



Online Toolkit Institutional Guide

Introduction

Purpose of this document

This document is meant for institutions that want to adopt the Autism&Uni toolkit. It will provide instructions on how to install, configure and add content to the toolkit. This document will not justify the decisions taken, or explain how to use the toolkit, because this is done in different documents.

Technologies employed

WiBAF is a JavaScript library to adapt web applications according to the user preferences. It can be used to track user data and change the presentation of the webpage accordingly. You can read more about WiBAF on its official webpage [1]. WordPress is a content management system, it allows to easily publish and update content in a blog-like style, to read more about WordPress, check their official webpage [2].

Installation

Prerequisites

The toolkit is provided as a web application, therefore a reachable web server is required to support the toolkit. Since WordPress has been used, the server is required to support PHP and have a MySQL database installed.

If the environment is properly setup, WordPress has to be installed, to do so, WordPress can be downloaded in the language of your institution in the official page [3]. An extensive guide on how to install WordPress can be found on their official webpage [4].

Integration of WiBAF

The WiBAF library is offered together with a custom WordPress theme for the toolkit, therefore the way to integrate WiBAF is to install the custom theme. To do so, the autismuni theme folder has to be moved inside the wp-content/themes directory, contained in the WordPress root directory.

Once the autismuni theme is copied to its directory, it needs to be activated. This is done in the WordPress administrator screen, under the menu Appearance > Themes. From this menu, the theme can also be customized, but an alternative way of doing it will be shown later in the guide.

WiBAF will be offered as a plugin in the future in order to make it more independent of the look and feel of the website. An update of the software and on how to integrate it and customize it will be available on its GitHub repository [5].

Installation of other dependencies

The toolkit does not only need WiBAF but also a set of plugins [6] [7] [8] [9] [10] [11]. The plugins can be installed from the administrator panel, under the menu Plugins > Add new. The plugins need to be activated after installation.

The Advanced Custom Fields plugin requires the “Pro” version. A license has been obtained for the Autism&Uni project, please contact Marc Fabri (m.fabri@leedsbeckett.ac.uk) for the activation details. The licence can be used only for the Autism&Uni Online Toolkit project. The Pro version is required for the Repeater Fields plugin, which is not part of the Standard version.

Import of the content

There are some files with content that need to be imported, this is done in the administrator panel, in the menu **Tools > Import > WordPress**. First the site content has to be imported, this is contained in the content.xml file. When importing the content, the checkbox that says “Download and import file attachments” needs to be checked. The authorship of all the content can be assigned to the administrator user. WordPress fails to import the Custom Fields settings [6], so this failed import needs to be partially deleted. In the Custom Fields Settings menu [6], this can be deleted, the trash bin needs to be emptied as well. Now import the ACF.xml file can be imported in the same way as before, but this time the aforementioned checkbox should not be checked.

WordPress still fails to import this properly so some manual amendments are required namely, in the Custom Fields settings menu [6], the “Information, Advice and Service Introductions” field group needs to be assigned to the categories: “Information and Advice” and “Leeds Beckett Services”. The same way, the “Interviews” field needs to be assigned to the categories “Professional Interview” and “Student Interview”.

Customization

In order to imitate the look and feel of the toolkit, there is some customization required:

- In the menu **Settings > Reading**, The home static page needs to be selected as front page
- The default URL structure is not very descriptive, this can be changed in the menu **Settings > Permalinks**. In the toolkit the “Post Name” option is selected.
- In the **Appearance > Theme** menu, there is an option to customize the Autismuni theme. This will open a new menu in which there is a “Menus > Menu Locations” option. The “sidebar nav” has to be set as both Primary and sidebar menu.
- The last step is to click the back arrow in the menu and select **Widgets > Sidebar**. All the default widgets have to be removed and the “Custom Menu” widget has to be added afterwards.

Internationalization

The software is provided in English, however WordPress can be installed in every language available. Some text fragments are written inside the theme, these can be found in the file called `dictionary.php`. The categories can be translated in the **Posts > Categories** menu, it is important to keep the “slug” field intact, as this is for internal use.

What can be expected from the software as-is

The software provided basically tracks three user features and reacts to them the following way:

- Is the user watching the videos provided? If not the videos will be shown in the bottom of the page.
- Does the user prefer the slide view or the page view? Every post can be displayed with this two views, our system automatically tracks which one the user selects and saves her preferences to show the next posts according to them.

- What information has the user read? It keeps track of the user history. Some posts have some pre-requisites that will disappear when the user has read all of them. It also adds the class “already-visited” to the posts that the user has already seen. This can be styled in the CSS to fade them, hide them, etc... This is done automatically also for the new posts that are dynamically created.

Creating new content

Creating new content is slightly different in the toolkit than in a normal WordPress, but it follows the same steps. The WordPress official documentation [12] can be checked to learn how this is done, the only difference is that the use of Custom Fields will display different fields to fill in depending on the category selected. Therefore it is important to select a category before start writing the post. A category can be selected in the right side of the screen when writing a post.

Creating directions

The toolkit supports also the creation of directions to indicate students how to get from one site to another. Directions can be created from the administrator panel, in the menu **Directions > Add New**. Directions are created and displayed step by step. New steps can be added by clicking the button “Add direction”. A box will be created, in which text or media images can be added. To delete a step, the minus sign next to the text box should be pressed.

Creating categories

Categories can be created/edited in the **Posts > Categories** menu. It is important that the changes made in the categories are consistent with the Custom Fields, i.e., if a new category is created and this should display some specific fields, this has to be specified in the Custom Fields settings [6].

Extending the toolkit

This part of the guide is oriented to people with a more technical profile. While some modifications could be done by people without a technical background, some require some previous knowledge on HTML, CSS, PHP, or Javascript.

Several things can be adapted in the toolkit. The following subsections will explore each one individually.

As the toolkit will still be improved after the project ends, any update on this section will be documented in the official repository of the WiBAF plugin for WordPress [5].

Extending the adaptation

In order to extend the adaptation, the adaptation and modelling files contained in the adaptation folder can be edited. A tutorial on how to edit these files is kept updated by the Eindhoven University of Technology in the official WiBAF repository [13].

Adding/removing sections

In order to add or remove sections, two steps are required. The first one can be completed in the Custom Fields settings menu [6] and it consists on the creation or deletion of new fields and the official documentation provides a good tutorial on how to do this [14]. With this modification, the information in the new section can be entered in the system, however, it will not be displayed to the user. To display this new information to the user, the file called `template-single.php` has to be modified. The field can be displayed using the function `the_field`. In order for WiBAF to identify

this fragment it should be enclosed in an identifiable div and a data-order attribute should be assigned to that div.

Decoupling the theme from the adaptation

The adaptation has been integrated inside the autismuni theme, however it can be decoupled and moved to a different theme. To do so there are two files from which pieces of code have to be extracted. The first one is the `template-single.php`. As it was mentioned before, every field can be displayed using the function `the_field` and it should be wrapped in a div as mentioned in the previous section.

The other file that has been modified is the `functions.php`, this contains most of the logic. More specifically, the following functions, together with their corresponding calls to `add_action`, have been added:

- `hook_adaptation_files`: This function is executed when WordPress loads the header of the page, so everything that might be added to the header can be done here.
- `link_wibaf`: This one does the same as the previous one, but it does so on the footer. It also initializes WiBAF and sets up the cookie to send to the server if that is the user's will. It also calls the sync functions, which downloads data from the server if the user has just logged in.
- `edit_adaptation_file`: This file is executed when a new post is created or an old one is updated, it modifies the adaptation file in order to add the code that sets the "already-visited" class to the new posts when the user reads them. It can be modified to dynamically add more adaptation functionality.
- `download_data`, `upload_data`, `my_save_extra_profile_fields`: These functions need to be modified if new variables are added in order to keep them synced between the client and the browser.

Apart from modifying those files, it is also required to move to the new theme the following files: `adaptation/adaptation.amf`, `adaptation/modelling.umf`, `js/wibaf.min.js` and the `js/app.js` file.

References

- [1] <http://wibaf.win.tue.nl/>. [Accessed 21 March 2016].
- [2] <https://en.wordpress.com/>. [Accessed 21 March 2016].
- [3] <https://wordpress.org/download/>. [Accessed 21 March 2016].
- [4] https://codex.wordpress.org/Installing_WordPress. [Accessed 21 March 2016].
- [5] <https://github.com/alexmontesg/WiBAF-plugin-for-WordPress>. [Accessed 21 March 2016].
- [6] <http://www.advancedcustomfields.com/>. [Accessed 21 March 2016].
- [7] <https://wordpress.org/plugins/categories-images/>. [Accessed 21 March 2016].
- [8] <https://wordpress.org/plugins/contact-form-7/>. [Accessed 21 March 2016].

- [9] <https://wordpress.org/plugins/regenerate-thumbnails/>. [Accessed 21 March 2016].
- [10] <https://wordpress.org/plugins/simple-page-ordering/>. [Accessed 21 March 2016].
- [11] <https://wordpress.org/plugins/wordpress-importer/>. [Accessed 21 March 2016].
- [12] https://codex.wordpress.org/Writing_Posts. [Accessed 21 March 2016].
- [13] <https://github.com/alexmontesg/WiBAF>. [Accessed 21 March 2016].
- [14] <http://www.advancedcustomfields.com/resources/options-page/>. [Accessed 21 March 2016].