

Let's make a website using Markdown on GitHub.com

Summary

You will experience computer coding utilizing the simplest coding method for making web pages called *Markdown*. Markdown code is useful for writing content for blogs or websites created using static site generators such as Jekyll or Hugo. Markdown is often described as *human-readable code*, because it uses a minimal set of symbols to describe the formatting of text within web pages that includes bold, italics, headings, image position, and linking web pages. Aaron Swartz developed Markdown as a simpler form of HTML when he was 18. Markdown codes are summarized on last page.

[GitHub.com](https://github.com) offers free website hosting with its *GitHub Pages* service. GitHub's *Jekyll* module provides formatted themes and converts Markdown to HTML code that web browsers can process. GitHub is a cloud service on which much of the *Free Open Source Software* (FOSS) is created using *Git Repositories*. Git was developed by Linus Torvald's who is credited with creating Linux.

Requirements

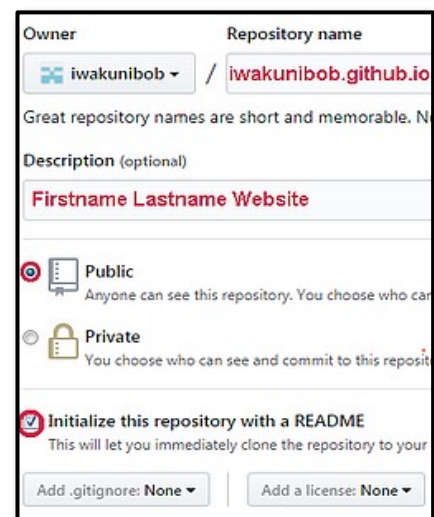
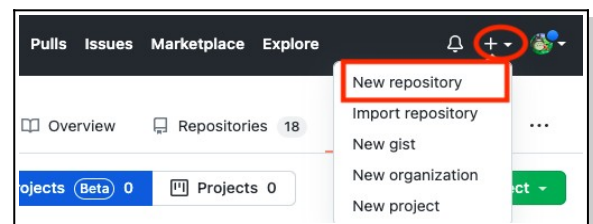
You will need to bring a portable computer to Plat-ABC to actively participate in this seminar and utilize wifi. The only software needed is a web browser to write markdown and upload images. If you prefer a text editor then, [Visual Studio Code](https://code.visualstudio.com/) is recommended and can provide Git connectivity to [GitHub.com](https://github.com).

Step 1: Open your browser and create a new account for yourself at [GitHub.com](https://github.com). Please create your account before attending the seminar on the computer you intend to use at the seminar..

- a) Your UserName is important because you will be giving it to people to find your website. It must be unique among GitHub accounts. After creating the account you will need to respond to email confirmation sent to your email before continuing and enter a launch code in the web browser.
- b) We will be using only the *GitHub Pages* service
docs.github.com/en/pages

Step 2: Create New Repository has several fields.

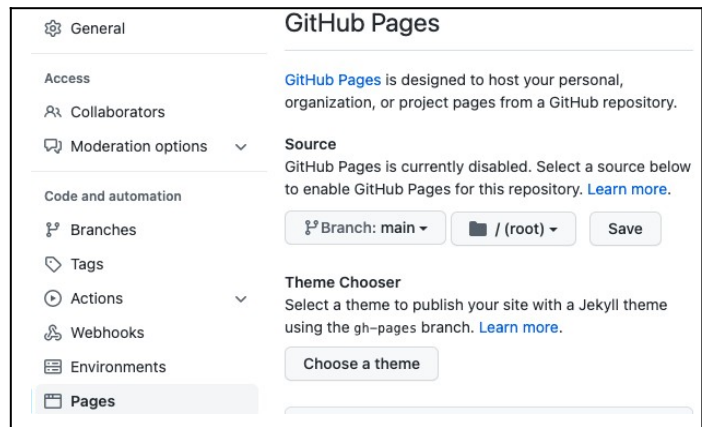
- a) Click on + symbol shown and select **New repository** as highlighted in red.
- b) Your repository name should be your *UserName.github.io*
This will allow you to create your home page that will be viewable to any web surfer at *UserName.github.io*
- c) Provide a Description for your website if desired
- d) Select the public radio button
- e) Check the README checkbox
- f) Click the green Create Repository button
- g) Your new website repository has been created



Step 3: Hosting your Repository on the Web

The README.md file is a markdown file and is your home page but creating a index.md or index.html file will become the new home page with full functionality. To make your repository available as a website you need to setup GitHub Pages web hosting.

- From within your repository click on the ... in upper right area and select **Settings** and then **Pages**
- Select Source Branch: **main** and **/(root)** and click **Save** button
- After waiting 5 minutes your website should be live and viewable to anyone on the world wide web at *UserName.github.io*

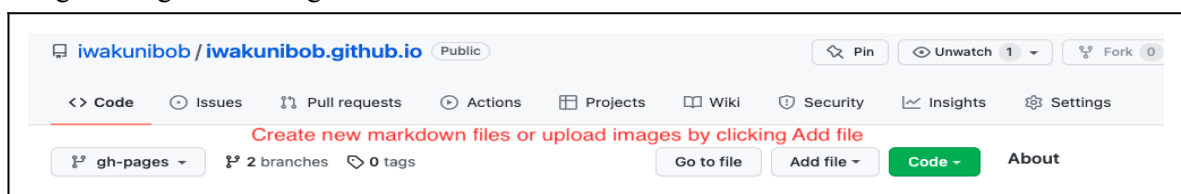


Step 4: Selecting a Theme

- Also on the the GitHub Pages section click the **Choose a Theme** button for selecting a theme.
- A new page will load from which you can select one of several nice themes. Clicking the Arrow on the right of the themes are more themes. Select a theme and then click the green **Select Theme** button.
- Open your url *UserName.github.io* in a new web browser Window and note that the theme has now changed and also your REAMDME.md file now has much more code inserted into it.

Step 5: Code your webpages

- Select the <> **Code** tab to view code for your repository. This will display all files currently in your repository folder and allow you to create new files and upload JPEG images. We will create three markdown pages with filenames: **index.md** **bio.md** **topic.md**
If you would like to include your own images on your web pages you should reduce the file size to less than 80 kb using an image processing program like Gimp available at <https://www.gimp.org>.
Image editing could be a good future seminar.



- Create your *Home page* by clicking the **Add file** button and select **Create new file**. Name the file **index.md** which will become the default home page for your website. Enter some Markdown code and text that you would like to appear on your homepage described in markdown summary. Create links [Biography](bio) and [Topic](topic) from home page. Click the green Commit button.
- Create your *Biography page* with file name **bio.md** which will become your biography page. Write a description about you and also create link back to home page using [home](index)
- Create your *Topic page* with file name **topic.md**. Your topic can be about anything you would like to tell the world about. Using markdown code organize the information.. Link to two images on topic page that you uploaded to GitHub or on an external website. Create link to [home](index)

Markdown

Markdown can be used for creating web pages or personal documents. Markdown documents have the *filename.md* extension. It is a simple coding methodology that provides functions for text formatting, creation of lists, linking of documents, and image inclusion in your documents.

The markdown symbols can be categorized as *Block elements* for things like headings and paragraphs, and *Inline elements* for things like Bold, Italics, Links, and Images placement.

Markdown Syntax Block elements

<i>To get this...</i>	<i>Type this...</i>
A paragraph of text <hr/>	<i>End with blank line or 2 spaces</i> <i>--- is called Horizontal Rule</i>
Largest Heading	<i># at beginning of line</i>
X-Large Heading	<i>## at beginning of line</i>
Large Heading	<i>### at beginning of line</i>
Normal Heading	<i>#### at beginning of line</i>
Small Heading	<i>##### at beginning of line</i>
Smallest Heading	<i>##### at beginning of line</i>
Block quote indented text	<i>> at beginning of line</i>
• Hierarchical Bullet List o Second Level bullet item	<i>+ Bullet List item</i> <i>+ Second level bullet item</i>
1. Number List Item 2. Number List Item	<i>1. Number List Item</i> <i>1. Number List Item</i>

Markdown Syntax Inline elements

<i>To get this...</i>	<i>Type this...</i>
New line of text without ↓ blank line above	<i>End preceding line with ↓</i>
<i>emphasized</i> text shows <i>italics</i>	<i>*emphasized* text shows *italics*</i>
Strong text shows as bold	<i>**Strong** text shows as **bold**</i>
<i>Emphasized Strong</i> text	<i>***Emphasized Strong*** text</i>
Some Strike through text	<i>Some ~~Strike through~~ text</i>
Display Image	<i>![Alt text](URLpath2image.jpg)</i>
Display Image with title	<i>![Alt text](URLpath2image.jpg "title")</i>
Link to webpage	<i><URLofWebpage2Link></i>
Link Text to webpage	<i>[Link text](URLofWebpage2Link)</i>
Link Text to webpage with title	<i>[Freedom](freedom.html "title")</i>