

Making a RACHEL Module

This guide will walk you through the process of creating a basic RACHEL module using an existing website or content for use on a RACHEL-Plus device. Experience with websites, folders, and text editors is required for this process

What is a RACHEL Module?

A RACHEL module is a folder that contains all of the necessary files for a website. When installed on a RACHEL-Plus that website becomes available to users on the RACHEL home page. Users who may not have access to the internet or are in an environment where content needs to be curated for appropriate educational use will now have the ability to browse that website

Components of a RACHEL Module

There are 4 main components that make up a RACHEL module

1. The main folder
2. The logo image file
3. The rachel-index.php file
4. The website content folder

The Main Folder

The main folder of a RACHEL module is a regular Windows or Linux file folder. With everything in place we call this folder a RACHEL Module

The name of the main folder contains some important information about the content and should follow a few guidelines

1. The folder name should always contain the language of the content followed by a hyphen (-) character to help indicate what language this content is in. For example: en-datapost would be English content. fr-wikipedia would be French content.
2. The folder name should always contain lower case characters
3. The folder name should not contain special characters or numbers
4. Words in the folder name should always be separated with an underscore (_) character

Some examples of RACHEL Module folder names are

- en-practical_action
- en-windows_apps
- es-mineduc
- fr-wikihow
- hi-wikivoyage

The Logo Image File

When displayed on the RACHEL home page a RACHEL module will have a logo image to help users navigate and identify the content. This may be the same logo as the website, company, or a completely unique image you choose.

There are a few guidelines for the logo image that should be used

1. The logo file should be a .PNG file
2. The logo file should be named "logo.png"
3. The logo should be a square with a size of 256x256 pixels or 128x128 pixels

The rachel-index.php File

The rachel-index.php file is a PHP code file that is used to display your content with its logo, description, and links on the homepage of RACHEL

```
<div class="indexmodule">
  <a href="<?php echo $dir ?>/content/index.html">
    
  </a>

  <h2><a href="<?php echo $dir ?>/content/index.html">Module Title</a></h2>

  <p>This is a wonderful module that will make the world a better place.</p>
</div>
```

Your Website Content

To add your own website to the RACHEL-Plus you will need a copy of all of the files from your website. The steps to retrieve these files are different for each website and may require modifications by a web developer for use offline.

In this tutorial a basic example website will be used. For more information about the RACHEL module requirements for your website please read the following section. Otherwise please skip to the “Creating Your RACHEL Module” section

For this advanced section a web developer may be required

The RACHEL-Plus is similar to most standard web servers. It can host normal web based content made in HTML, CSS, JS, or PHP with images, videos, documents, and other content. These are the requirements for hosting your own website offline as a RACHEL module

1. A home page for your website. This home page file is usually called index.html or index.php but may differ depending on the website or how it was saved
2. All content that is hosted online will have to be downloaded and localized. This may include videos or documents from sites like Youtube or Google Docs
3. The links in your HTML files will need to be modified for offline use. For more information about this process please see the following section

When hosted offline on RACHEL, all links your custom website will need to be relative to the root folder. This means that rather than linking to a specific directory all links are relative to their current position.

An example of a link that will not work is

```
<a href="/mypage.html"></a>
```

Due to the "/" at the beginning of this link, the link assumes that the mypage.html file will be available at the "web root" of the server. Since RACHEL hosts many websites in their own folders they will not be located at the root of the server. To fix this link we will change it to a relative link by removing the leading "/"

```
<a href="mypage.html"></a>
```

Now when the link is clicked by a user it will look in the current folder for "mypage.html" and not the root of the server

Creating Your RACHEL Module

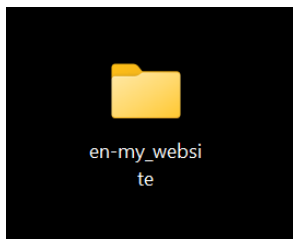
This section will cover creating your first RACHEL module. You will need the following before starting

- A computer
- Your logo image file
- The content files of your website
- The example module from the following link [en-my_website.zip](#) downloaded and unzipped on your computer. Depending on your browser, you may need to right click the link and select "Save Link As" to save the file

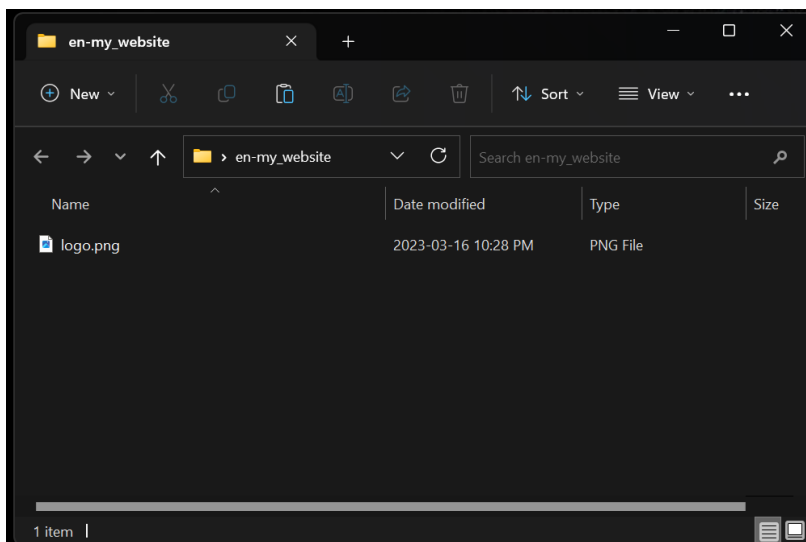
To get started please follow the steps below in the order they are provided

1. On your computer create a new folder which has a name that follows the RACHEL module naming guidelines from above

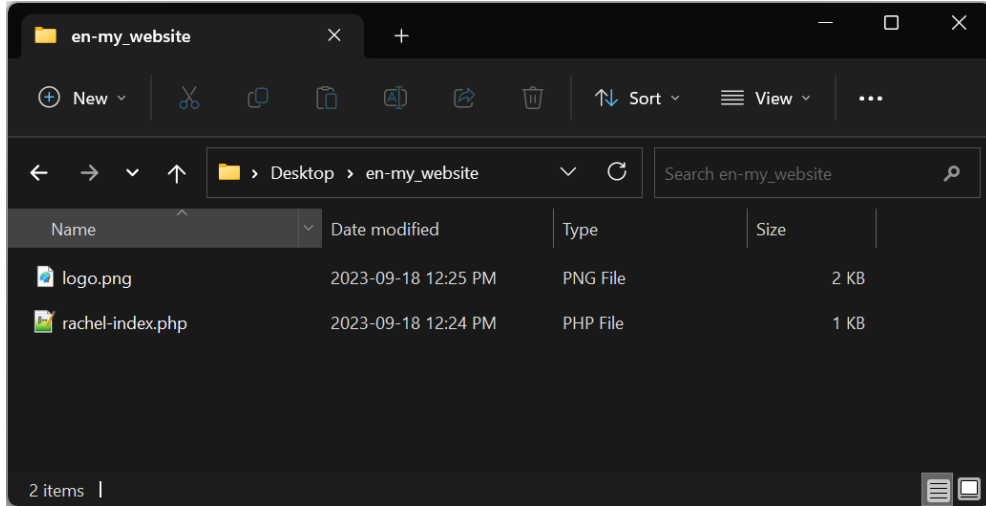
We'll call our module en-my_website in this example which will indicate that this module contains English content



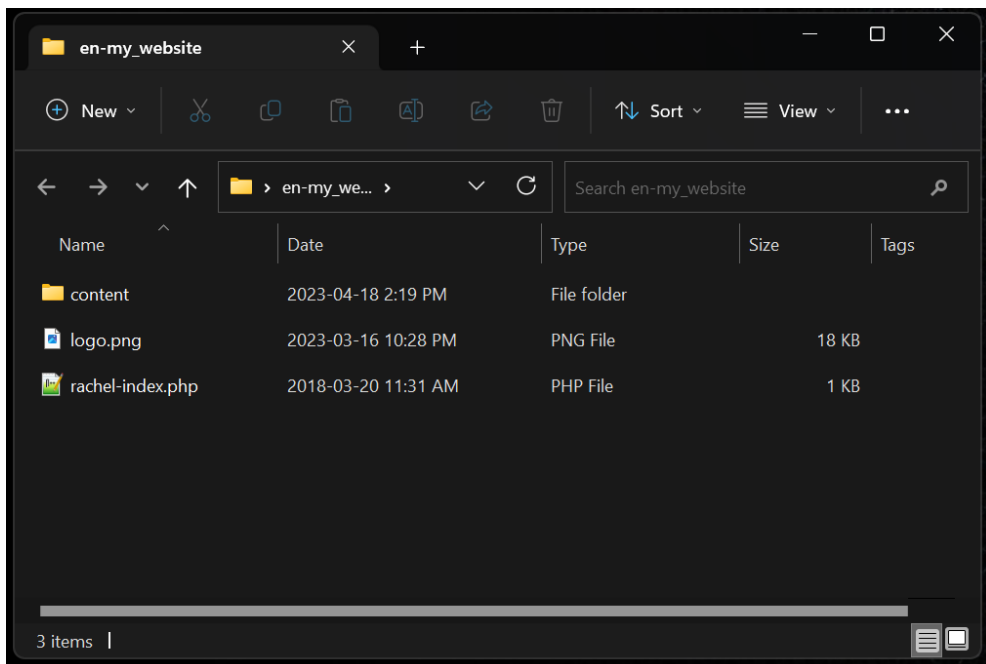
2. Open your en-my_website folder and place your logo.png image file inside the folder. This file should be named logo.png and follow the guidelines mentioned above



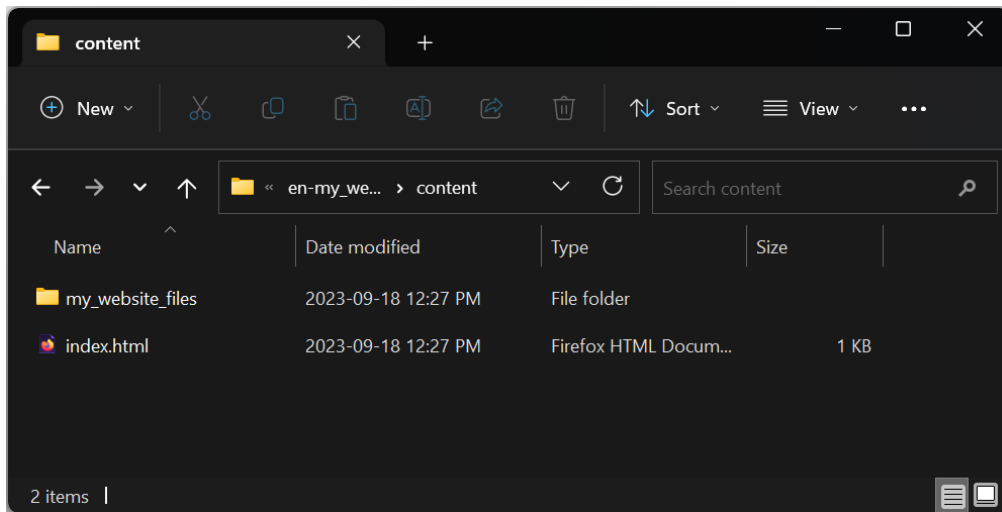
3. Copy the “rachel-index.php” file from the example module zip you downloaded and into this folder



4. Create a new folder called “content” inside your en-my_website folder



5. Copy all of your website files to the newly created "content" folder.
 - Please note that these files will be different for each website.
 - The homepage of your website should be in this folder. It is usually called "index.html or "index.php" but may be different depending on how your website was designed



6. Open the rachel-index.php file with a basic text editor like Windows notepad

```
File Edit View
```

```
<div class="indexmodule">

  <a href="<?php echo $dir ?>/content/index.html">
    
  </a>

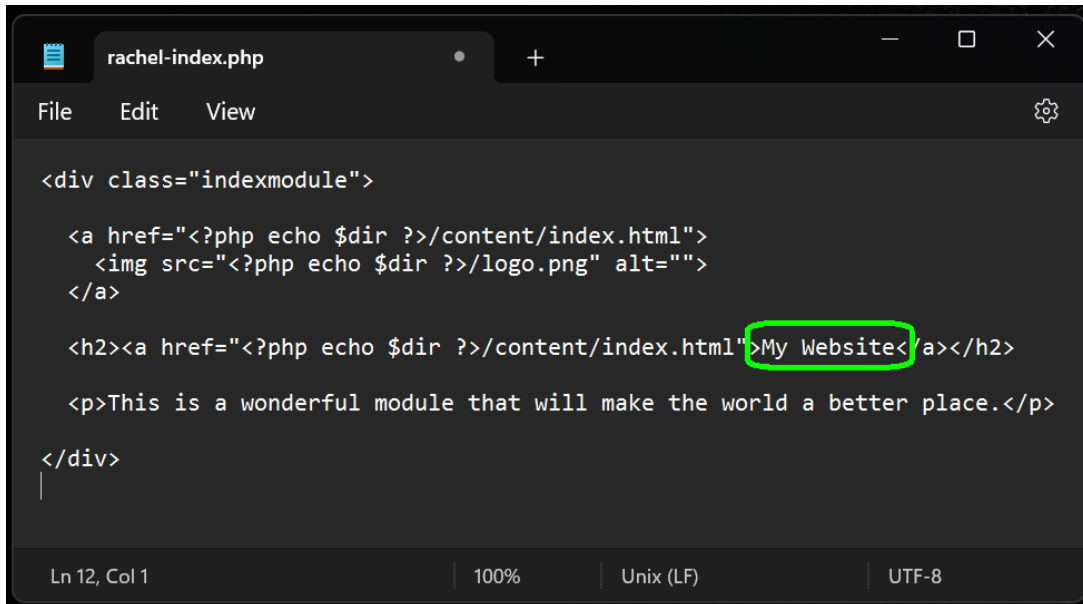
  <h2><a href="<?php echo $dir ?>/content/index.html">Module Title</a></h2>

  <p>This is a wonderful module that will make the world a better place.</p>

</div>
```

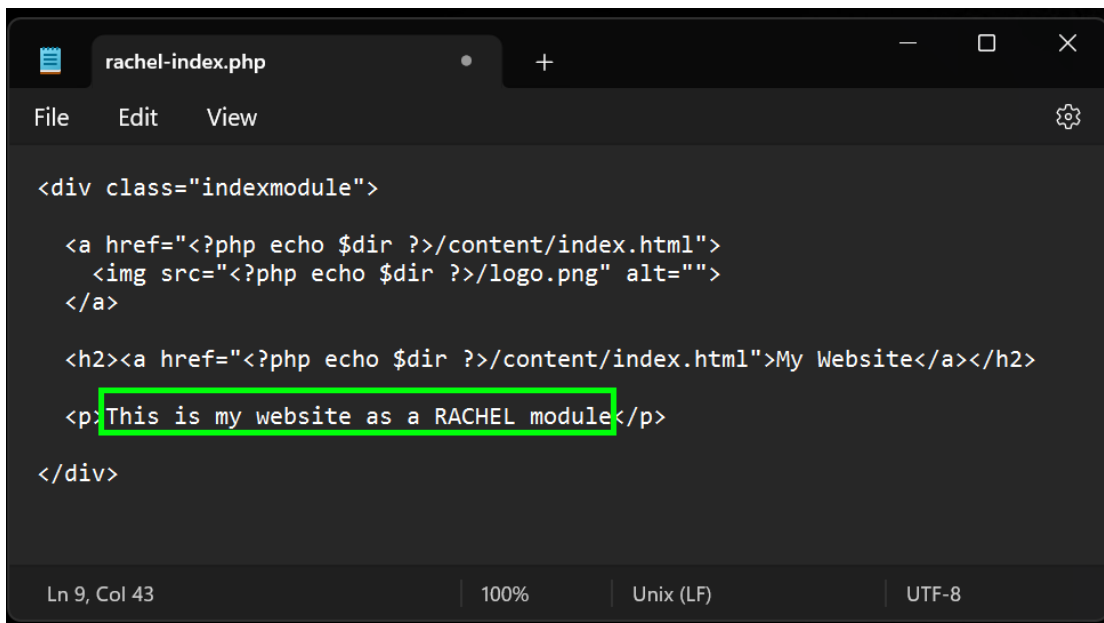
Ln 12, Col 1 | 100% | Unix (LF) | UTF-8

7. Change "Module Title" text to the title that you want displayed on the RACHEL home page for your module



```
rachel-index.php
File Edit View
<div class="indexmodule">
  <a href="<?php echo $dir ?>/content/index.html">
    
  </a>
  <h2><a href="<?php echo $dir ?>/content/index.html">My Website</a></h2>
  <p>This is a wonderful module that will make the world a better place.</p>
</div>
Ln 12, Col 1 | 100% | Unix (LF) | UTF-8
```

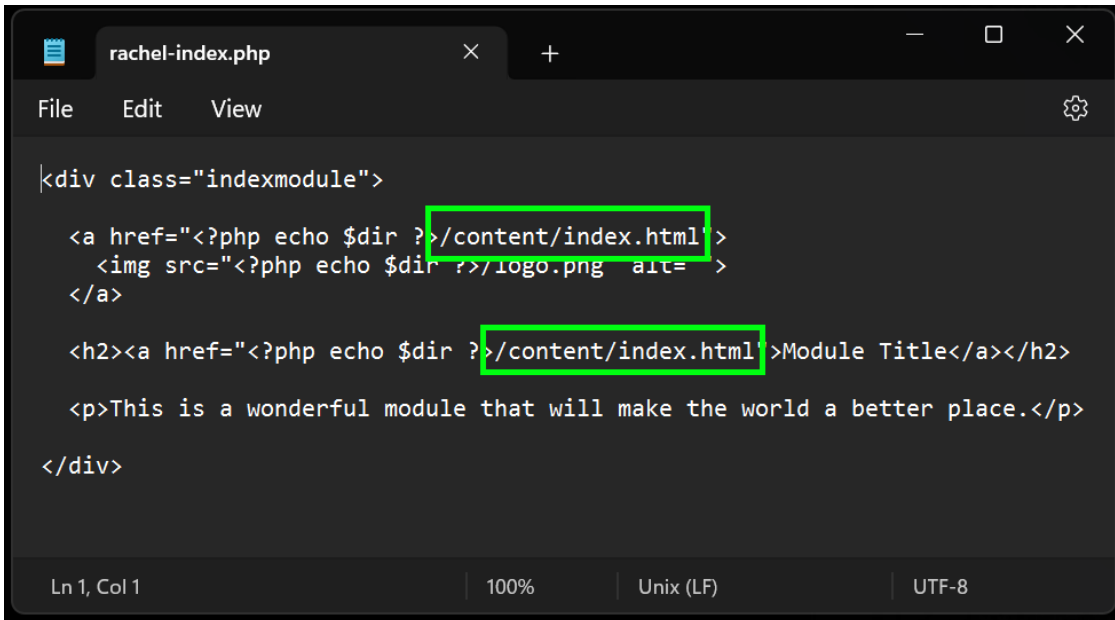
8. Change the module description text to a description for your module that will be displayed on the RACHEL home page.



```
rachel-index.php
File Edit View
<div class="indexmodule">
  <a href="<?php echo $dir ?>/content/index.html">
    
  </a>
  <h2><a href="<?php echo $dir ?>/content/index.html">My Website</a></h2>
  <p>This is my website as a RACHEL module</p>
</div>
Ln 9, Col 43 | 100% | Unix (LF) | UTF-8
```

9. There are two links that need to match the file name of your website's home page file which was placed inside the "content" folder.

In our example the home page file is called "index.html"



```
<div class="indexmodule">
  <a href="<?php echo $dir ?>/content/index.html" >
    
  </a>
  <h2><a href="<?php echo $dir ?>/content/index.html" >Module Title</a></h2>
  <p>This is a wonderful module that will make the world a better place.</p>
</div>
```

If you have a different name for your homepage file please change "index.html" to match your homepage file name. This may be different for different websites. For example "index.php" or "home.html"

10. Save your rachel-index.php file changes

You have now successfully created a RACHEL module! There are several ways to transfer this module to the RACHEL device. For the latest tutorials please visit our forums at community.worldpossible.org