<Among us website>
Project Report

DT228 / TU856
Web Development

<Raghd Al Juma>

School of Computer Science
Technological University Dublin

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Declaration

I hereby declare that the work described in this dissertation is, except where otherwise stated, entirely my own work and has not been submitted as an exercise for a degree at this or any other university.

Signed:

<Raghd Al Juma>

<19/12/2020>

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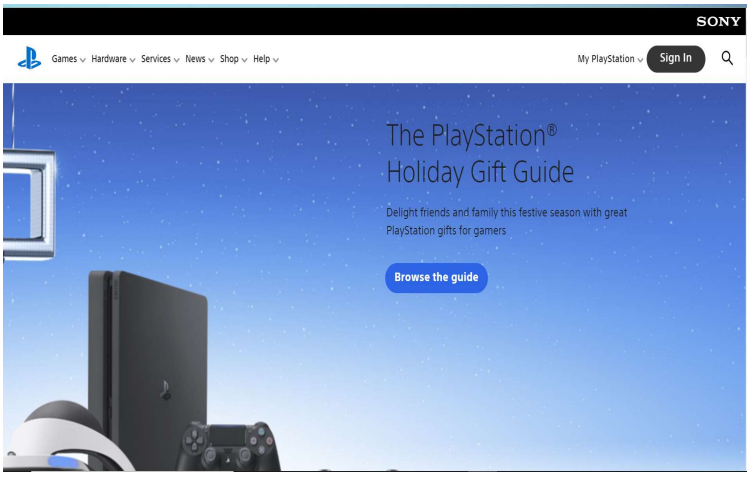
1. Problem Description

This website is a website that describes and explain a game called ‘Among us. It includes five HTML page, one CSS file and one JavaScript file. The first page briefly describes the game and its history, and there’s a video running on the background with no audio for visual entertainment for the user, there’s also information about the game rules displayed using a table. The second page looks at the different maps in the game, and it contains pictures and a video player embedded YouTube videos about the three maps in the game. In the third page, there’s information about customizing the look of your character and their colour and extra materials that can be purchased in the game. The fourth looks at different tasks and has an image rotator that shows different tasks to give the user an idea about it.
Finally, the fifth page is a “contact us” page, there is a contact form that the user could send a message to me and register in the website, and a quiz to make the website interactive.

The archetypical users of this site are gamers and the fan base of the game. This game will provide information for the players who want to learn more about the nature of the game and prepare themselves before starting to play.

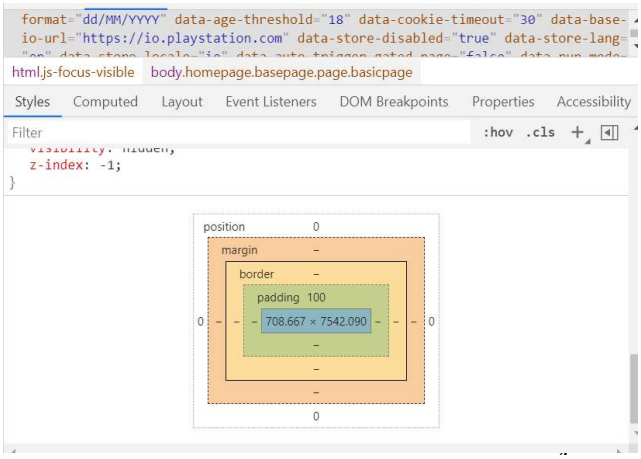
2. Research



https://www.playstation.com/en-us/

To get inspiration for the website I looked at 3 different gaming and video games related websites.
The first website I looked at was the Play station website. I noticed that the layout of the website is as follows:

1. A header with the name of the company and a horizontal navigation bar. Also, a logo that is linked to the main homepage.
2. Followed by a picture or a “banner” of some of their products/ games. This section is made as a slideshow that works automatically and can be done manually so the user can move to the next image.
3. Other content relating to their products. Each section or div takes the size of the whole screen 100% width.
4. A footer



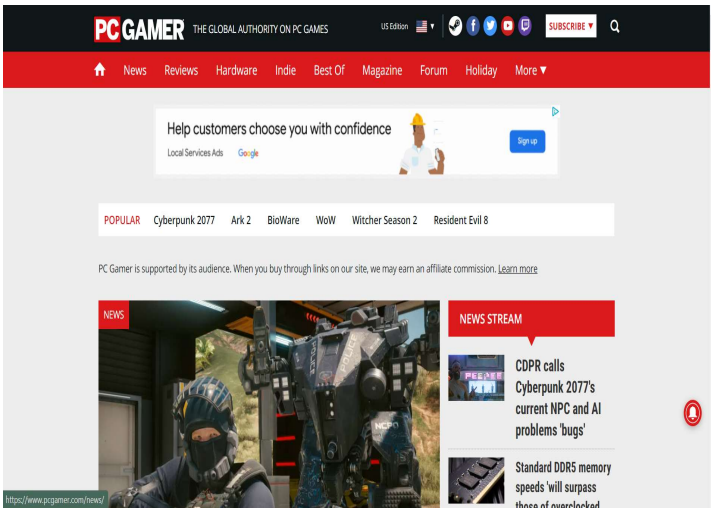
html and body have 0 margin

Also, the website is very responsive, and the size of the contents adjust depending on the size of the screen. In addition, all the content is taking 100% width and there are no

margins used which I did like for the header part, but I disliked in the content part because it looked a little unorganized.

The second website is the PCGAMER website. The layout was as follows:

1. A header with a bar for the website title and a navigation bar. The width of the header is 100%.
2. The main content with no margins as well. Also, Content are divided vertically and horizontally, as in some content have a vertical section like the News stream in the Image.
3. Footer



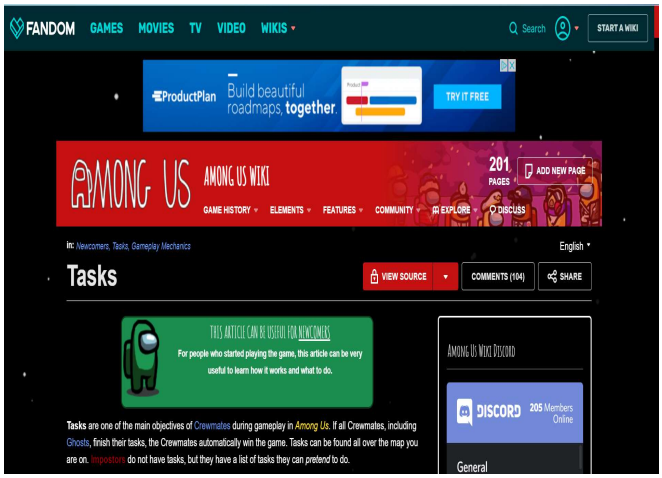
https://www.pcgamer.com/

This website is also responsive.

The third website is FANDOM website for different games. The layout of the website is like the previous website.
The layout is as follows:

1. A horizontal navigation bar with the title of the website and the logo all together.
2. Main content. Data are represented using tables, paragraphs and lists.
3. Footer.

This website is also responsive, and it is the most similar one to the website I am creating. One bad thing about the website is it had many advertisements. However, these adds were not covering any content which was good.



https://among-us.fandom.com/wiki/Tasks

3. Technology Selection and Site Architecture

The website will be created using HTML5 and CSS3. The plan is to make the website as responsive as possible using CSS for users who will be accessing the website using phones, tablets or PC. To make it responsive, I will be using and making their sizes using a percentage height and width and avoiding pixels. Also, I will be using relative lengths like vh and vw in the sizes of the different content. I might add media query to make sure that the size adjusts accordingly. In addition, I will be checking the website in different browsers like Firefox, internet explorer, internet edge and chrome to check compatibility.

4. Low Fidelity Prototype

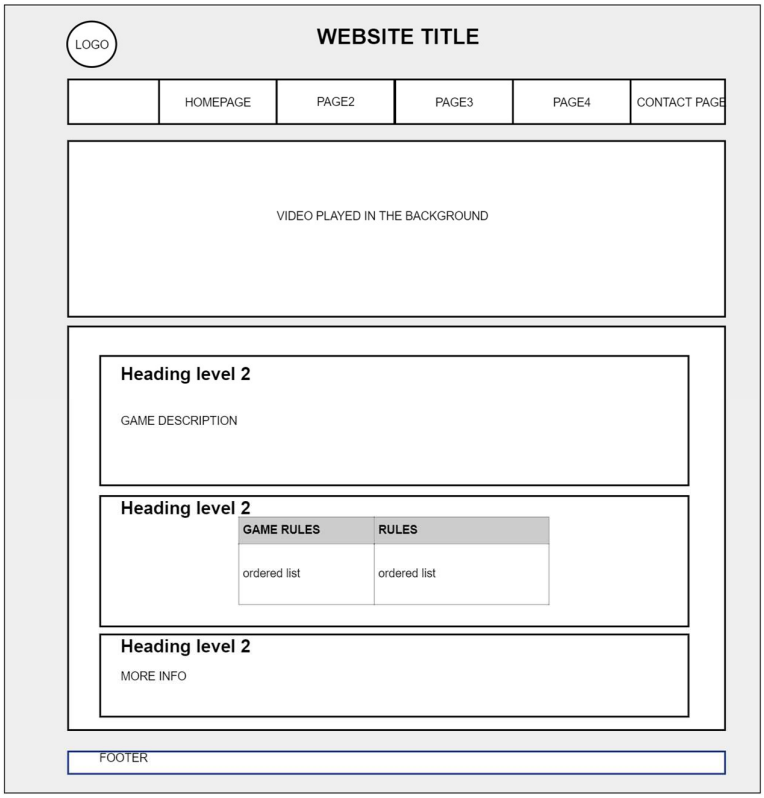
The website will have the following layout that will be across all pages:

1. Header with website title, logo and navigation bar.
2. Main content
3. Footer

I used the following layout to make the website look clear and crowded with content, also divided the content into divs and will style the content to have margins in between to make the content appear better.

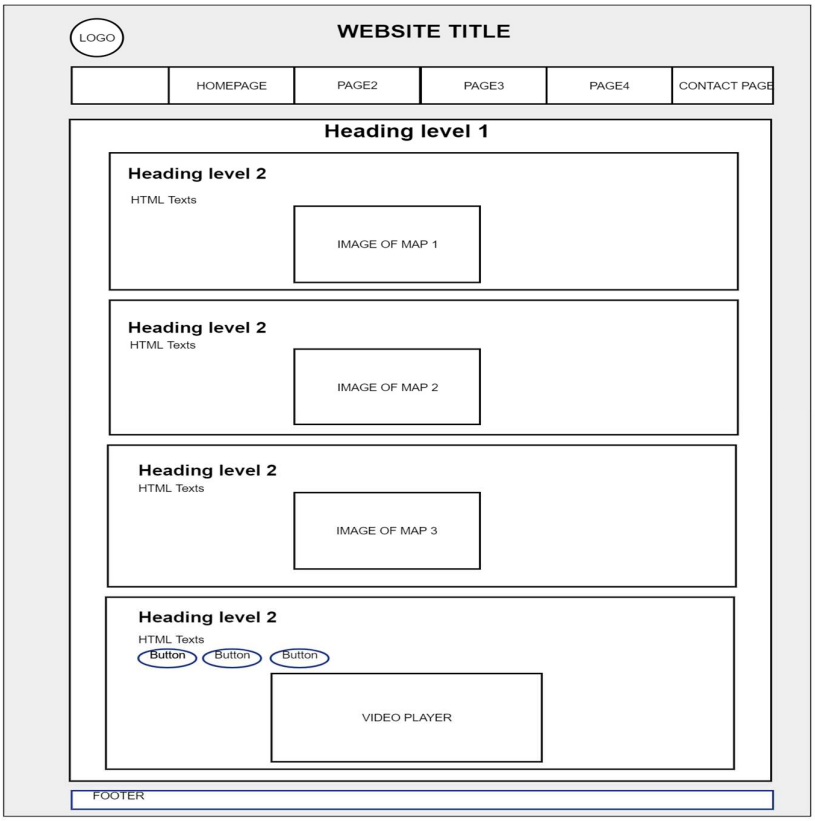
This is the wireframe of the index page. It will have a video related to the website theme in the header section that will play automatically and will be muted so that the user is not disturbed by it.

The main content will be a brief description of the game.



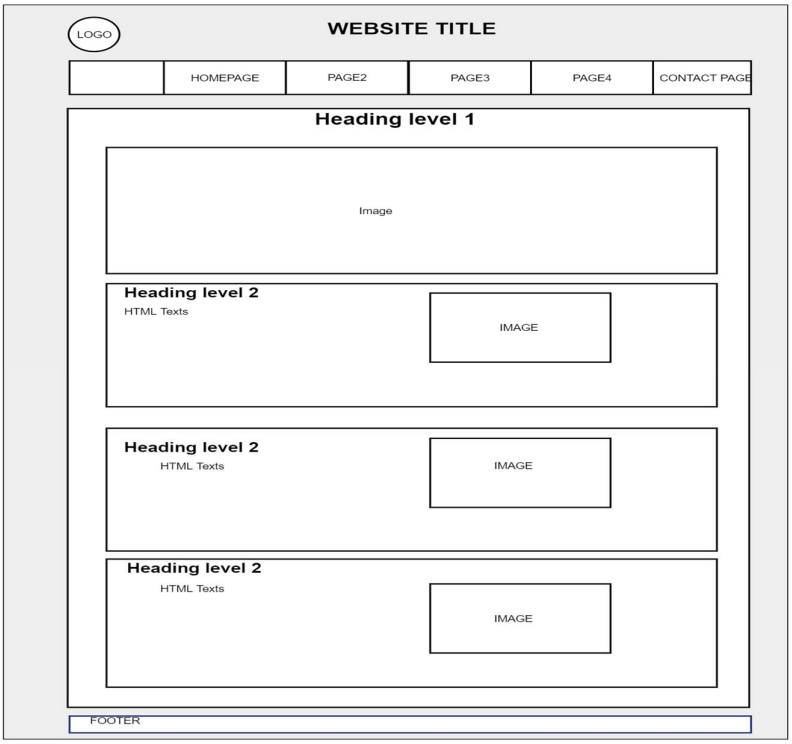
index

This is the wireframe of the second page. It will contain information about the maps in the game and will display pictures related to it. Also, it will have a video player that will be created using java script. The videos will be embedded iframes from YouTube.



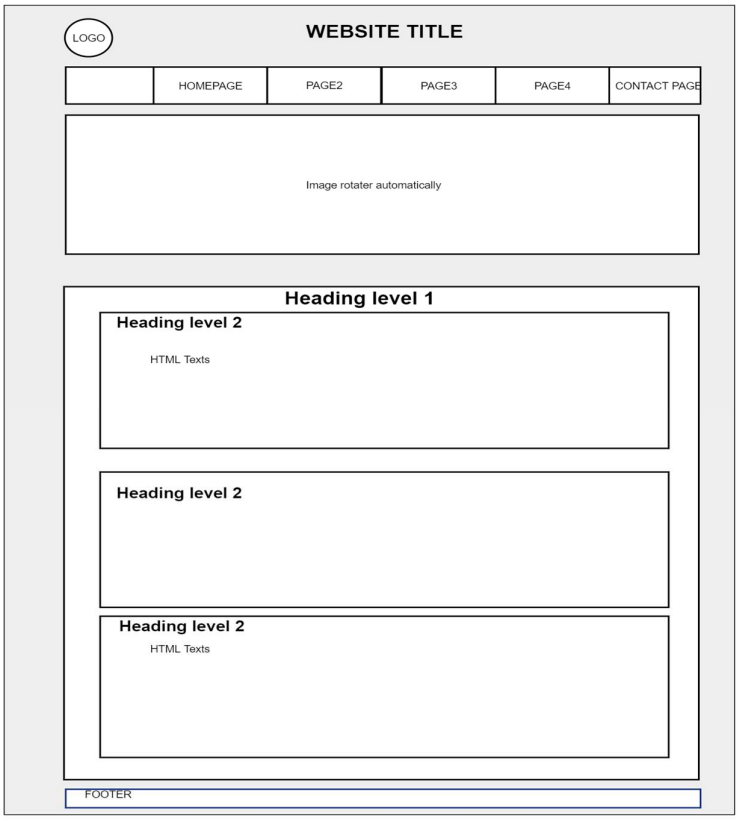
page 2 (Maps)

This is the wireframe for the third page. It will contain information about how to customize your character in the game. It will contain different images and a text.



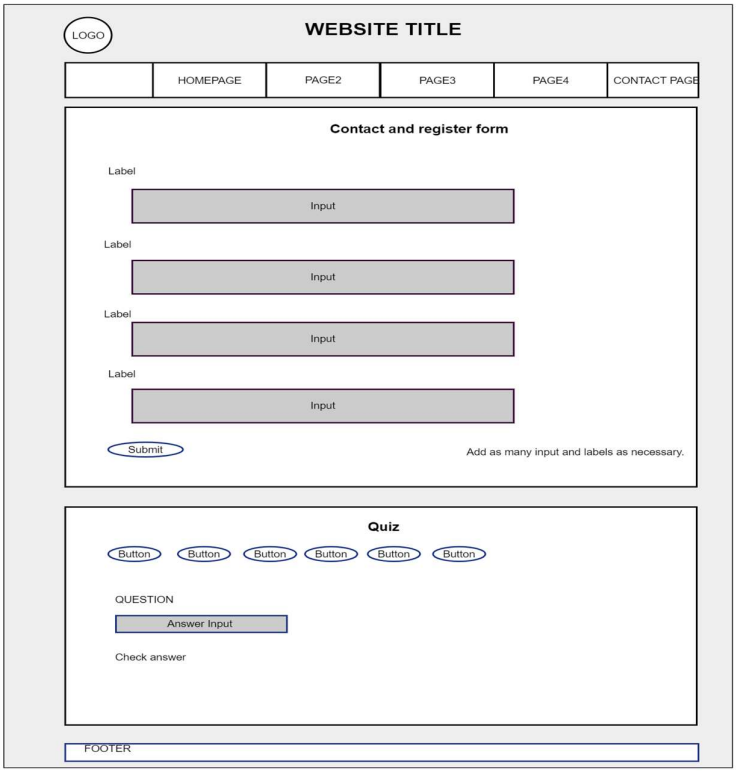
page 3 (character)

This is the wireframe of the fourth page. This page will contain information about the tasks that needs to be performed in the game. It will also have a timed image rotator that will be created using JavaScript.



Page 4 (Tasks)

Finally, the fifth page will have a contact and registering form. The user gets to register in the website and send a message. Also, there is a quiz about information relating to the game that the user could try for fun.



Page 5 (contact us)

5. Development Plan

The following is the steps for creating the website:

1. Create the recurring layout throughout the website i.e. The header (nav bar, logo), the footer. This will be done using HTML and CSS.
2. Get more information and research about the game and find/draw images to use in the page.
3. Find YouTube videos to embed in the website.
4. Start creating the pages content using HTML and CSS.
5. Create the contact form.
6. Work on the three JavaScript pieces, and the validation for the contact form.
7. Check and validate HTML and CSS using online validators. Fix issues.
8. Check compatibility across different browsers.

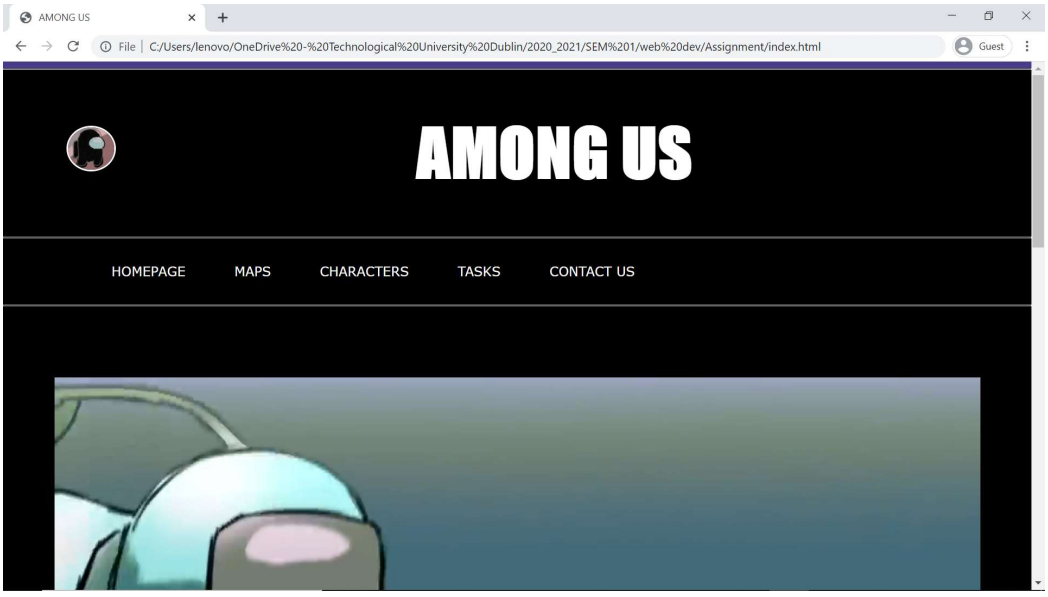
6. Testing Plan

For HTML validation I used https://www.freeformatter.com/ . This website pointed out any errors or issues in the html, such as stray divs and sections or missing headings in a section. For CSS validation, I used https://jigsaw.w3.org/css-validator/ . Which showed me that the CSS had no issues.

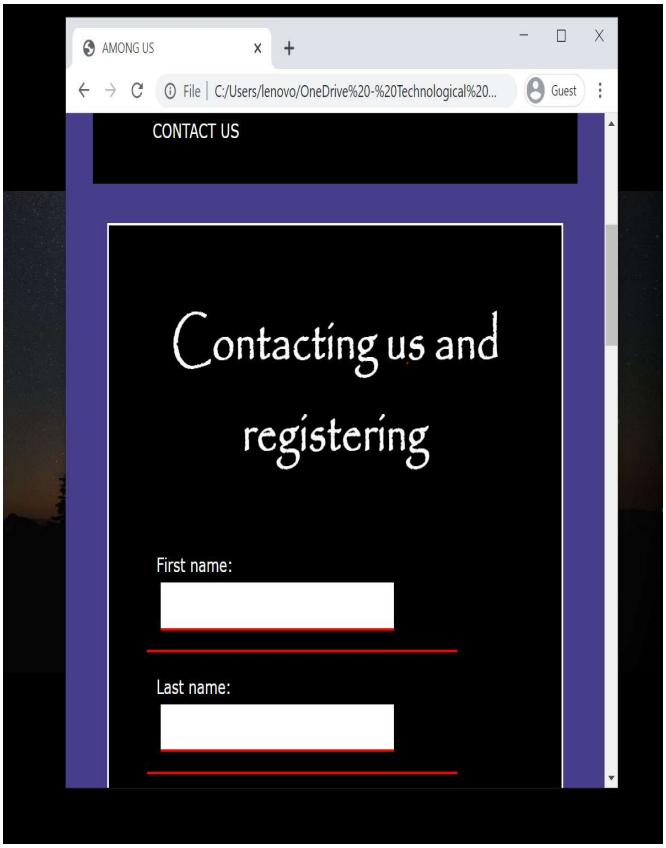
Also, for browser compatibility, the website was checked on Firefox, internet explorer, internet edge and chrome. In all these browsers the website functioned the way it was supposed to be.

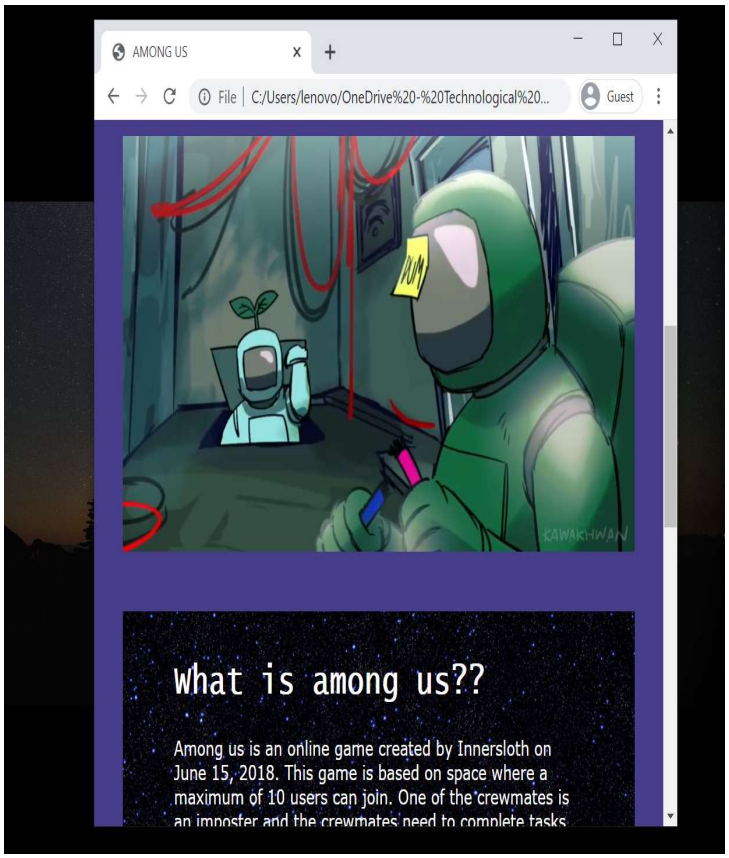
7. Site Evaluation

This is a screenshot of the website in chrome as a full screen:



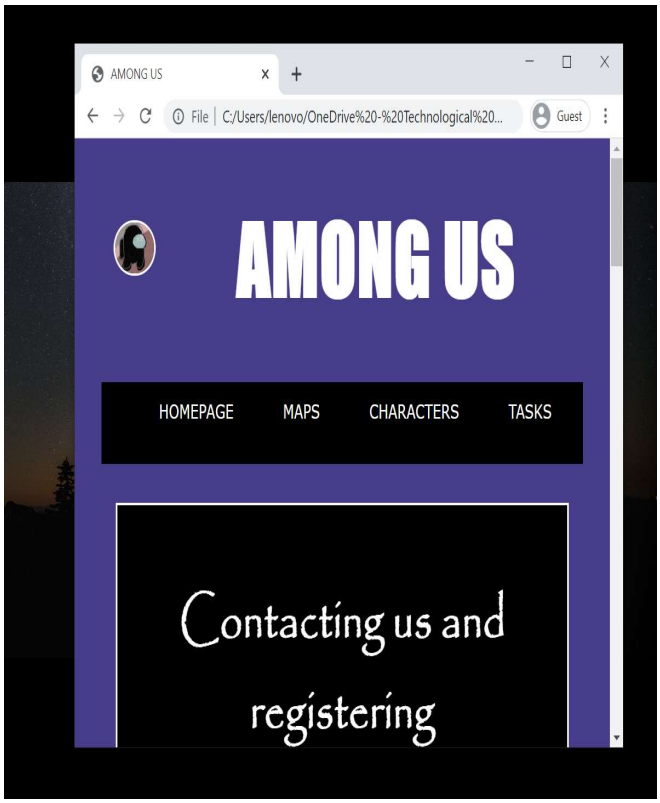
The website was made responsive, so that the contend would adjust according to the screen / browser size. These are pictures of the website when the browser is made smaller:



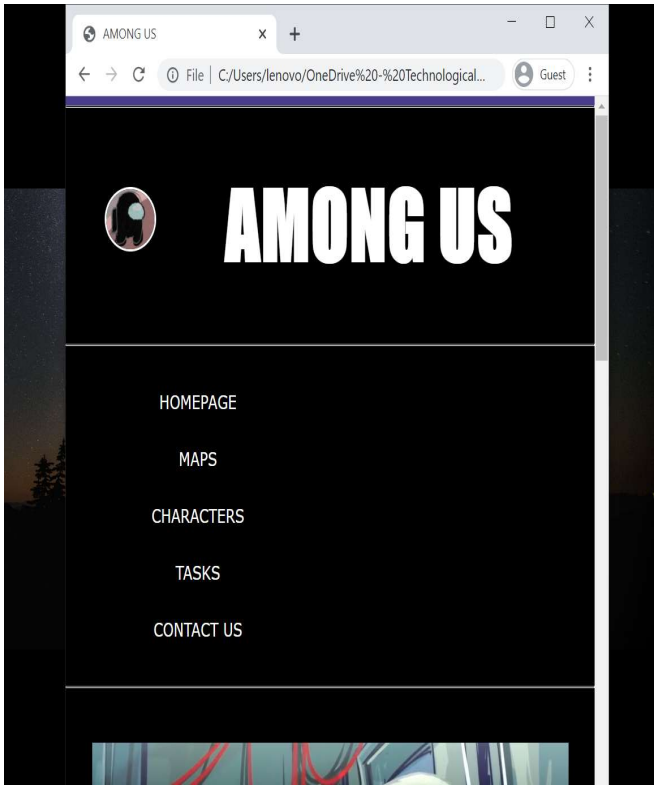


To make it responsive like this, the content was separated in div and those divs sizes were made using relative lengths like % and vh /wh. Also, to make sure the font does not stretch out I used the unit rem for font size in CSS which will make the size relative to the root.

One of the issues encountered was making the navigation bar responsive. As in when the making the browser smaller, half of the navigation bar would disappear. To solve this issue, media query was used. I set the navigation bar as an inline block when the screen is smaller. This made it look like a vertical navigation bar instead of making the navbar disappear. I also redesigned the header to make it look better. This will make it compatible for users entering the website with phone devices.



Before



After

```
/*  Tablets */
@media  only     screen  and (max-width  :   768px)  {
    nav ul      { display: inline-block; }

}
/*  Phones  */
@media  only     screen  and (max-width  :   480px)  {
    nav ul      { display: inline-block; }
}
/*  Custom  */
@media  only     screen  and (max-width  :   320px)  {
    nav ul     { display: inline-block; }
}
```

Media query

In addition, the website has many pages which might make it hard for a user to navigate through the site. In order to enhance the user's navigation experience, I added a pagination. I looked it up in W3schools and decided to add it to my pages. This was not in my initial prototype, however, adding it improved the website.


```
<div class="pagination">
  <a href="index.html">&laquo;</a>
  <a href="index.html">1</a>
  <a href="page2.html" class="active">2</a>
  <a href="page3.html">3</a>
  <a href="page4.html">4</a>
  <a href="page5.html">5</a>
  <a href="page3.html">&raquo;</a>
</div>
```

```
.pagination {
    display: inline-block;
    margin-top:2vh;
}

.pagination a {
    color: orange;
    float: left;
    padding: 8px 16px;
    text-decoration: none;
    transition: background-color .3s;
    border: 1px solid orange;
    margin: 0 4px;
    background-color:black;
}

.pagination a.active {
    background-color: white;
    color: black;
    border: 1px solid white;
}

.pagination a:hover:not(.active) {background-color: white;}
```

Also, in the contact section the registration form had some required inputs, so when the user tries to submit without filling them the page would scroll up to that point. However, the scroll was instant which was not good. I researched for a solution and found out about the scroll-behaviour property from w3schools and used it in my CSS.

8. Deployment

To deploy this website, the following should be done:

- Find a hosting. For example, cPanel.
- Get a domain name.
- Access FTP, login to FTP client application.
- Upload the website contents/files to the host using FTP.
- Finally, add the link to google.

For search engine optimisation, I used <meta> description and key words in my pages with a brief explanation of the webpage, to make sure that when the user searches about among us they will find my site in a higher rank in the search engine.

Appendices

Weekly Project Report – Week 1

This week, I started researching for an idea for my website. I decided that my project will be about the game Among us. This website will provide an explanation of the game and its rules with a variety of videos and pictures related to do it.

Weekly Project Report – Week 2

This week, I have looked at different websites to get ideas of how I will structure my pages and I found 3 websites that can be useful for that. I also started making the wireframes of my first and second pages.

Weekly Project Report – Week 3

This week I started with the navigation bar and the title of the website using HTML and CSS. I made sure everything is responsive. I am also nearly done with my index page and I will be moving on to the second page next.

Weekly Project Report – Week 4

So far I am working on my page 3. I made a wireframe for it and I am working through the page.
For my second page, I used a JavaScript function to rotate picture of Among us maps.

Also, finished index page and page 2. I also made a CSS sheet and a java script sheet that is linked to all pages.

Weekly Project Report – Week 5

I finished all pages using a constant stylesheet. I changed my JavaScript rotating images to a different page. I also make a form in the contact page for registration and I validated some of the inputs using JavaScript. I also mad a quiz to test the user knowledge about the content of the website and make the website interactive.

I also added another JavaScript element in my second page. Which is a video player of embedded YouTube videos