TECHNICAL SCHOOL FOR INDUSTRIAL ENGINEERING AND TELECOMUNICATIONS

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Web Content Management System. International Office YPU

Noelia Cortijo

Professors Robert Schalkoff and Yoshinaga Nobuyuki

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CHAPTER 1. INTRODUCTION

This Project came up from the need of the International Office from Yamaguchi Prefectural University to renew their website because their actual website is not practical for visitors, we will discuss the reason later.

Considering this, the purpose has been to look for a solution that reaches an easy way to add new content as well as edit and update, making it as much as dynamic website possible. Moreover we also get a nicer looking website.

This project gives an easy handling tool for the people in charge of the information system and also for the user of the website. This way we will obtain a great satisfaction of usability for them.

Event dates had been the center of attention for the project development. The staff from the international office will be provided by tools to manage those events. Once the events are stored on the database the user will be able to see them in the calendar shown in the website.

To obtain this result a platform based on a content management system (CMS) has been used. Furthermore, the CMS is based on PHP and we also would use this programming language to include some utilities. PHP is a scripting language which is appropriate to server-side web developments. They are not only a very extended now a day but also there are many choices and information about them. In conclusion, it would make easier to develop and futures updates of the website and system.

CHAPTER 2. OBJECTIVE

The main objective of this project is to develop an application from scratch for the International Office. The working procedure and needs are completely unknown,
therefore meetings and questions have been held. Then some ideas came out and once they were accepted the application development started.

To be more efficient with the ideas, the old website has been also studied as a part of the process. The old website was heavy because of text images. There was more reason that think that the page visually not agreeable for users. And that’s one of the reasons to restart a new version of the website.

The idea of the website is also to help users to be easier informed as well as make easier any kind of announcements. The calendar with the events is a very smart idea to do it. The calendar is very intuitive for users and as soon as a user enters into the website it can be seen. The information is accessible and no hided under any menu. That has been a very big advance on the design.

The achievement of the functionality required by the staff is carried out using Drupal as our CMS system. That means that first of all that Drupal system structure and data model must be understand, and then adapt it to achieve the required functionality.

CHAPTER 3. METHODOLOGY

To have the best result in a project organization and order must be taken. Because of that the methodology will structure, plan and control tacks for the development. That way everything will have a time process set and will be achieved.

3.1 PROGRESS AND DEVELOPMENT

First of all the tutor has been the guide during the process and the support to understand the main ideas of some programming languages as well as CMS systems generalities.
Second hand a great communication between both sides of the project (staffs and performer) has been necessary to determinate perfectly all the goals to start developing it.

Finally the decision about the system that they require was CMS, so more meeting have been held to specify other aspects that CMS can offer and might be useful.

An aspect that was very intuitive and necessary was the calendar. It was a tool very useful and that would make the website look more updated with the event inserted every month.

CHAPTER 4. TECHNOLOGY

4.1 WHY CMS?

The most important reason is that there is not a maintenance centralized on a person. Anyone who has permission enter into the system can make changes, and what is better they can be made them anywhere, anytime.

CMS have tools to design with word processor knowledge that is non-technical knowledge.

They preserve the design’s consistency because content is stored separate from design, the content from all the users (authors) are presented with the same regular design.

The menus and their links are generated automatically based on the data base, so if the content changes no link changes must be done.

There is also the advantage of including users manage processes. It helps to add any other code a make it just available to certain users. That way if there is any page that we
want just to be seen by the staff, we can do it easily by granting access control (permission).

There is another answer to this question. If we look at the work required to do something like a CMS but not so complex, but with almost the same utilities, it would takes us much more time than it really took to configure everything. So the answer is also evident. We are not going to invent anything different from the existing systems, so is not worthy to spend time on it. And that is why developers can spend more time in the real important facts of building up a website and create new code to adapt their necessities to the existing ones.

From user point of view there are more reasons:

- CMS helps with the layout, showing all the web pages same and that help to the user feel always in the same website, be comfortable and not close the window.

If a website is dynamic it’s going to be taken more seriously, therefore it’s going to be more often visited looking for updates or news.

In conclusion looking at the necessities of staff using a CMS program has been the best choice. Because new information has to be displayed every year or month, so the edition possibility is essential. So with a CMS adaptable program they are going to be able to add and also create new content. And Drupal CMS program allows it without much knowledge about computer systems or web designing.

4.2 CONTENT MANAGEMENT SYSTEM

A content management system or CMS [1] is a program which allows creating a supported structure (framework) to create and administrate content, mainly in web
pages, but in the other hand from the participants. So that means that it is also a system used for the Net surfers to add dynamically content to a website, this kind of pages are more famous as blogs.

It’s also an interface which controls a data base where the information is stored. The system allows managing independently the content and the design as we already say. Thus, it’s possible to manage the content and give any time a different design to the website without having to format all the content again. Furthermore, it allows easy and controlled publication in a host for various publishers by giving them permission for it.

In the project an Event tool as extra process has been created. That tool will help to add into the data base dates and display them on the calendar, visible for all users.

4.2.1 CONTENT MANAGEMENT SYSTEM CLASSIFICATION

[2]There are a big number of content management systems available, and we can classify depending on the property by free and open source software and also by private software.

We can also classify them by programming language used to develop like PHP, JAVA, ASP .NET, Perl, Phyton and Ruby on Rails. In the other hand we have some software belonging to Microsoft and others.

In the bibliography there is available more information about different CMS and you can also compare them. [3]

4.3 DRUPAL - CMS

In the last competition about the best CMS Open Source system there were the short-listed on it; Joomla, Wordpress and Drupal. And that was the starting point. If they had
been chosen they must be a good choice. It’s not easy to take a decision so transcendental for our system, thus many comparisons and researches had been useful to understand almost all the facilities of each earlier mentioned CMS.

Wordpress has been discarded very quickly because it doesn’t have enough tools needed by the user.

Finally the Drupal system came as the best option because is the most flexible system and also because there is many information and Add-on (modules) which help to the developer of the whole project. One advantage is that Drupal has a contributed module called Content Construction Kit (CCK) which allows building our own content of information through a user interface.

To create and edit content as developer no extra editors are needed, because there is knowledge about web designing. But in the other hand, the main users of this project will be staffs whose knowledge about computer is not enough to write easily, so a specific editor is going to be provided. That is going to help to focus on the content design instead of how to do it. The editor is a very friendly because of its similarity with the popular Microsoft Word.

Content management is possible thanks to a data base installed in the server and which keeps all data related to the website like: users, permission, roles and post-comment, files attached.

A content management system is also in charge of giving accessibility to the web site as well as been compatible with all navigators.
CHAPTER 5. TECHNICAL DESCRIPTION

5.1 VERSION & ADMINISTRATOR MENU

The version installed on the server is Drupal 5.23. The server MySql data base and other configuration requirements had been taken into account to choose the version.

Next list shows all the menu and submenu available on the actual Drupal configuration, the add-ons included.

**Content management**

- Categories: content organization menu.
- Comments: list and edit site comments and the comment approval queue. There is also the setting option button.
- Content list: view, edit and delete your site's content. There is a filter which helps to find the content.
- Content types: manage posts by content type, including default status, front page promotion, etc.
- Forums: Control forums and their hierarchy and change forum settings.
- Post settings: Control posting behavior, such as teaser length, requiring previews before posting, and the number of posts on the front page.
- RSS publishing: Configure the number of items per feed and whether feeds should be titles/teasers/full-text.

**Site building**

- Blocks: Configure what block content appears in your site's sidebars and other regions.
- Contact form: Create a system contact form and set up categories for the form to use.
- Menus: Control your site's navigation menu, primary links and secondary links, as well as rename and reorganize menu items.
- Modules: Enable or disable add-on modules for your site.
- Themes: Change which theme your site uses or allows users to set.

**Site configuration**

- Administration theme: Settings for how your administrative pages should look.
- Clean URLs: Enable or disable clean URLs for your site.
- Date and time: Settings for how Drupal displays date and time, as well as the system's default timezone.
- Error reporting: Control how Drupal deals with errors including 403/404 errors as well as PHP error reporting.
- File system: Tell Drupal where to store uploaded files and how they are accessed.
- File uploads: Control how files may be attached to content.
- Images: Configure the location of image files and image sizes. Also, if enabled, configure image attachments and options for image galleries.
- Image toolkit: Choose which image toolkit to use if you have installed optional toolkits.
- Input formats: Configure how content input by users is filtered, including allowed HTML tags, PHP code tags. Also allows enabling of module-provided filters.
- Performance: Enable or disable page caching for anonymous users, and enable or disable CSS preprocessor.
- Site information: Change basic site information, such as the site name, slogan, e-mail address, mission, front page and more.
- Site maintenance: Take the site off-line for maintenance or bring it back online.
- Wysiwyg: Configure client-side editors.
- Workflow-ng: Workflow-ng administration links.

User management

- Access control: Determine access to features by selecting permissions for roles.
- Access rules: List and create rules to disallow usernames, e-mail addresses, and IP addresses.
- Profiles: Create customizable fields for your users.
- Roles: List, edit, or add user roles.
- Users: List, add, and edit users.
- User settings: Configure default behavior of users, including registration requirements, e-mails, and user pictures.

5.2 STARTER WITH DRUPAL

To understand the working process of Drupal first we have to learn some basic concepts about it to work properly and not waste any time looking for impossible things or even doing things harder than they really are.

Let’s have a look to the five principal layers. In the next pages each section will be explained.
5.2.1 NODES

It’s the basic content of Drupal system; all kind of content can be a node. For the website we had everything planed, so that was the first step to develop. Each node can content different type of information; we can use HTML or PHP. We will deal with it a bit later.

Each node has in common the next few properties:

- Title.
- Author and published date.
- Body.
- Parent item, which inform under the tree is going to be shown.

There is also available to show or not nodes, depending on the state we want to select. To create the main page we should chose Promoted to front page. As there are shown on the picture below there are multiple choices.
A very useful tool also is the comment enables show in the bottom of the page. This section will help to different user to write or not, depending on the option selected.

Because of the default configuration of Durpal system nodes that can be created are pages and story. The main difference between them is just some default configuration setting. Moreover in story type node the creator and date also will be displayed.

There are other utilities like attach files or show pictures also installable through modules which help and make more setting available during the content adding process. There is always the permission importance to do changes on the content.

5.2.2 MODULES

Modules define the functionality of the site or website. Modules are PHP fields, which are very easy to install. We can difference between two module types; contributed and core.
Contributed modules are add-ons for Drupal [4]. They allow extending, building, and customizing Drupal’s core functionality. These modules are not part of the core files and may not have optimized code/functionality for our purposes. Most of these contributed modules are available.

Some modules are included in Drupal in the first installation, they are called core modules. They can be enabled or disabled depending on our goal for the website. Because of these modules programmer work always looking for the best compatibility most of the modules can work at the same time.

Drupal’s official website has many modules. If you are looking for a specific one there is a search box. It’s going to show all the modules as well as comments from the people in the forum. You can also find the modules by functionality category. All the modules are from people who need a specific thing so as they do we can also do one and share it.[5]

To install modules they must be compatible with Drupal version. The modules have to be placed into modules folder and then it will be shown in the menu Sites building/modules. You would have to enable it and also make it visible to your administrator account. You have to go to User management/Access control and select the module you want to see on your menu. Moreover we have to be careful about enabling modules and disabling them, sometimes errors can complicate the system configurations.

5.2.3 BLOCKS

There are areas to position data within a page. They often contain lists of nodes or other navigational content and are frequently placed in the left or right regions of a
page. Assignment to a region is specified through the admin settings. Blocks themselves are not nodes. You can specify that a block only appears on certain pages or in certain contexts. The appearance of a block is controlled in a theme. [6] So if there is a new block that originally Drupal doesn’t have installed and the theme is changed it’s not going to be shown.

A block configuration is similar to a content page or story. We can show or hide information depending on roles, users or just in some specific pages. There is also a gap for body and with different format to edit the text.

The calendar is written in PHP language into a new Block created called Calendar. It can placed anywhere in the website, depending on the region set.

![Picture 4 Blocks]

5.2.4 MENUS

Menus are pages that already exist on our content menu. With the menu setting we can organize all our pages and have a control of all of them. For that we first need to
create de data and then add it to any parent menu. As well as the block we can choose between different roles to be able to see it and also to hide depending on user type.

We can classify menu in three different groups:

- Navigation: contains administrator menus, supplies by core and contributed modules. This menu will be just displayed to authenticated users.
- Primary links: it can contain main sections of the website structure.
- Secondary links: it can contain links to other secondary sections of the website.

There is also weight column which represents the order inside the menu. This option is also available into Block configuration. Either way, if there are two menus/blocks with the same weight number they will be ordered alphabetically.

5.2.5 USER PERMISSION

This core module allows each user to be able to do certain kind of thing. The administrator of the website should be able to do more changes than any other user. So in access control menu many options are revealed to configure to each user role.

We can also give permission for certain input format. For example a regular content manager with no idea about programming cannot be allowed to edit with PHP input format. So we will configure it through input format setting in site configuration menu.

Through the user management menu we can some setting like the ones displayed below:

- User registration: there a few option; only site administrators can create new user accounts, visitors can create accounts and no administrator approval is required and visitors can create accounts but administrator approval is required.
- User e-mail setting: allows customizing e-mail that can be sent to the user or shown while they are registering. It would depend in the previous configuration.
- Picture: disable or enable image attachment to the user information.

5.2.6 TEMPLATES

To edit the main Drupal template we used a specific program which allows exporting the layout to Drupal’s system.

To add a new template we have to place the new folder into the Theme folder of Drupal installation.

We can set a different theme for authenticated or non-authenticated user. If we change the theme through Site Building we will set the theme for non-authenticated. But if you would like to see a different appearance while logged you must change it in Site configuration/Administration theme.

Creating the theme and extra styles

First of all, the theme made with Photoshop to show to staff was approved. To obtain the final result CSS from the theme have been changed. There are also some new properties to fit the calendar and other tables, to the For the project some extra style sheet has been developed. The calendar and some other tables are associated to classes from CSS called extra_ypu.css.

CHAPTER 6. CALENDAR

The calendar as we already say in this document is a very important tool added to the inside to be controlled for Drupal system. When we talk about been controlled it means that the access add, edit or delete an event must held by authorized users.
A new table has been added into the database. The fields are described below.

- **Event**: title of the event
- **Date**: when the event will be held.
- **URL**: to add extra information about the event or other possibilities.
- **Description**: long description which will be shown once we click on the calendar’s day.

*Event* table is a new table created in the date base just for this objective, the calendar.

The calendar is made on *PHP* programming language. It’s dynamically generated. The code bears in mind the possibility of leap year and it’s consequence on month’s number of days.

To develop the calendar it started step by step. The beginning has been showing all months from the same year. And after the code was built up, it was set in a page into Drupla system.

Actual website shows the month from the server month and the day will be highlighted.
The idea from the calendar is to display events it on the calendar. There can be show also other months by changing the month with the indicator. There available two indicators to go back and forward along the months.

First of all the code obtains the month, year and day. The page can receive specific month and year as variables. If those variables are not set the code will obtain the date from the server:

```php
if((isset($_GET['d']))?$day=$_GET['d']:$_day = date("d");

if((isset($_GET['m']))?$month=(int)$_GET['m']:$_month = date("m");

if((isset($_GET['y']))?$year=$_GET['y']:$_year = date("Y");
```

On the page there is always a variable which indicates the month displayed. And when we press back or forward the variable sent is the actual month plus or less one.

In indicators’ link we assign the actual node’s number($nodeid), that way the code doesn’t depend on the node. Current node is obtained with Drupal variables as shown below:

```php
if (arg(0) == 'node' && is_numeric(arg(1))) $nodeid = arg(1);
```

During the number writing the code looks for a match to set that number’s style different class. The code look for the actual day and the event resulted from the query.

**CHAPTER 7. EVENT PAGE**

From the calendar some variables are sent to event page. The variable is set with the date that the user clicked on. So in the page the date is searched in the data base and then the information from the query is displayed.
Firstly the ID of the event was sent through the variable but there was no option to be more than one event displayed.

CHAPTER 8. INSTALLED MODULES & CONFIGURATION

Every single module (add-on) must be placed on modules folder of Drupal installation and after that it must be enabled on Administer/Site building/Modules. Some modules must have permission access selected for the user.

The next modules installed to develop the website are configurable in Site building menu show in the Main menu (bellow user name).

8.1 WYSIWYG & CKEDITOR

WYSIWYG module allows using editors to edit the content. This module is capable to support any client-side editor and simplifies the installation and their integration. The editor library needs to be downloaded and installed as well.

The supported editors are: CKEditor, FCKeditor, jWysiwyg, markItUp, NicEdit, openWYSIWYG, TinyMCE, Whizzywig, WYMeditor, YUI editor.

Even if they are many choices for an editor CKEditor has been the best choice. It has a lot of tool to edit the text and they are very intuitive for the user.

Once the editor is recognized by Drupal (module enabled) we can match it with an input format previously configured.
In Drupal’s system by default tree input formats are installed (first tree options in the previous picture): filtered HTML, PHP code and full HTML. Each one has different code interpretation configurations. So to keep each configuration a new input format has been created. The input format created will be available to all kind of users and once we editing process finished the CKEditor will be the input format used by default to every user. That’s maybe a disadvantage, because each user is oriented to a type of writing jobs, but on the other hand it’s not something critical for the system developing process.

8.2 IMAGES

The image module is used to create and administer images for the site. Each image corresponds to a node and can have two default sizes but more sizes can be added.

Image setting shows a bunch of more sizes and folder in which they will be hosted.

Additionally and optionally there is a module which helps forming images groups, it’s called Gallerix. It adds a group of images to a node and is in charge of displaying them in nice looking view. All the albums created will be displayed in the same structure, because the sort order is the only one individual configuration available for Gallerix module.
8.3 ATTACH

Bellow all the content pages like page or image contents there is possible to add a file related with the current page.

If we want to use the attached file to the current content it necessary to submit the page, that way the file will be really uploaded to the server.

It’s possible to restrict file extension name configurable on setting menu in *File uploads*. There are also different restrictions depending on the user type.

To **delete** the image we have to select first option (number 1) and after press submit on the bottom. The second eligible option (number 2) helps to **show** directly a **link** on content body. The disadvantage is to be shown the bottom of the body a link to the attached file. It can’t be configurable.

That is a reason to use the *path* shown under the name (3). Depending on the use of the file we can use it to add it as a picture included on the body or as a link for the file.
8.4 WORKFLOW-NG

This module allows the user from role or roles to receive the notification about comments. There are many options about the rules assigned to any kind of action on a comment depending on the user.

First of all, we have to edit any content type and then enable writing on them. After that we have to select on comment settings Read/Write option. Then any user who has privilege for it will be able to write. (This is controlled on the access control module)

Something that this module helps with is to send e-mail to the members of a role when an action happens, for example when someone (user/role eligible) adds a comment to certain page.

Conditions are circumstances that make an event go happen, in the next list we can see options offered from the module:

![Event options image](Picture 8 Event options)
So looking at that list we can see that this module has many utilities. If the office owner of this project’s website would need more control about how does what, they would just to add some new events to do it.

On the setting of each created event there are conditions and actions. The conditions are associated to “who” is the doer, so can be an anonymous user or some roles.

Actions are more related to what happens when the condition evaluation is true. In the next list we have the options offered:

![Picture 9 Actions]

This module is useful for this project because the international students who are abroad can easily share their experience and they also can send pictures to the staff to put them next to their comment.

One useful idea for this module is to add subscription list. And make possible to receive news or any other kind of information to users belonging to a role.

CHAPTER 9. CONCLUSION

I was surprised about how big CMS world is. I learnt a lot about them by searching main characteristic to choose the appropriate one. I’m sure that private CMS are more
stable than the open ones, but for small projects Drupal is a very good choice. It has a lot of abilities, and allows one self to integrate add-ons into the system easily. For example, Microsoft Word cannot be changed, not even the language.

I learnt many things about PHP programming language. It’s not easy to imagine that the code is not executed on the client-side and that makes harder to think what to write if I want the user be able to see any solution.

After teaching how Drupal system works the objective of this project has been reached. The staff will be able to change their own websites content very easy, keeping the structure’s layout.

The languages used for this project were HTML, CSS and PHP. As a result of being more familiar with HTML I had to work on PHP and CSS longer.

PHP language is very helpful to develop a dynamic website so it would be very useful in futures websites I will do.

It’s also important to highlight the importance of a good looking site. But because of the fight between standards’ and navigators’ owners it is not easy to create a unique CSS file for all of them. I realize that CSS it solid to comprehend, somehow it is a tree of style heritages and many properties are modified on the tree. And it makes not easy to determinate who is the parent style of an inherited property given on the navigator.

The editing of PHP has been in a local machine to see the result and to work more fluently on the code without having any other problem derived from the layout.
CHAPTER 10. BIBLIOGRAPHY

[1] Wikipedia:
http://es.wikipedia.org/wiki/Sistema_de_gestión_de_contenidos


CHAPTER 11. INTRODUCTION FOR THE USER GUIDE

In this guide you would learn how to add use Drupal system to add content as well as to edit and make each page look the way you want.

General vocabulary and tips:

* indicates that the gap is obligatory to be completed.

Use Preview button as much as you can to obtain the result, because once you press Submit there is no way to go back.

CHAPTER 12. ACCESSING TO DRUPAL SYSTEM

Access to the main page of the international web page and then add to the top URL:

http://international.ypu.jp/?q=user

Then your user name and password will be asked.

Once you get into the system, menu tree will be displayed. There you can see the options to build up the page and more contents.

CHAPTER 13. CONTENT TYPE ADDING

On the left side there is the content menu. There are a few menu options (inside create content):

- Page: the main page that will be later linked or not with a menu link. (create content/page)

- Image: to add images to the system and they will be available to show them in many pages. (create content/image) There is also the option to attach files in each content page created.
- Album: configure a full page with only images. They will be shown as you want. (create content/album)

In the bottom of each adding process page there are available two buttons: Preview and Submit. Preview means that the changes will not be saved till you click on Submit.

The page can be divided on 5 main parts:

1- Body: content editable by users of Drupal system.

2- Title: page title.

3- Menu: visible to all net users. Each of them is called items with menu title.

4- Calendar: displays events that must be introduced on the system.

5- Parent menu: title of the group of menus.

The content list (administer/content management/content list) displays all the content type installed on the system (image, page and album). There is easy to update some of them at the same time with any options, the most important is the delete option. The
rest of the options are more complicated options that are not useful. You have to select
the content you want to update and the option to apply, finally press update button.

13.1 PAGE

- Title: is the header that will be visible on the top of the page.
- Body: information created by each content type.
- Menu setting: set the title and then select Parent item: (this option is only if you
  want to see it directly in the menu on the left side block)
- International office: page will be an item from the menu.
- Other: page will be a submenu of the selected.
- Weight: means the level (position) the menu selected. If they are two in the same
  level the system will order them alphabetically.
- Publishing options: published (visible to everyone), promoted to front page (just
  one page can have that selected), sticky at top of lists and create new revision.

13.2 IMAGE

Procedures A and B explains to ways to upload images. It is important that the image
must be uploaded to use it as part of the content.

A- Upload one image - Content/ Create content/Image
An image is threaded as a page, so it’s possible to create a page with one picture. But we can use this tool also to add one image to any page after uploading with this procedure. Go to Content/Create content/Image.

First of all choose the file and press attach. Remember that you should press submit to upload the file to the server. Here we have the result:

Now the image will be located into the folder files/images. Remember the name of the file. If you forget you can go to the image and press right button, select “Save as”. Then you would see the real name of the image.
After adding the image we can find it at *Content List*. Once you added many pages, images or albums, they might be hard to find. So Drupal system has a search engine very easy to use:

There are three types of filters. Filtering by *type* can be the best idea. Remember to remove it if you want to see all the contents (pressing on *Reset*).

**B - Attach images to a page (or other files) - ** *Content/Create content/Page*

Any content type can have an attached file, so you can edit any content type and then follow the instruction to attach files. First of all choose the file and press attach.(See picture 14)

Remember that you should press submit to upload the file to the server. And then you have done that, you have to edit the page and specify your images path to add it to your page.
Then Picture 7 shows the option available when the image is uploaded.

![Picture 15](image)

Picture 15 Attach file in contents possibilities

To **delete** the image already attached we have to select first option (number 1) and after press submit button on the bottom. The second eligible option (number 2) helps to **show** directly a **link** on content body (see picture 16).

![Picture 16](image)

Picture 16 Attached as link

The disadvantage is that the link is shown in the bottom of the body, and that can’t be configurable. This result is same for any kind of file, even if the attached is a picture the second selection option is going to show a link. To add a picture read the next explanation.
The path shown under the name (3 on picture 15 or files/images/name.jpg with A process) is to add a picture, without any link. Depending on the use of the file we can use it to add it as a picture included on the body or as a link for the file.

To **add the image to the page** you should edit the page and the in the top tool bar add an image:

![Edit toolbar](Image 17 edit toolbar)

An image property sheet will be shown in the screen, and on it you have to specify where is the image you want to show (**URL**).

![Image properties](PICTURE 18 IAMGE PROPERTIES)

1. **URL**: All the files you upload are in the same path.
2. **Alignment**: options *<not set>* (text up and down the image), left and right.
3. **Resize**: reload’s image’s to the real dimensions.

**Warning**: Images’ properties can be changed pressing with the right mouse button on it.
13.2.1 CHANGE EXISTING IMAGE

Visualize content list menu and select edit. As you already have done before, you can a choose file and attach. Follow the same procedure as before.

If the dimension from the new image you have replaced are different from the new press indicator 3 (see picture 18.3).

13.3 CREATE AN ALBUM

To create an album you have to do the same steps as creating a page. After submitting you will be able to add as much as pictures as you want.

Press Pictures/Add and then submit with each picture you choose.

Caption gap sets the information that is going to be show when the mouse is over the image. If you change it press Save changes button.
The circle with a cross inside is used to delete the image from the album.

When you finish the album will be in content list menu.

CHAPTER 14. TEXT EDIT WITH THE TOOL BAR

In this section there will be explained some options from the tool bar. But it’s assumed that everyone has ever worked with a text editor like Microsoft Word, so their knowledge is enough to edit with the tool provided in this project.

14.1 ADD LINK

To set a link, go to image properties or select the text and click on the Link.

*Link* property sheet will be shown in the screen, and on it you have to specify:

(picture 21)

- URL: copy and paste the full URL you would like link. For example:
  
  ![http://www.google.com](http://www.google.com)

- Target: indicates the place where the page will be open. If you want to show it in a new page change the option. To show the page in the same page you should **not** change this option.
You can remove the link by pressing right button and pressing on Unlink. (or right mouse click on the object)

14.2 FORMATTING TEXT

Sometimes you would like to put some title to a text. It’s recommended to use Format options (Heading 1, 2, 3, 4, 5, 6), as show in picture 23:
CHAPTER 15. CALENDAR EVENTS

As you can see in the calendar there are different colors, one shows the actual day and the other one is the day that has an event.

Those events must be added through the system. Each event must have a date and title. But you can also add a long description as well as a link to see more information about the event.

15.1.1 ADD EVENTS

Fill all the gaps with the information you want to show.
Fallow the indicators to see the correspondence.

- Event: short title.
- Url: optional link to any page.
- Description: large information about the event.
- Date: day of the event.

15.1.2 LIST EVENTS

You can filter by ID or by date. To see all the events from the actual year select empty option in the month list.(see picture 25)

![Picture 25 Empty month](image)

15.1.3 EDIT AND DELETE EVENTS

To do any change (edit or delete) you need first to check the ID number using the last process.

Fill any option with the ID and make the change by using Update/delete button.

CHAPTER 16. COMMENT ADMINISTRATING

Edit a page and then this menu can be shown in the bottom. To make a page editable by anonymous user select the last option.
A role called PostReviewer is the one who is going to receive the mail if someone writes any comment. This comment will not be displayed in the page till he administrator of them approves it. Enable de comment approval queue.

Approve comments are available in content management/Comments. Click on Approval queue button. Then the comment must be edited and in Administration area change Status option to Published. Then it will be displayed on the main page where it was written. (See picture 26 and 27)
The edition is the same as a page content type. There is available the file attachment and the text editor tool.

CHAPTER 17. MENU SETTINGS

To add any item to the menu the content type must exist on content list. Any of the content types explained before can be part of menus or submenus.

First of all go to the page you want to add at the menu and edit this gap. Automatically the text from the Title (picture 29.1) is going to add as part of the selection on Parent Item (picture 29.2)
When this change is submitted the page will appear as part of the parent item selected. In the next picture (30) we can see that the menu created in the 29th picture is added to the menu.

Notice: even if the menu is deleted submenu pages will not disappear. You can access to them in the menu content list.
TECHNICAL SCHOOL FOR INDUSTRIAL ENGINEERING AND TELECOMUNICATIONS

Course:

TECHNICAL TELECOMMUNICATIONS ENGINEER

Projects title: **HANDBOOK**

Web Content Management System. International Office YPU

Noelia Cortijo

Professors Robert Schalkoff and Yoshinaga Nobuyuki

Yamaguchi (Japan), February 17th 2011
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CHAPTER 1. INTRODUCTION FOR THE USER GUIDE

In this guide you would learn how to add use Drupal system to add content as well as to edit and make each page look the way you want.

General vocabulary and tips:

* indicates that the gap is obligatory to be completed.

Use Preview button as much as you can to obtain the result, because once you press Submit there is no way to go back.

CHAPTER 2. ACCESSING TO DRUPAL SYSTEM

Access to the main page of the international web page and then add to the top URL:

http://international.ypu.jp/?q=user

Then your user name and password will be asked.

Once you get into the system, menu tree will be displayed. There you can see the options to build up the page and more contents.

CHAPTER 3. CONTENT TYPE ADDING

On the left side there is the content menu. There are a few menu options (inside create content):

- Page: the main page that will be later linked or not with a menu link. (create content/page)

- Image: to add images to the system and they will be available to show them in many pages. (create content/image) There is also the option to attach files in each content page created.
- Album: configure a full page with only images. They will be shown as you want. (*create content/album*)

In the bottom of each adding process page there are available two buttons: *Preview* and *Submit*. Preview means that the changes will not be saved till you click on *Submit*.

The page can be divided on 5 main parts:

1- Body: content editable by users of Drupal system.
2- Title: page title.
3- Menu: visible to all net users. Each of them is called items with *menu title*.
4- Calendar: displays events that must be introduced on the system.
5- Parent menu: title of the group of menus.

The content list (*administer/content management/content list*) displays all the content type installed on the system (image, page and album). There is easy to update some of them at the same time with any options, the most important is the *delete* option.
rest of the options are more complicated options that are not useful. You have to select the content you want to update and the option to apply, finally press update button.

3.1 PAGE

- Title: is the header that will be visible on the top of the page.
- Body: information created by each content type.
- Menu setting: set the title and then select Parent item: (this option is only if you want to see it directly in the menu on the left side block)
- International office: page will be an item from the menu.
- Other: page will be a submenu of the selected.
- Weight: means the level (position) the menu selected. If they are two in the same level the system will order them alphabetically.
- Publishing options: published (visible to everyone), promoted to front page (just one page can have that selected), sticky at top of lists and create new revision.

3.2 IMAGE

Procedures A and B explains to ways to upload images. It is important that the image must be uploaded to use it as part of the content.

A- Upload one image - Content/Create content/Image
An image is threaded as a page, so it’s possible to create a page with one picture. But we can use this tool also to add one image to any page after uploading with this procedure. Go to Content/ Create content/Image.

First of all choose the file and press attach. Remember that you should press submit to upload the file to the server. Here we have the result:

Now the image will be located into the folder files/images. Remember the name of the file. If you forget you can go to the image and press right button, select “Save as”. Then you would see the real name of the image.
After adding the image we can find it at *Content List*. Once you added many pages, images or albums, they might be hard to find. So Drupal system has a search engine very easy to use:

![Picture 4 filter](image)

There are three types of filters. Filtering by *type* can be the best idea. Remember to remove it if you want to see all the contents (pressing on *Reset*).

**B - Attach images to a page (or other files)** - *Content/Create content/Page*

![Picture 5 choose file](image)

Any content type can have an attached file, so you can edit any content type and then follow the instruction to attach files. First of all choose the file and press attach.(See picture 14)

Remember that you should press submit to upload the file to the server. And then you have done that, you have to edit the page and specify your images path to add it to your page.
Then Picture 7 shows the option available when the image is uploaded.

![Picture 6 Attach file in contents possibilities](image)

To **delete** the image already attached we have to select first option (number 1) and after press submit button on the bottom. The second eligible option (number 2) helps to **show** directly a **link** on content body (see picture 16).

![Picture 7 Attached as link](image)

The disadvantage is that the link is shown in the bottom of the body, and that can’t be configurable. This result is same for any kind of file, even if the attached is a picture the second selection option is going to show a link. To add a picture read the next explanation.
The path shown under the name (3 on picture 15 or files/images/name.jpg with A process) is to add a picture, without any link. Depending on the use of the file we can use it to add it as a picture included on the body or as a link for the file.

To **add the image to the page** you should edit the page and the in the top tool bar add an image:

![Picture 8 edit toolbar](image)

An image property sheet will be shown in the screen, and on it you have to specify where is the image you want to show (**URL**).

![PICTURE 9 IMAGE PROPERTIES](image)

1. URL: All the files you upload are in the same path.
2. Alignment: options *<not set>* (text up and down the image), left and right.
3. Resize: reload’s image’s to the real dimensions.

**Warning:** Images’ properties can be changed pressing with the right mouse button on it.
3.2.1 CHANGE EXISTING IMAGE

Visualize content list menu and select edit. As you already have done before, you can a choose file and attach. Follow the same procedure as before.

If the dimension from the new image you have replaced are different from the new press indicator 3 (see picture 18.3).

3.3 CREATE AN ALBUM

To create an album you have to do the same steps as creating a page. After submitting you will be able to add as much as pictures as you want.

Press Pictures/Add and then submit with each picture you choose.

Caption gap sets the information that is going to be show when the mouse is over the image. If you change it press Save changes button.
The circle with a cross inside is used to delete the image from the album.

When you finish the album will be in content list menu.

CHAPTER 4. TEXT EDIT WITH THE TOOL BAR

In this section there will be explained some options from the tool bar. But it’s assumed that everyone has ever worked with a text editor like Microsoft Word, so their knowledge is enough to edit with the tool provided in this project.

4.1 ADD LINK

To set a link, go to image properties or select the text and click on the Link.

![Link property sheet](image)

Link property sheet will be shown in the screen, and on it you have to specify:

(picture 21)

- **URL**: copy and paste the full URL you would like link. For example: [http://www.google.com](http://www.google.com)

- **Target**: indicates the place where the page will be open. If you want to show it in a new page change the option. To show the page in the same page you should **not** change this option.
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Sometimes you would like to put some title to a text. It’s recommended to use Format options (Heading 1, 2, 3, 4, 5, 6), as show in picture 23:
CHAPTER 5. CALENDAR EVENTS

As you can see in the calendar there are different colors, one shows the actual day and the other one is the day that has an event.

Those events must be added through the system. Each event must have a date and title. But you can also add a long description as well as a link to see more information about the event.

5.1.1 ADD EVENTS

Fill all the gaps with the information you want to show.
Fallow the indicators to see the correspondence.

- Event: short title.
- Url: optional link to any page.
- Description: large information about the event.
- Date: day of the event.

### 5.1.2 LIST EVENTS

You can filter by ID or by date. To see all the events from the actual year select empty option in the month list.(see picture 25)

![Picture 16 Empty month](image)

### 5.1.3 EDIT AND DELETE EVENTS

To do any change (edit or delete) you need first to check the ID number using the last process.

Fill any option with the ID and make the change by using Update/delete button.

### CHAPTER 6. COMMENT ADMINISTRATING

Edit a page and then this menu can be shown in the bottom. To make a page editable by anonymous user select the last option.
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Approve comments are available in content management/Comments. Click on Approval queue button. Then the comment must be edited and in Administration area change Status option to Published. Then it will be displayed on the main page where it was written. (See picture 26 and 27)
The edition is the same as a page content type. There is available the file attachment and the text editor tool.

CHAPTER 7. MENU SETTINGS

To add any item to the menu the content type must exist on content list. Any of the content types explained before can be part of menus or submenus.

First of all go to the page you want to add at the menu and edit this gap. Automatically the text from the Title (picture 29.1) is going to add as part of the selection on Parent Item (picture 29.2)
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Notice: even if the menu is deleted submenu pages will not disappear. You can access to them in the menu content list.
Web Content Management System.
International Office YPU

Noelia Cortijo
Professors: Robert Schalkoff and Yoshinaga Nobuyuki
Yamaguchi, February 17th 2011
Presentation procedure

- Make clear this projects’ objectives
- Needs, know the user (staff)
- Comparison of two pages (old – new)
- Content Management System
- Calendar - events
- Conclusion
- Break
- Teaching for staff.
Objective

- Make users be able to build up the website
- Layout agreeable
  - Text easy reading
  - Picture
- Organize information
- Teach the main useful tool and working process
Steps to achieve the objectives

1. Know the user
2. Analyze user task and goals
3. Establish usability requirements
4. Usability text the concepts (teaching lesson)
5. Repeat as necessary (feedback)
Needs

- Updated/organize information
- Comment page from students experiences
- Calendar
- Reorganize and modify
Why a **Content Management System**

- Mainly: easy user management
- Pleasant interface
- Always the same structure

**DRUPAL open source**
Calendar

• Why?
• Programmed on PHP: dynamic calendar
  o Actual day and event marked
  o Event added in the system
Event

- Day selected a page show the event description
- Can be one day more than 2 events

Event planned
Farewell Party
Wednesday, January 26th, 2011

Event description: Hello'ssss "Don't minddd" "

Farewell Party
Wednesday, January 26th, 2011

Event description: Farewell Party had held on January 26. It was teary-eyed party.

More information
Old website

- Information duplicated and most of it with images
- Not organized for a website

Heavy
New version I

- Organized
- Intuitive
- Information on tables (positive aspects)
- Harmony: one typography
- Different organization
  - Might some new menu
  - More pages with less information in each of them (but still not enough changes made about that)
- Attach documents, links, pictures
Post any comment from anonymous users (approval queue)

Maintenance not centralized, multiple users
New version - editor

- Friendly
- Editor as usual ones
Roles

• What is a ROLE?
• User
• how can we use it?
• Example
  ○ Who receive the mail.
  ○ In charge of the system for the comments.
  ○ Changes Control
Conclusion

- There are a lot of CMS available
  - Easy process to add information
- Manual reading importance
- Not experience

- PHP programming language (edit with SSH)
  - Communication inter-page
- Organizing information (how important)
- Working with Data base (Mysql)
- Content management system
Thank you for coming
Teaching

- Content type: Page, album and image
- Text editor: links and attachments
- Menu
- Calendar
- Comment admin.
- Roles and users
Who is in charge of the comments (role change)
Exercise

- Attach