
}
```

```
.block.block_with_controls div.header div.commands {
text-align:center;
padding:2px;
}
```

```
.block.block_with_controls div.header div.commands a img {  
margin-right:3px;  
}
```

```
.title h2 {  
font-size:12px;  
text-transform:uppercase;  
font-weight:400;  
color:#333;  
margin:0 !important;  
padding:8px 0 0 10px;  
}
```

```
.block div.block_action input,.block div.block_action img {  
margin-top:3px;  
margin-right:3px;  
position:relative;  
top:6px;  
}
```

```
.block div.content {  
font-size:12px;  
font-weight:200;  
padding:10px 15px 15px;  
}
```

```
#region-post .block div.content {  
padding-left: 15px;  
}
```

```
.block_calendar_month table.minicalendar {  
margin-bottom:0 !important;  
}
```

```
.block_calendar_month table.minicalendar.calendartable th abbr {  
border:none !important;  
text-decoration:none;  
}
```

```
.block_login.block div.content div {  
margin-bottom:9px;  
clear:both;  
}
```

```
.block_login.block div.content label {  
font-size:11px;  
display:inline-block;
```

```
min-width:50px;
margin-right:3px;
}
```

```
.block_myprofile div.content div.myprofileitem.picture {
width:105px;
float:left;
}
```

```
.block_myprofile div.myprofileitem.fullname {
font-size:12px;
font-weight:800;
}
```

```
.block_myprofile div.myprofileitem.edit {
clear:both;
font-weight:800;
font-size:12px;
}
```

```
.block_news_items div.content li.post {
margin-bottom:4px;
margin-top:2px;
}
```

```
.block_recent_activity.block_docked div.content h2.main,.block_recent_
activity.block_docked div.content h3.main,.side-pre .block div.content
h2.main,.side-post .block div.content h2.main,.block div.content h3.main,.
block div.content h2 {
font-size:13px;
color:#333;
font-weight:800;
background:none;
font-family:"Helvetica Neue", Helvetica, Arial, sans-serif;
}
```

```
div.yui3-widget.yui3-overlay.yui3-widget-positioned {
border:1px solid #ccc;
}
```

```
div.yui3-overlay-content.yui3-widget-stdmod {
border:1px solid #fff;
background:#f9f9f9 url([[pix:theme|alert-overlay]]) repeat-x;
}
```

```
div.yui3-widget-bd {
border:none;
```

```
background:none;
}
```

```
div.yui3-widget-bd h1.helpheading {
font-size:16px !important;
font-weight:800;
margin-top:5px;
}
```

```
.yui-module.yui-overlay.yui-panel div.hd {
background:#f9f9f9 url([[pix:theme|bart5]]) repeat-x 0 90%;
}
```

```
#menuwrap {
height:45px;
width:100%;
clear:both;
background:[[setting:menubackcolor]] url([[pix:theme|menu/menugrad]])
repeat-x;
box-shadow: 0px 3px 3px rgba(0,0,0,0.2);
top:0;
z-index:9998;
margin:0;
position: fixed;
}
```

```
#menuwrap960 {
height:45px;
width:[[setting:width]];
margin-left:auto;
margin-right:auto;
clear:both;
}
```

```
#homeicon a.homeiconlink {
display:block;
float:left;
border:0;
max-width:200px;
height:45px;
text-align:center;
text-decoration:none;
vertical-align:middle;
}
```

```
/*#homeicon a.homeiconlink:hover {
```

```
background:[[setting:menuhovercolor]];
}*/
```

```
.displace {
position:absolute;
left:-5000px;
}
```

```
#menuitemswrap {
font-size:13px;
font-weight:600;
float:left;
border:0 !important;
margin-left:0;
margin-top:0;
margin-bottom:0;
}
```

```
#custommenu {
border:none !important;
height:40px;
}
```

```
div.yui3-menu.yui3-menu-horizontal {
background:transparent !important;
border:none !important;
float:left;
}
```

```
.yui3-skin-sam .yui3-menu-horizontal .yui3-menu-label {
background-image:none !important;
}
```

```
div.yui3-menu-content {
border:none !important;
background:transparent !important;
}
```

```
.yui3-menu-content li a {
font-size:12px;
text-transform:uppercase;
font-weight:400;
line-height:45px !important;
cursor:pointer !important;
border-right:none !important;
border-top:none !important;
border-bottom:none !important;
```

```
color:#fff !important;
margin:0 !important;
}
```

```
.yui3-menu-horizontal .yui3-menu-label {
color:#fff !important;
}
```

```
.yui3-menu-horizontal .yui3-menu-label-menuvisible {
background-position:5px -23px !important;
}
```

```
.yui3-menu-content li {
border:none !important;
}
```

```
.yui3-menu-content li:hover {
background:[[setting:menuhovercolor]] !important;
}
```

```
div.yui3-menu.custom_menu_submenu {
background:url([[pix:theme|menu/yuiarrow]]) no-repeat 20px 0 !important;
border:none;
min-width:100px;
z-index:9998;
}
```

```
div.yui3-menu.custom_menu_submenu div.yui3-menu.custom_menu_
submenu {
background:none !important;
min-width:100px;
}
```

```
div.yui3-menu.custom_menu_submenu div.yui3-menu-content {
z-index:9998;
min-width:200px;
padding-top:0 !important;
padding-bottom:0 !important;
background:url([[pix:theme|menu/black95]]) !important;
margin:20px 0 0 -40px;
}
```

```
div.yui3-menu.custom_menu_submenu div.yui3-menu-content div.yui3-
menu.custom_menu_submenu div.yui3-menu-content {
position:absolute;
top:-15px;
}
```

```
div.yui3-menu.custom_menu_submenu .yui3-menu-content li {  
border-left:none;  
}
```

```
div.yui3-menu.custom_menu_submenu .yui3-menu-content li a {  
font-size:12px;  
border-bottom:0 solid #ccc !important;  
border-top:0 solid #fff !important;  
text-transform:none;  
text-decoration:none !important;  
}
```

```
div.yui3-menu.custom_menu_submenu .yui3-menu-content li a:hover {  
cursor:pointer;  
text-decoration:none !important;  
background:[[setting:menuhovercolor]] !important;  
}
```

```
#dock {  
padding-top:0;  
width:30px;  
}
```

```
div.dockitem_container div.dockitem {  
background:#fff;  
border:none;  
color:#666;  
font:100% Constantia, Lucidabright, Lucida, Georgia, serif;  
}
```

```
div.dockitem_container.firstdockitem {  
border-top:none;  
}
```

```
div.dockedtitle {  
border:none;  
padding-top:3px;  
padding-bottom:3px;  
}
```

```
div.dockitempanel_content {  
border:1px solid #dadada !important;  
border-left:none !important;  
font-size:90%;  
}
```

```
div.dockeditempanel_hd {
text-align:left;
font-size:12px;
padding-top:3px;
padding-bottom:3px;
background:#eee;
border-bottom:1px solid #dadada !important;
}
```

```
div.dockeditempanel_hd h2 {
font-weight:600;
font-size:12px;
}
```

```
div.dockeditempanel_bd ul,div.dockeditempanel_bd li {
list-style-type:none;
padding:0;
}
```

```
#dockeditempanel {
margin-left:1px;
}
```

```
#dock div.controls {
margin-top:20px;
padding-top:0;
position:relative;
}
```

```
h3.sectionname,h2.headingblock,h2.main,h3.main,h2.main a,h3.main a,div.
loginpanel h2,div.signuppanel h2 {
font-size:18px;
text-transform:uppercase;
text-align:left;
padding-top:0px;
padding-bottom:2px;
display:block;
font-weight:400;
margin:3px 0 2px;
color:#36F;
}
```

```
#page-course-info h2.main,h3.sectionname,h2.main a,h3.main a,div.
loginpanel h2,div.signuppanel h2,div.hd h3.main {
font-size:16px;
background:none;
}
```



```
.forumpost {  
border:1px solid #eee;  
}
```

```
.forumpost div.row.header {  
background:#f9f9f9 url([[pix:theme|forumt]]) no-repeat 20px 100%;  
padding-bottom:12px;  
}
```

```
.forumpost .left.picture img {  
border:2px solid #fff;  
}
```

```
.forumpost .topic {  
padding-top:5px;  
padding-left:5px;  
}
```

```
.forumpost .subject {  
font-size:110%;  
}
```

```
.forumpost .author {  
font-size:90%;  
font-weight:300;  
}
```

```
.forumpost .row.side {  
font-size:90%;  
padding-top:10px;  
padding-bottom:5px;  
}
```

```
.forumpost .commands {  
padding-right:5px;  
}
```

```
.info .name a {  
font-weight:700;  
}
```

```
.indent {  
margin-left:30px;  
}
```

```
div.subscribelink {  
text-align:right;  
}
```

```
.mform fieldset,fieldset.clearfix {  
border:1px solid #dadada !important;  
background:#f9f9f9;  
}
```

```
.ftoggler {  
font-size:18px;  
color:#333;  
}
```

```
div.notifysuccess {  
width:80%;  
font-size:15px;  
color:#008500;  
border:3px solid #dadada;  
text-align:center;  
background:#fff url([[pix:theme|check]]) no-repeat 2% 50%;  
margin:0 auto;  
padding:5px;  
}
```

```
.generaltable .header a,.forumheaderlist .header a,th.header.  
questionnametext a {  
border:none;  
color:#333;  
font-size:12px;  
text-decoration:none;  
padding:5px;  
}
```

```
tr.r1 td {  
background-color:#f9f9f9;  
}
```

```
table.rolecap td,table.rolecap th {  
border-bottom:1px solid #dadada;  
}
```

```
table.rolecap td.risk {  
border-left:1px solid #dadada;  
}
```

```
ul.unlist,ul.unlist li,ul.unlist li div,ul.unlist li div ul,ul.unlist li div ul li {  
list-style-type:none;  
margin:0;  
padding:0;  
}
```

```
div.coursebox {
padding-bottom:7px !important;
margin-bottom:7px !important;
border-bottom:1px solid #eee;
}
```

```
div.coursebox h3.name {
margin-top:0;
margin-bottom:0;
width:230px;
}
```

```
div.coursebox h3.name a {
font-size:16px;
font-weight:400;
color:#36F;
}
```

```
.unlist div.summary {
font-size:14px;
color:#666;
font-style:italic;
}
```

```
.unlist ul.teachers {
display:block;
padding-left:5px !important;
}
```

```
div.categorybox {
border:none !important;
margin-top:0;
}
```

```
td.category.name a {
padding-left:20px;
font-weight:400;
font-size:16px;
}
```

```
#course-index td.category.name a {
padding-left:0;
background-image:none;
}
```

```
table.categorylist td {
padding:0;
}
```

```
div.course_category_tree a {  
font-size:16px;  
font-weight:400;  
text-decoration:none;  
}
```

```
div.course_category_tree div.category,div.course_category_tree div.category_  
label,div.course_category_tree div.courses {  
margin-bottom:8px;  
}
```

```
div.course_category_tree div.category.with_children div.category_label {  
background-position:0 55% !important;  
}
```

```
div.course_category_tree div.course a {  
font-size:14px;  
}
```

```
div.course_category_tree div.controls {  
font-size:10px;  
color:#666;  
text-transform:uppercase;  
}
```

```
div.course_category_tree div.controls div {  
margin-top:3px;  
margin-right:10px;  
border-bottom:1px solid #dadada;  
}
```

```
.path-course-view .course-content li.section {  
border:1px solid #e5e5e5;  
}
```

```
.path-course-view .course-content .side {  
padding:5px 0;  
}
```

```
#page-course-view-weeks .weekdates {  
font-size:1em;  
font-weight:400;  
color:#777;  
padding:2px;  
}
```

```
.course-content .current {  
background:#ffc;
```

```
}
```

```
.course-content .main .content {  
background:#fff;  
padding:10px;  
}
```

```
span.completionprogress {  
font-size:11px;  
font-weight:200;  
}
```

```
div.assignment.overview {  
margin-bottom:5px;  
padding-bottom:3px;  
border-bottom:1px dashed #dadada;  
}
```

```
div.assignment.overview div {  
display:block !important;  
float:none !important;  
width:100% !important;  
}
```

```
#page-my-index div.coursebox {  
border-bottom:none;  
}
```

```
table.glossarycategoryheader h2.main {  
text-align:center;  
margin-bottom:0;  
margin-top:0;  
}
```

```
table.glossarypost {  
margin-top:0;  
width:100%;  
border-bottom:1px dashed #dadada;  
}
```

```
table.glossarypost td.entry h3 {  
font-size:20px;  
}
```

```
#page-mod-wiki-view h2.wiki_headingtitle {  
font-size:22px;  
font-family:Georgia, serif;  
color:#333;  
font-weight:600;
```

```
text-align:left;
margin-bottom:3px;
margin-top:2px;
}
```

```
.content hr {
height:1px;
color:#dadada;
background-color:#dadada !important;
border:none;
border-style:none;
}
```

```
div#intro {
border:none;
text-align:center;
font-size:14px;
color:#333;
}
```

```
div.questionbankwindow.block div.header {
background:#f9f9f9 !important;
}
```

```
div.questionbankwindow.block div.header a {
color:#333 !important;
font-size:11px;
}
```

```
div.generalbox.sitetopic,div.generalbox.authsui,#page-course-info
div.generalbox,#page-admin-roles-assign div.generalbox,table.
roleassigntable,table.roleassigntable td,#page-blocks-private-edit div.
generalbox {
border:none;
max-width:100%;
}
```

```
div.generalbox.firstpageoptions h3.main {
font-size:16px;
}
```

```
div.redirectmessage {
width:60%;
border:none;
font-size:13px;
background:#fff url([[pix:theme|ajax-loader]]) no-repeat 50% 100%;
margin:10px auto 0;
padding:20px;
```

```
div.box.errorbox {
border:1px solid #dadada;
color:red;
background:#fff url([[pix:theme|error]]) no-repeat 1% 3%;
padding:10px;
}
```

```
#page-mod-page-view div.generalbox {
border-left:none;
border-right:none;
border-top:none;
}
```

```
div#tablecontainer {
margin-bottom:10px;
}
```

```
div.course-content div.availabilityinfo {
font-size:11px;
font-style:italic;
border-bottom:1px dashed #dadada;
margin-bottom:10px;
padding:2px;
}
```

```
.twocolumns div.loginpanel {
border-right:1px dashed #dadada !important;
}
```

```
div.forgetpass {
clear:both;
}
```

```
div.loginform {
width:50% !important;
}
```

```
div.loginform div.form-input input {
width:90px !important;
}
```

```
div.loginform label {
line-height:20px;
}
```

```
div.signuppanel {
float:right !important;
width:40% !important;
```

```
margin-left:0;
padding-left:0;
}
```

```
div.singlebutton.forumaddnew {
text-align:center;
}
```

```
#page-course-info h2.main {
line-height:5px;
margin-bottom:5px;
}
```

```
.singlebutton {
margin:0 !important;
}
```

```
.calendar_event_course {
background-color:#ddd;
border:#bbb solid 1px;
}
```

```
.calendar_event_global {
background-color:#ddeeb8;
border:#adc687 solid 1px;
}
```

```
.calendar_event_group {
background-color:#fee7ae;
border:#ebce7b solid 1px;
}
```

```
.calendar_event_user {
background-color:#bee2f7;
border:#98c9e7 solid 1px;
}
```

```
#id_summary_editor {
width:100%;
}
```

```
.minicalendar td.today {
border:#de473c solid 2px !important;
}
```

```
.minicalendar td.calendar_event_global {
border:#adc687 solid 1px;
}
```



```
.minicalendar td.calendar_event_group {  
border:#ebce7b solid 1px;  
}
```

```
.minicalendar td.calendar_event_course {  
border:#bbb solid 1px;  
}
```

```
.minicalendar td.calendar_event_user {  
border:#98c9e7 solid 1px;  
}
```

```
#page-admin-index .adminwarning {  
border:1px solid #ccc48d;  
background:#fff9d0;  
}
```

```
#page-content #region-main-box .region-content {  
padding: 0;  
max-width:600px;  
}
```

```
.region-content img {  
max-width:540px;  
height:auto;  
}
```

```
.box select {  
max-width:300px;  
font-size:10px;  
overflow:scroll;  
}
```

```
.boxwidthnarrow {  
width:30%;  
}
```

```
.boxwidthnormal {  
width:50%;  
}
```

```
.boxwidthwide {  
width:95%;  
}
```

```
.headermenu {  
display:none;  
}
```

```
#footersocial ul {  
margin-left:0;  
}
```

```
#footersocial ul li {  
padding-left:0;  
padding-right:0;  
list-style-type:none;  
margin-right:0;  
display:inline;  
}
```

```
#themeorigin {  
margin-left:auto;  
margin-right:auto;  
color:#bbb;  
font-size:10px;  
padding:10px 10px 10px 20px;  
}
```

```
#themeorigin a,a.hover,a.visited {  
color:#bbb;  
font-size:10px;  
text-decoration:none;  
}
```

```
div.yui3-widget-bd a,.tabtree li a,.block div.content a,.unlist a,.categorybox  
a,.course_category_tree a,.section a,.profilelogin,.profilelogin a,.profilelogin,  
profilelogin a:hover,.profilename a:hover,div.dockeditpanel_content  
a,table a,.mod-indent a:hover {  
text-decoration:none;  
}
```

```
a:active,a:focus {  
outline:0;  
}
```

```
#profilename img,.breadcrumb li img,div.yui3-overlay-content.yui3-widget-  
stdmod img,#homeicon img,.mod-indent img {  
vertical-align:middle;  
}
```

```
#profilebar .event,div.category.subcategory.with_children {  
margin-left:20px;  
}
```

```
#profilebar .event a,a:hover,a.visited,table#categoryquestions th a {  
color:#fff;  
}
```

```

#profileoptions img,#footersocial img {
vertical-align:middle;
padding:2px;
}

.profileoptions,.profileoptions a,.profileoptions,.profileoptions a:visited {
background-color:transparent;
color:#fff;
}

.block.hidden div.header,#page-my-index h3.main {
border-bottom:0;
}

.block_comments div.content li,#page-course-info div.generalbox ul,#page-
course-info div.generalbox li {
list-style-type:none;
}

.block_messages.block div.content .list a,.unlist ul.teachers li {
font-size:10px;
}

.block_myprofile div.content div,.block_news_items div.content div.head.
clearfix,div.tabtree li a span,.unlist ul.teachers li a {
font-size:11px;
}

.block_news_items div.content div.info,div.assignment.overview div.name {
font-weight:600;
}

div.yui3-menu.custom_menu_submenu li a.yui3-menu-label,div.yui3-menu.
custom_menu_submenu li a.yui3-menu-label:hover {
background:url([[pix:theme|menu/subarrow]]) no-repeat right center
!important;
}

.dockedtitle h2,div.dockeditempanel_bd {
font-weight:200;
}

.forumpost img,.topics img,.block img {
max-width:100%;
height:auto;
}

.forumpost .content,#page-mod-wiki-view div.generalbox,div#newmessa

```

```
geoverlay {
padding:10px;
}
```

```
.subscribelink a,div#newmessageoverlay a {
text-decoration:none;
font-size:11px;
}
```

```
div.course_category_tree div.course.odd,.course-content .main {
background:#f9f9f9;
}
```

```
div.que,div.generalbox,div.section {
border:1px solid #dadada;
}
```

```
.footer_block,.footersocial {
float:left;
height:50px;
overflow:hidden;
width:30%;
padding:10px;
}
```

```
#page-mod-quiz-edit div.quizcontents {
clear: left;
display: block;
float: left;
width: 68%;
}
```

```
/*ajustes finais*/
```

```
#page-site-index .headingblock {
color: #000;
}
```

```
select {
max-width: 150px;
}
```

```
element.style {
height: 259px;
width: 460px;
}
```

```
.mform .fitem .felement {
```

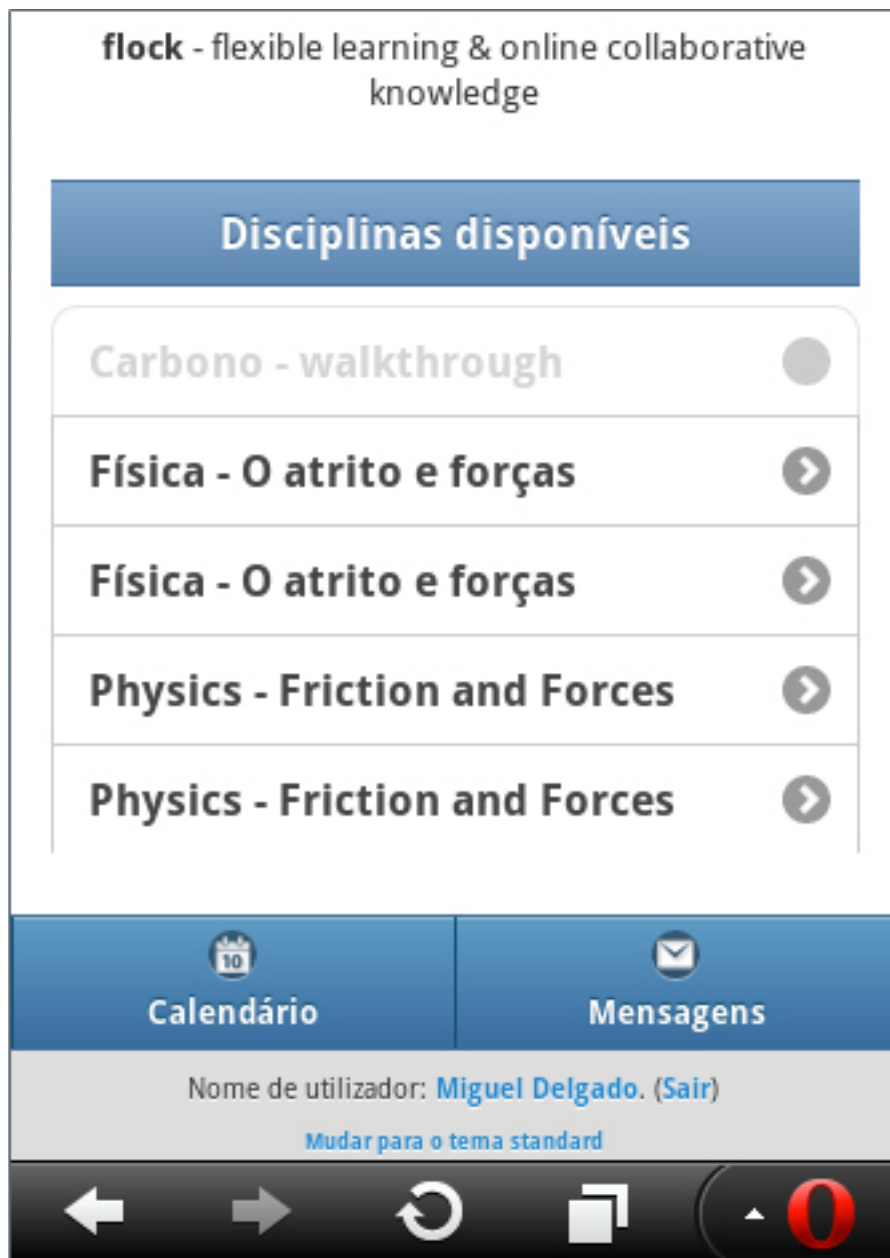
```
width: 98%;  
}
```

```
.mform .fitem fieldset.felement {  
margin-bottom: 0;  
margin-left: 0;  
padding-left: 1%;  
text-align: right;  
}
```

```
.block .minicalendar {  
margin: 10px auto 10px -16px;  
}
```

```
h1, h2, h3, h4, h5, h6, p, ul, ol, dl, input, textarea {  
font-family: Verdana, sans-serif;  
}
```


ANEXO D - PROPOSTAS ABANDONADAS



Proposta de versão mobile, abandonada devido a restrições de temporais

ATRITO E A VARIAÇÃO DA ENERGIA MECÂNICA

AS MINHAS DISCIPLINAS [ATRITO](#)

▲

inicial

Notícias

linas

es

to

3

virtual

▲


a

edição


3

a


Fundamento teórico



Experiência prática



Simulação virtual



Proposta de disposição de tópicos de curso em grelha, abandonada devido a restrições de temporais e de compatibilidade.

Demonstration of Online Educational Modules with Online Experiments

A. Cardoso¹, M.T. Restivo², P. Cioga¹, M. Delgado¹, J.N. Monsanto¹, J. Bicker¹, E. Nunes¹ and P. Gil^{1,3}

¹Department of Informatics Engineering of the University of Coimbra, Coimbra, Portugal

²UISPA, IDMEC-Pólo FEUP, Faculty of Engineering, University of Porto, Porto, Portugal

³Departamento de Engenharia Electrotécnica, Faculdade de Ciências e Tecnologia
Universidade Nova de Lisboa, Campus de Caparica, Lisboa, Portugal

Abstract— Emerging technologies provide the necessary support to develop online educational modules with online experiments through web platforms for educational and training frameworks. Combining design techniques and virtual and augmented reality, templates, contents and interfaces could improve users' analytical capabilities of perception and cognition, and allowing the development of online courses more attractive, while promoting the learning process. This paper briefly describes some relevant aspects of a platform under development, including some application examples. The authors intend to demonstrate the main characteristics of this platform, presenting some online educational modules with online experiments, including interaction using haptic devices.

Index Terms — Online courses; online experimentation; remote and virtual labs; virtual and augmented reality; interface design; haptic devices.

I. INTRODUCTION

In the last few decades there have been significant efforts to develop platforms of tutoring systems, including remote and virtual labs as web-based educational tools [1], for students of different scholar levels and trainees in lifelong learning programs, where the inherent flexibility and adaptability of such systems are greatly welcome [2]. Furthermore, the careful design of user's interfaces (UI) and the use of different types of interacting devices, such as haptic devices, represent new and exciting challenges.

This new paradigm of learning and training creates a system rich in educational contents that are practical, flexible and easy to access, breaking down spatial and temporal barriers of the traditional approaches. Students and trainees may accomplish their own experiments from her/his laptop just requiring the availability of an Internet connection to have access to different kinds of virtual or real plants and experiments, not only in a b- or e-learning context but also enriching classroom activities [3].

Concerning UI, digital technology and advanced software also expand the creative potential of graphic design by making possible an unprecedented manipulation of color, form, space, and imagery [4].

The design process involves the conceptualization of the template for the Learning Management System (LMS), the interface elements necessary for the application's operation, as well as all the elements of whole platform.

At the Department of Informatics Engineering of the University of Coimbra, with the collaboration of the Faculty of Engineering of the University of Porto a web

platform for online experimentation is under development. It aims to offer to different types of users, from secondary to higher education, and also to lifelong training, a framework where tutors and students/trainees can communicate and interact remotely through the internet, in a b- or e-learning context.

The results to be presented comprising different modules correspond mainly to the final work of three master students of Informatics Engineering and Design and Multimedia.

II. THE STRUCTURE OF THE WEB PLATFORM

In the following sections, the main aspects of the web platform structure and some online educational modules, which will be under demonstration, are briefly described.

A. LMS templates

The Moodle platform was selected as LMS in order to take advantage of its main dynamic learning environment features while designing a course or module. The templates for educational modules are developed applying design techniques to improve the analytical capabilities of perception and cognition and to allow users to solve tasks that may be too complex and rather confusing, to come up with online courses more attractive and promote the learning process. Finding design solutions that facilitate the human-computer interaction and the information visualization in a way, substantially will raise the user's interaction experience with the platform and improve the quality of the learning development.

B. Virtual and Augmented Reality

The Virtual and Augmented Reality (VAR) is considered as a tool, which is intended to provide users with an application to be used in the context of learning and exchange of information through simulated environments. Similarly to videogames, the e-learning platforms share an identical objective, namely, to provide the user with forms of interaction attracting and facilitating the learning process including the interface, as well as, the information provided by the platform [5]. Thus, the platform could take advantage of the benefits of Game Design for the development of the three-dimensional environments and interfaces [6], as a Serious Game. In VAR, users see the real world with an additional layer of information allowing the use of tangible interfaces, giving the user an immersive environment, and the ability to interact with virtual objects and to receive physical responses, based on the friction and other attributes of the real objects [6].

C. Virtual Labs with interface using haptic devices

Nowadays, there is an increasing use of haptic devices in several areas of science, which can be used to provide the execution of complex and remote tasks, or to improve the response to equipment so that the user may have more information on the physical or virtual system. The virtual experiments are built to give users different and simple perspectives, which reproduce essential aspects of the real laboratory's environment. The user will be able to interact with 2D and 3D simulations and "feel" them by using haptic devices.

D. Environment Simulation Tool

The platform includes an Environment Simulation Tool (EST) where the tutor may design his/her own experiences or adapt existing ones with contents and structural elements according to students/trainees level and to fulfill the requirements of a given educational subject. The application includes an editor, responsible for the creation phase, where the tutor may choose the objects to include on the scene, its position, behavior and features like surface texture, weight or height.

With the purpose of controlling the designed environments with greater virtualization of reality, not possible to mimic with standard I/O devices, e.g. a keyboard or a mouse, the EST is developed to give the possibility of interaction using haptic devices.

III. ONLINE EDUCATIONAL MODULES

Some online educational modules with online experiments are in development using the referred web platform. The demonstration includes mainly virtual experiments to illustrate basic concepts of physics with applications involving, for example, pulleys, springs, pendulum or inclined planes.

A. Basic concepts of physics using inclined planes

This module introduces some basic physics concepts using inclined planes. An object placed on an inclined plane could slide down the surface because of an unbalanced force with an acceleration that depends on several factors. To understand this type of motion, it is important to analyze, for example, the forces acting upon an object on an inclined plane. Figure 1 depicts a draft of a scenario of this application example.

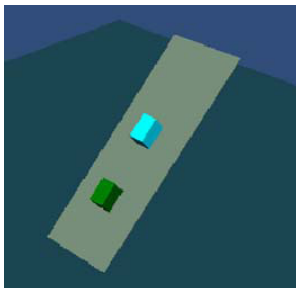


Figure 1. Scenario with objects in an inclined plane.

B. Other examples

Other examples of educational modules include diverse experiments to introduce hydrostatic concepts in fluid mechanics. The three-tank benchmark system, outlined in

Figure 2, could be used to support these application examples.

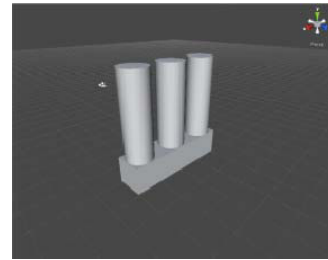


Figure 2. Scenario representing a three-tank system.

IV. CONCLUSIONS

Some aspects of a web platform for the development of online educational modules were briefly described. The design project, the multimedia contents and the interaction using haptic devices are mainly introduced. A set of illustrative online experiments are proposed to be demonstrated during the Exhibition Session @ REV2012.

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AUTHORS

Alberto Cardoso, João Bicker, Eduardo Nunes and Paulo Gil are with the Department of Informatics Engineering, University of Coimbra, Pólo II, 3030-290 Coimbra, Portugal (e-mail: {alberto, bicker, enunes, pgil}@dei.uc.pt)

M. T. Restivo is with the UISPA, IDMEC-Pólo FEUP, Faculdade de Engenharia, Universidade do Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal (e-mail: trestivo@fe.up.pt).

Pedro Cioga, Miguel Delgado and José Nuno Monsanto are MSc students at the Department of Informatics Engineering, University of Coimbra, Pólo II, 3030-290 Coimbra, Portugal (e-mail: {pcioga, mdelgado, jnac}@student.dei.uc.pt).

