

Web Application and Development: Group Assignment Manual

CS1524 / CS1525



February 16, 2020

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1 Vision and Strategy

1.1 Preface

The purpose of this manual is to describe the wiki application. A list of instructions are given to perform a variety of tasks and the features are described in detail. The instructions are written in such a form that a novice should be able to run the wiki and install any required applications. The first section is an addition to the manual. It provides insight into the vision behind the wiki, the planning process, and discusses the team collaboration through the creation process.

1.2 Planning

Our team's vision for developing the wiki was to understand the requirements. This was specified in the "assessment template" file provided. This section instructed us to build a wiki for any given topic. We understood that must create a readable and user friendly wiki that met the given requirements with a clear and functional layout.

We also gave some thought into additional features such as links to information pages, and a pop-up login. After understanding our vision of the wiki, we proceeded to our strategy.

On a more specific level, we understood that we needed to create a wiki that had different access levels, such as a standard user, editor, and an administrator to complete different tasks. A sign in and register feature must also be provided. These specific requirements for the editor and administrator are further outlined in the "assessment tasks" portion of the template given to us.

1.3 Team Collaboration

We decided to divide the work in such a way that everyone was doing an equal amount in their preferred field. The specifications of such are provided in the team contribution form. In order to ensure the quality of the wiki, we decided that it would be best if we worked together. We arranged to work together in our practicals and meet each other in the group study areas at the University Library when needed. Furthermore, if none of us were able to meet then we would work separately at home, still communicating through messenger.

Furthermore, github was a really helpful tool as it let us work together and enabled us to share the files when needed. Overall, our group used different communication and collaborative methods which enabled us to create an interesting wiki page, with readable and efficient code.

1.4 About The Wiki

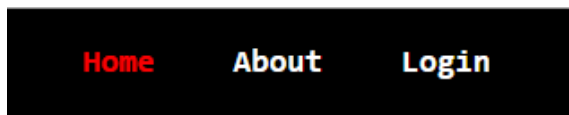
This wiki is about the Netflix television show, “Mr.Robot”. The idea of the wiki is to share information about this show to fans. The purpose of the wiki is to create a community of people to share ideas and opinions about the tv show. The future of the wiki would be to create a multi web page with different tv shows, however, the requirements specified that the application is to be designed to handle a single web page. However, there is the potential for the wiki to grow and become larger.

2 Functionality

2.1 Navigation Bar/ Different Views

The navigation bar is at the top of all pages in each different view (standard user, editor, and admin). The different access levels have differing features and abilities.

Without logging in the navigation bar looks as follows. It is highlighted in red to denote what page you are currently on.

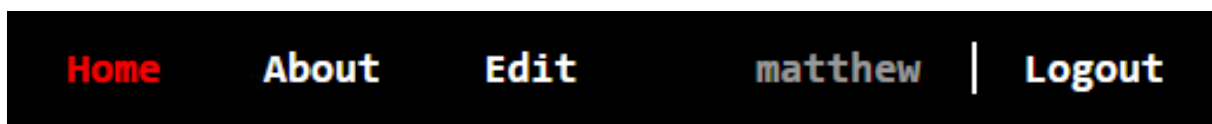


It will be apparent when you login, as the 'Login' tab changes into the option to 'Logout' and also displays your username.

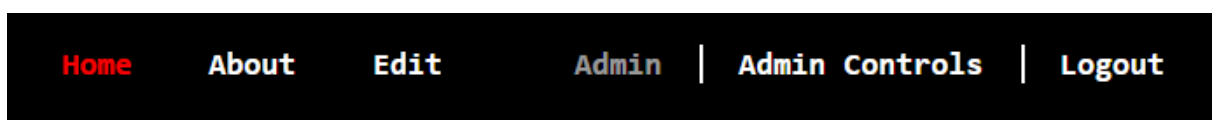
For a standard user:



For a user with editing privileges:

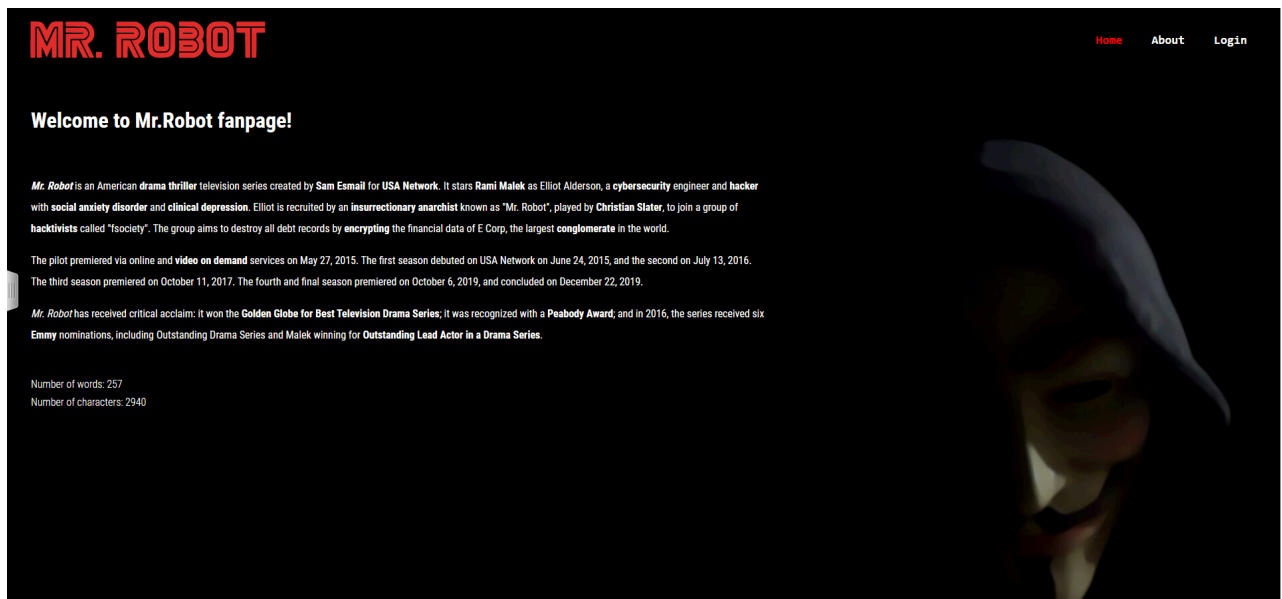


For the Admin:



2.2 Home Page

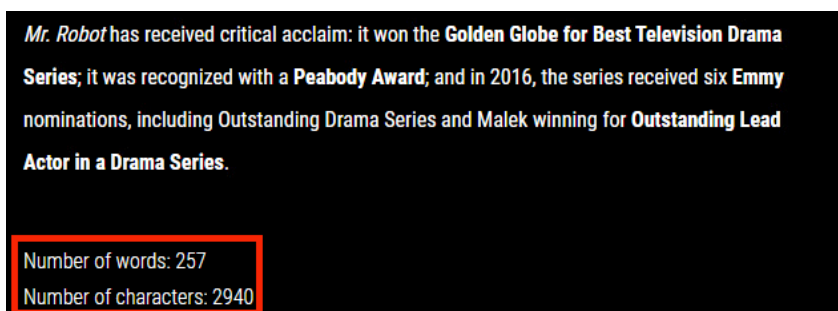
As soon as you open the wiki, it will direct you to the home page which looks as follows.



If your location has changed and you click ‘About’ to return to the home page, simply press ‘Home’ in the navigation bar at the top of the screen.

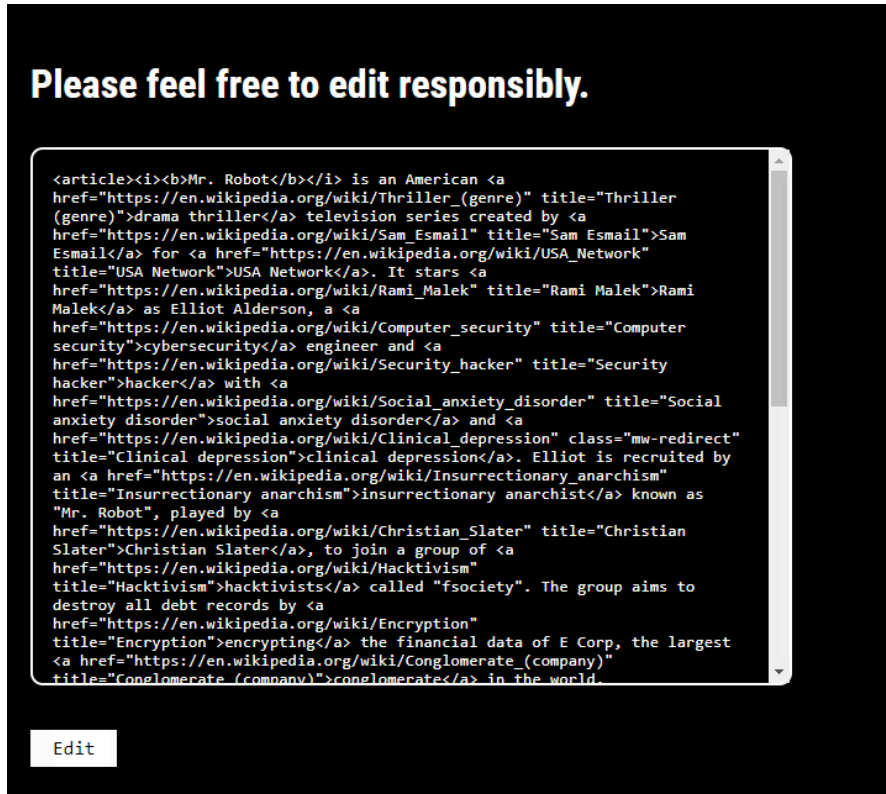
The page which you are on is highlighted in red in the top right hand corner of the page.

In addition, the number of words and characters from the article appears at the bottom of the article as shown below.



2.3 Edit Page

The edit function is only available to certain users in which they have the ability to edit the article written about the Mr. Robot.



The users have the ability to make changes to the main article, if they have the edit feature enabled by the admin. You can simply type in the changes you would like to change, and press edit. This will perform the change automatically. **When you register as a new user, your default setting is view only, the admin will have to enable this feature.**

2.4 About Page

The about page can be seen even when you are not logged in. This simply redirects the user to a page with the names of the creators of the wiki as shown below.



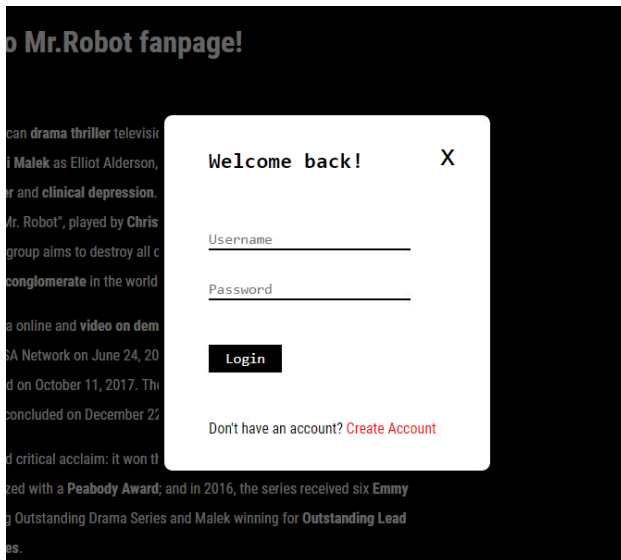
2.5 Logging into the Wiki

(If you do not have an account, please refer to section 2.6.) To login to your account:

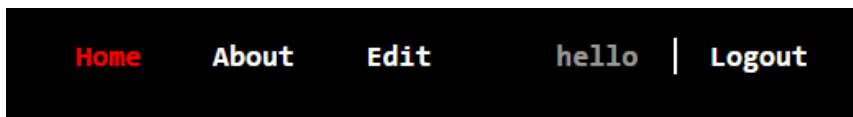
1. Simply press the login tab in the navigation bar.



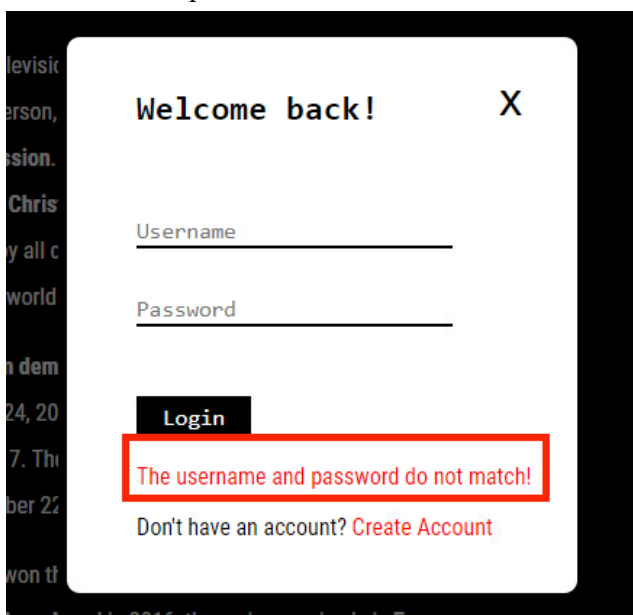
2. A pop up will appear, and enter the required information (username and password).



3. If you have successfully logged in, the navigation bar will display your username and now give you the option to logout.



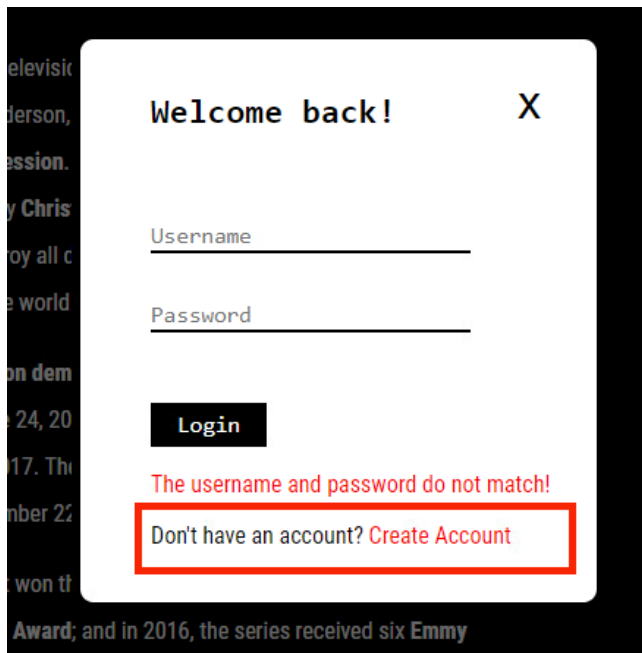
4. If your password or username is incorrect a message will appear and tell you that the username and password do not match.



2.6 Create an Account

In order to create an account:

1. Go to the login tab in the navigation bar.
2. A pop up will appear that will ask for a username and password. Underneath there is a link to create an account.



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Award; and in 2016, the series received six Emmy

Welcome back! X

Username

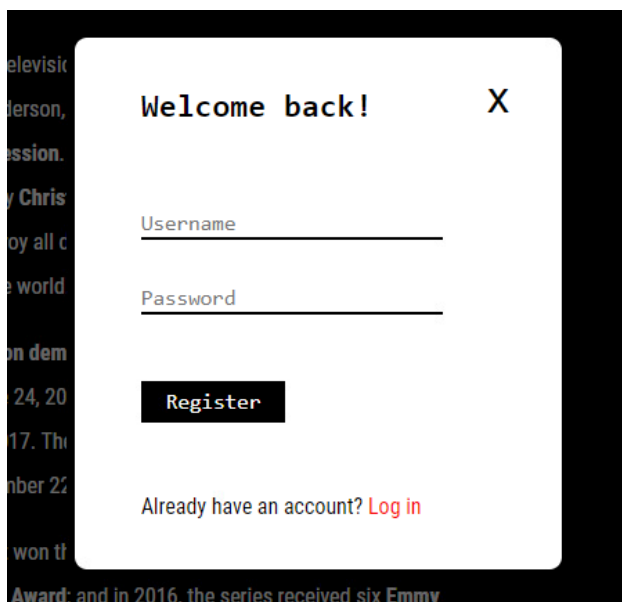
Password

Login

The username and password do not match!

Don't have an account? [Create Account](#)

3. Click “Create Account”, and it will redirect you to the create account pop-up.



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24, 20
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Award; and in 2016, the series received six Emmy

Welcome back! X

Username

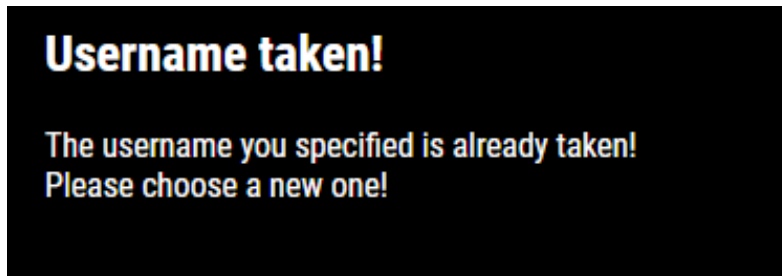
Password

Register

Already have an account? [Log in](#)

You also have the option here to return to the login page.

4. You can choose your username and password, and press register. However, if your username is already taken by another user a message will appear saying that the username specified is already taken and to choose another one.



5. Once you have created your account, it will redirect you back to the home page. You can now login, using the instructions from section 2.5.

2.7 Additional Features

There are links provided within the article that re-direct you to Wikipedia pages. This additional feature was implemented in order to provide greater insight to the reader, and allow them to understand/further their reading on a tangential subject associated with the Netflix show “Mr. Robot”.

In order to access the Web pages, hover over the bolded words. They will appear in red text when you hover over them, and the title of the webpage will appear. For example,

Welcome to Mr.Robot fanpage!

Mr. Robot is an American **drama thriller** television series created by **Sam Esmail** for **USA Network**. It stars **Rami Malek** as **Elliot Alderson**, a **cybersecurity** engineer and **hacker** with **social anxiety disorder** and **clinical depression**. Elliot is recruited by an **insurrectionary anarchist** known as "Mr. Robot", played by **Christian Slater**, to join a group of **hacktivists** called "fsociety". The group aims to destroy all debt records by **encrypting** the financial data of E Corp, the largest **conglomerate** in the world.

The pilot premiered via online and **video on demand** services on May 27, 2015. The first season debuted on USA Network on June 24, 2015, and the second on July 13, 2016. The third season premiered on October 11, 2017. The fourth and final season premiered on October 6, 2019, and concluded on December 22, 2019.

Mr. Robot has received critical acclaim: it won the **Golden Globe for Best Television Drama Series**; it was recognized with a **Peabody Award**; and in 2016, the series received six **Emmy** nominations, including Outstanding Drama Series and Malek winning for **Outstanding Lead Actor in a Drama Series**.

Number of words: 257

Number of characters: 2940

If you click on it, it will redirect you to a Wikipedia page as shown below.

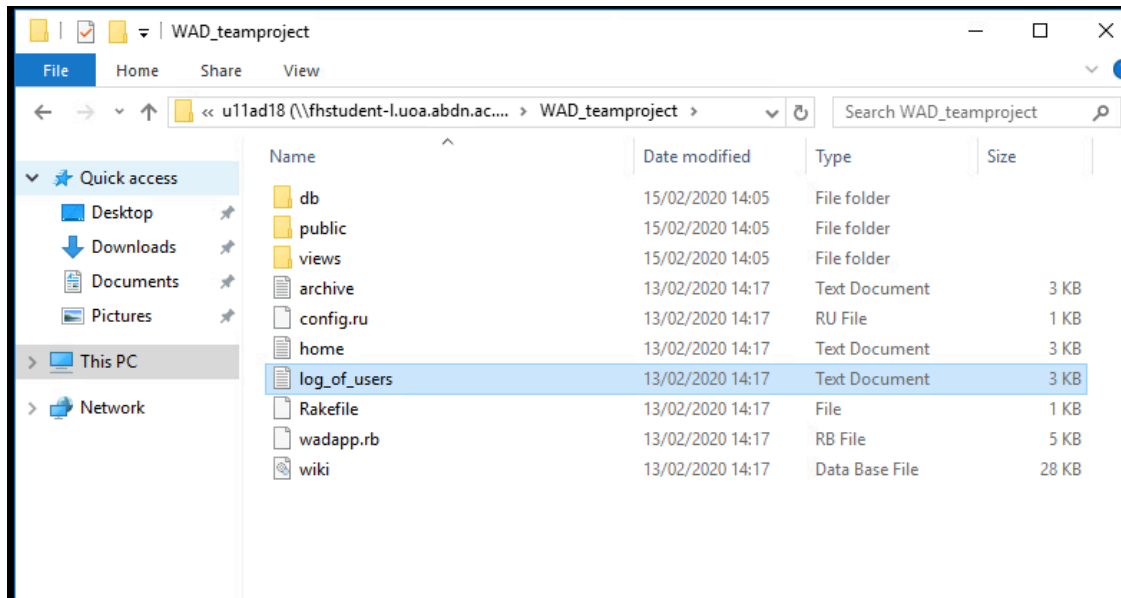


In order to go back to the wiki simply press the back button at the top left hand corner of the web browser.

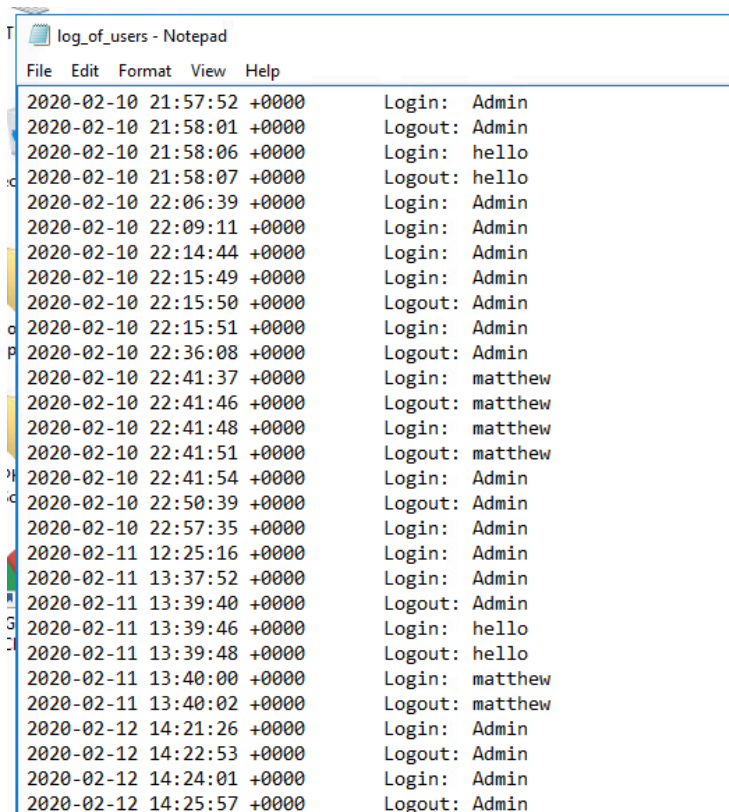


2.8 Log

There is a log of users in the folder that shows the date and time in which the users login and logout of the wiki.



The above shows the location of log in the folder.



The above is an example of contents of log of users.

2.9 List of Users

The following shows the list of users and their corresponding passwords.

Username	Password
hello	hello
matthew	matthew
andy	password
user	password

Recall that the system is case sensitive, so ensure you are using the correct upper/lower case characters.

There is only one registered Admin. The credentials for this admin is discussed in section 3.1.

3 Admin Instructions

The following section includes instructions and recommendations on certain features and highlights the basic functions of the wiki. These instructions have been written in the simplest form to ensure that a novice would be able to follow them easily. There are additional links provided in this section for any further assistance you may require.

3.1 Admin Login

In the navigation bar, press login and enter in the corresponding fields. Note that it is case sensitive.

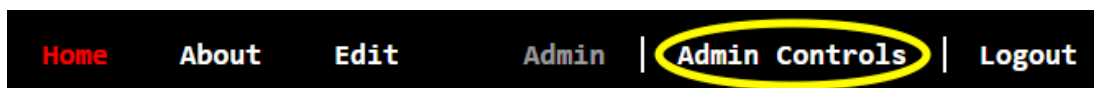
User: Admin

Password: admin

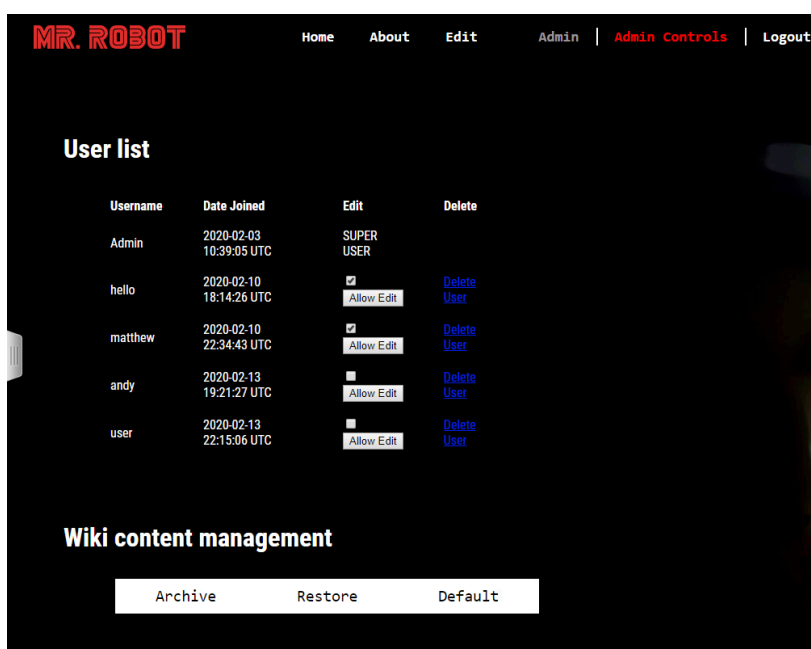
If you require further assistance to login, please refer back to section 2.5.

3.2 Admin Controls

In order to access the admin controls ensure that the admin is logged in correctly. You can check this by looking at the navigation bar. It will display the name “Admin” to show you are logged in. Once logged in, a new tab appears in the navigation bar called “Admin Controls”.



The Admin Controls page looks like the following.



The Admin has access to the list of users, in which they are given the date joined, whether or not they are able to edit, and the ability to delete the user entirely.

User list			
Username	Date Joined	Edit	Delete
Admin	2020-02-03 10:39:05 UTC	SUPER USER	
hello	2020-02-10 18:14:26 UTC	<input checked="" type="checkbox"/> Allow Edit	Delete User
matthew	2020-02-10 22:34:43 UTC	<input checked="" type="checkbox"/> Allow Edit	Delete User
andy	2020-02-13 19:21:27 UTC	<input type="checkbox"/> Allow Edit	Delete User
user	2020-02-13 22:15:06 UTC	<input type="checkbox"/> Allow Edit	Delete User

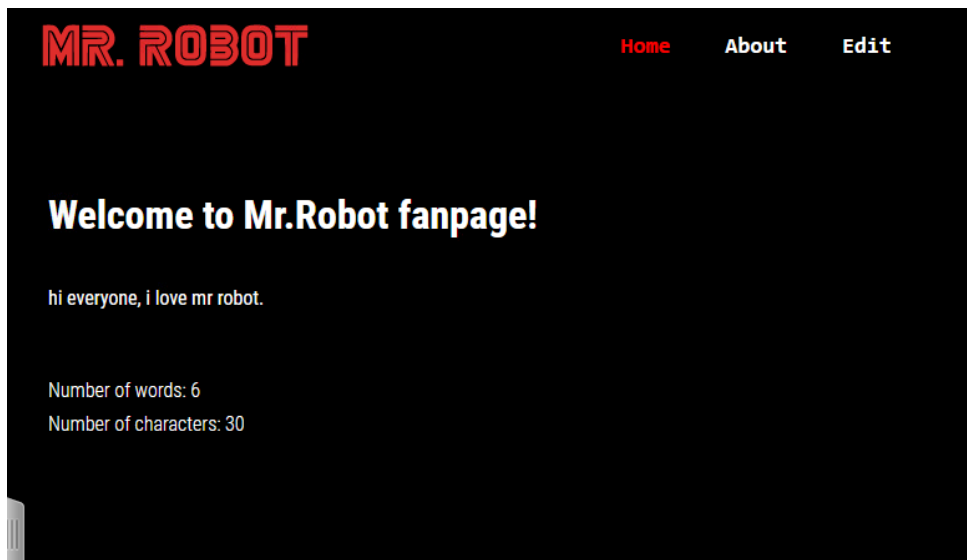
The admin has the ability to archive the homepage, restore the version to a backup, or restore the wiki to its default. If one of the users decide to edit the article, the admin has the ability to restore an older version or to restore it back.



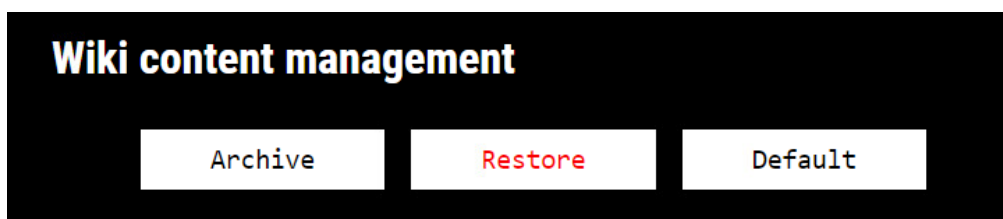
When you press 'Default', this will return the wiki back to the default session.



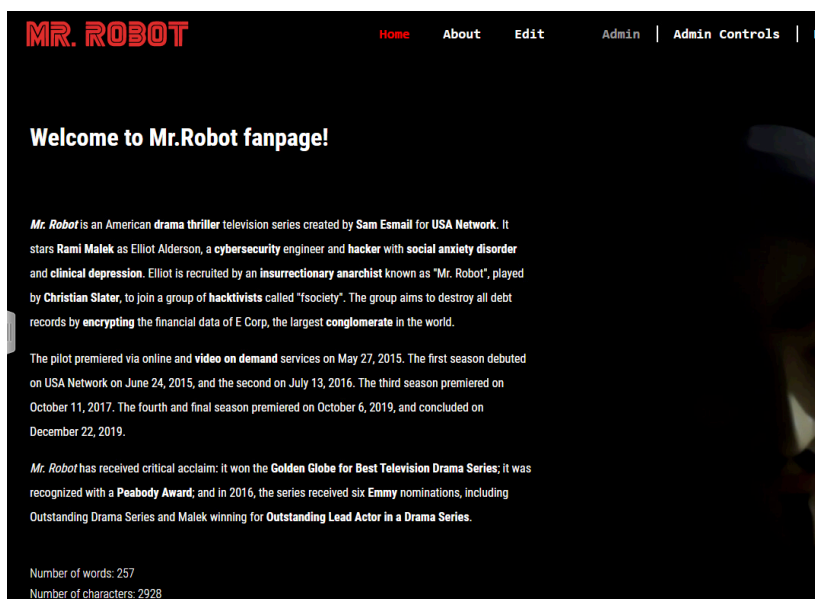
The admin has the ability to restore the session, within the admin controls tab.



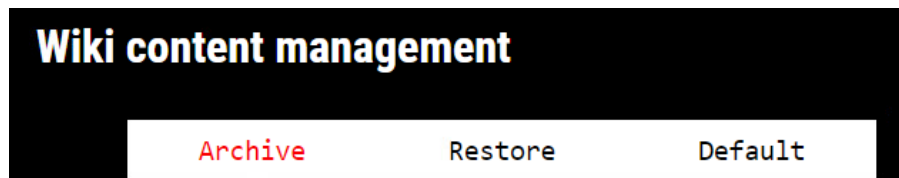
For example, if a user made the above changes to the article, the admin would simply need to go into the admin controls and press restore.



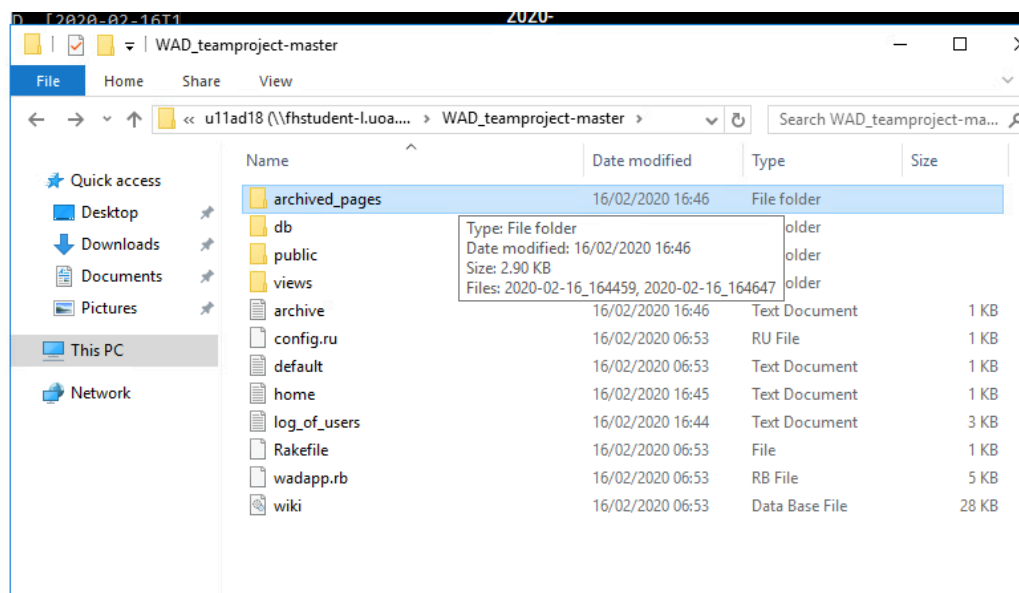
Once the restore function has been pressed, it will redirect the user back to the original article that was written. This function is only available to the admin.



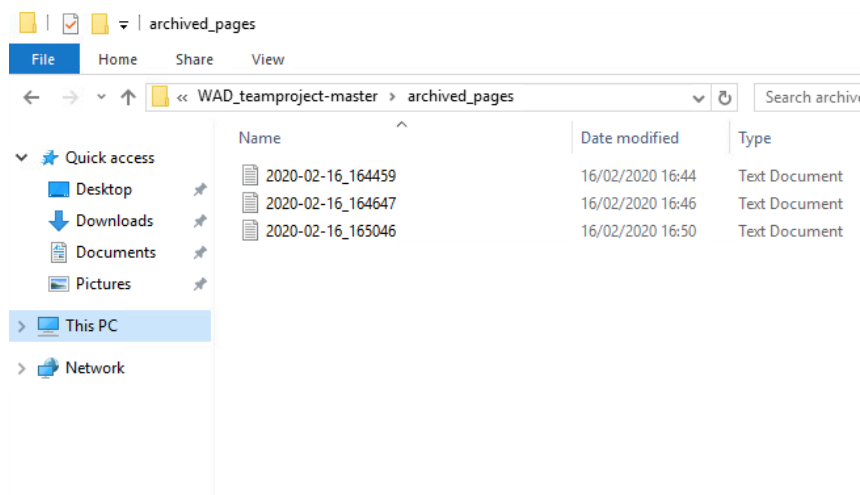
The admin has the ability to archive sessions.



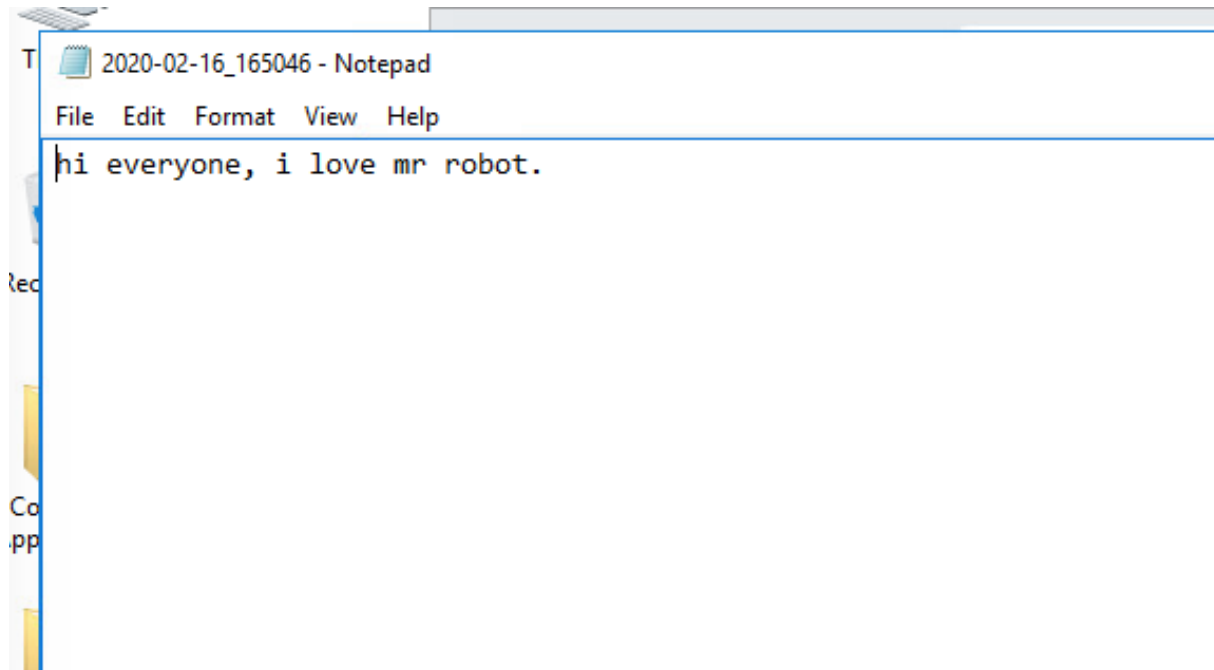
If the article has been changed and the admin wants to archive the article, all they have to do is press “Archive”. This will save a text file into a folder called “archived_pages”. This folder exists within the original folder that you downloaded.



Within the folder there will be a text file of the sessions you have archived. For example,



You can open these text files and see what was written. The file name will also be saved as the date, and hence can be easily referenced.



The admin also has the ability to edit. This feature is further discussed in section 2.3.

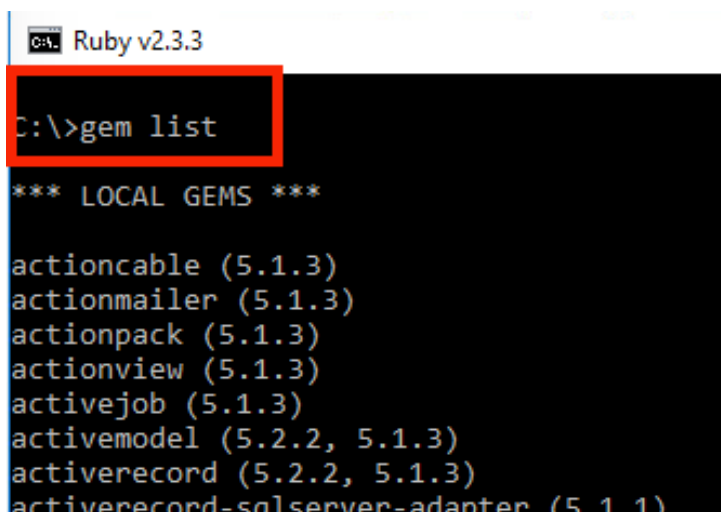
3.3 Requirements

Note that the zip file was created in a specific way, including the location of folders and files. Moving these files will result in an error and it will be unlikely the wiki application will run entirely or in the intended way. In addition, the names of the files and folders cannot be changed as this would also likely result in an error.

System Requirements for running the wiki:

- Ruby 2.3.3 or later installed on the machine. This is the program the system will be running on, and no other application will suffice. If any additional help is required for the installation of ruby, visit the following webpage:
 - <https://www.ruby-lang.org/en/>
- A few additional gems will be required, such as: sinatra (v2.0.5) and activerecord (v5.2.2). In order to download these visit:
 - <https://rubygems.org/pages/download>
 - <https://www.realifewebdesigns.com/web-programming/rubyonrails/gem-bundler.asp>

You can check the gems you already have on your ruby application by typing “gem list” into the command window, as shown below.

A screenshot of a command window titled "Ruby v2.3.3". The window shows the command "C:\>gem list" entered at the prompt. The output displays a list of installed gems under the heading "*** LOCAL GEMS ***". The gems listed are: actioncable (5.1.3), actionmailer (5.1.3), actionpack (5.1.3), actionview (5.1.3), activejob (5.1.3), activemodel (5.2.2, 5.1.3), activerecord (5.2.2, 5.1.3), and activerecord-sqlserver-adapter (5.1.1).

```
C:\>gem list

*** LOCAL GEMS ***

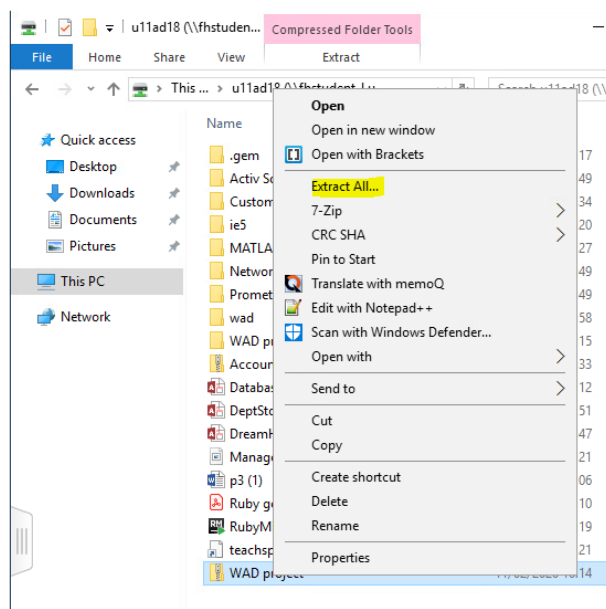
actioncable (5.1.3)
actionmailer (5.1.3)
actionpack (5.1.3)
actionview (5.1.3)
activejob (5.1.3)
activemodel (5.2.2, 5.1.3)
activerecord (5.2.2, 5.1.3)
activerecord-sqlserver-adapter (5.1.1)
```

- An operating machine. This wiki has been created and used on windows 10. This manual is written in reference to that operating system. Therefore, a windows 10 machine would also be a requirement for the wiki to run as anticipated. A web browser is also required, preferably google chrome.

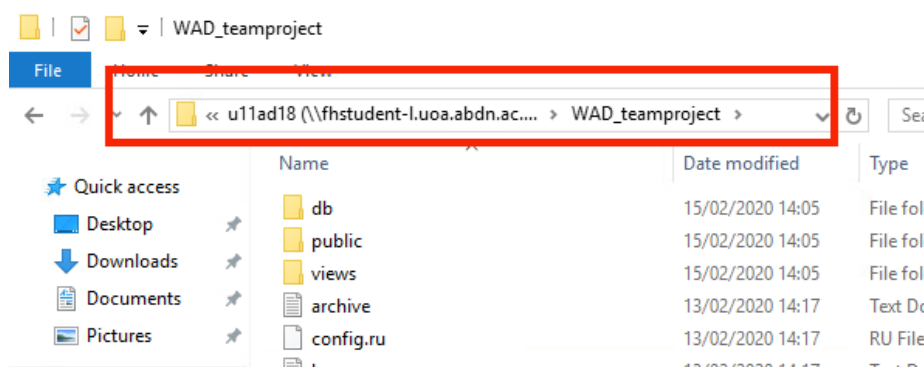
3.4 Running the Wiki

In order to run the wiki, all of the requirements are needed, then proceed to following the instructions below.

1. Download the zip file, right click on the zip file, and press “extract all...”



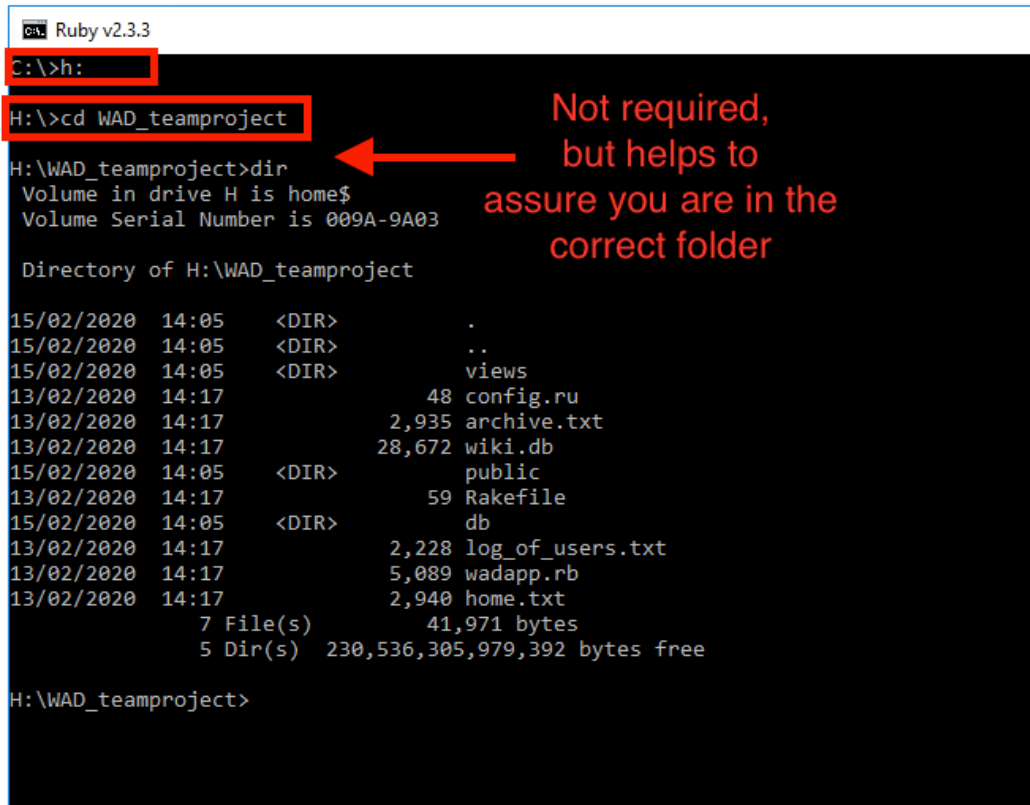
2. Once all of the files have been extracted, recall where the folder has been saved.
For example, the above has been saved in the h: drive, within the folder WAD_teamproject. The below shows an example of the pathway of the files.



3. Open the ruby application, and enter the following commands with your corresponding information. For example,

1. h:
2. cd WAD_teamproject

Once you have accessed the main folder with the files in the terminal you can enter the “dir” command to see the files in the folder, as shown in the screenshot below.



The screenshot shows a terminal window titled "Ruby v2.3.3". The command prompt is "C:\>h:". The user enters "H:\>cd WAD_teamproject", which is highlighted with a red box. An arrow points from a red text annotation to this command. The annotation reads: "Not required, but helps to assure you are in the correct folder". The user then enters "dir", and the terminal displays the directory listing for "H:\WAD_teamproject". The listing shows files and directories including "views", "config.ru", "archive.txt", "wiki.db", "public", "Rakefile", "db", "log_of_users.txt", "wadapp.rb", and "home.txt". The total size of files is 41,971 bytes, and the total size of directories is 230,536,305,979,392 bytes free.

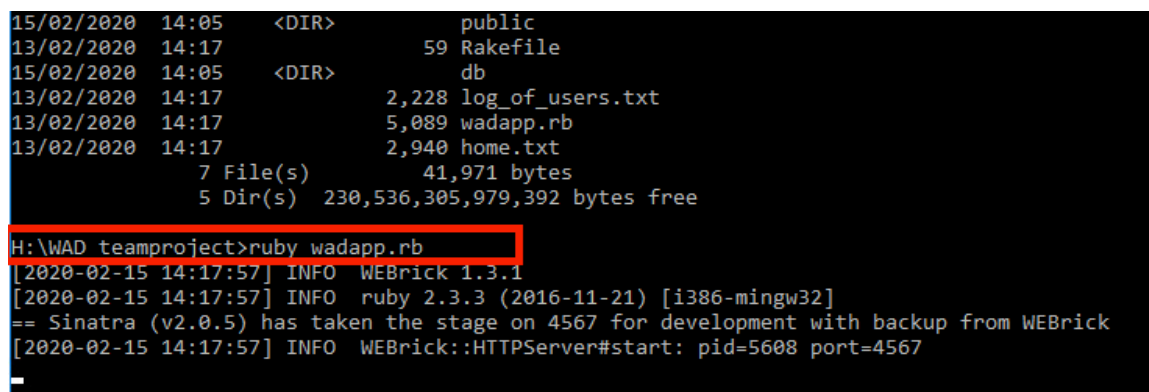
```
Ruby v2.3.3
C:\>h:
H:\>cd WAD_teamproject
H:\WAD_teamproject>dir
Volume in drive H is home$
Volume Serial Number is 009A-9A03

Directory of H:\WAD_teamproject

15/02/2020  14:05    <DIR>          .
15/02/2020  14:05    <DIR>          ..
15/02/2020  14:05    <DIR>          views
13/02/2020  14:17             48 config.ru
13/02/2020  14:17          2,935 archive.txt
13/02/2020  14:17        28,672 wiki.db
15/02/2020  14:05    <DIR>          public
13/02/2020  14:17             59 Rakefile
15/02/2020  14:05    <DIR>          db
13/02/2020  14:17          2,228 log_of_users.txt
13/02/2020  14:17          5,089 wadapp.rb
13/02/2020  14:17          2,940 home.txt
               7 File(s)          41,971 bytes
               5 Dir(s)  230,536,305,979,392 bytes free

H:\WAD_teamproject>
```

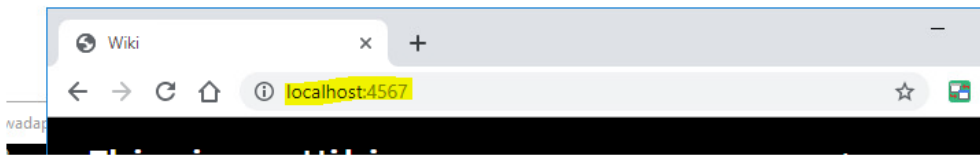
4. Now run the command “ruby wadapp.rb”. This will run the wadapp.rb file in the ruby program.



The screenshot shows the terminal window from the previous screenshot. The user enters "H:\WAD_teamproject>ruby wadapp.rb", which is highlighted with a red box. The terminal displays the output of the command, including the WEBrick version (1.3.1), the Ruby version (2.3.3), and the Sinatra version (v2.0.5). The output also shows that the Sinatra application has started on port 4567.

```
H:\WAD_teamproject>ruby wadapp.rb
[2020-02-15 14:17:57] INFO  WEBrick 1.3.1
[2020-02-15 14:17:57] INFO  ruby 2.3.3 (2016-11-21) [i386-mingw32]
== Sinatra (v2.0.5) has taken the stage on 4567 for development with backup from WEBrick
[2020-02-15 14:17:57] INFO  WEBrick::HTTPServer#start: pid=5608 port=4567
```

5. Next open a web browser, preferably google chrome and enter the url, localhost:# (eg. localhost:4567)



6. This will direct you straight to the home page of the wiki app.

