## **User Experience (UX)**

* **User stories**
  + **First Time Visitor Goals**
    - As a First Time Visitor, I want to easily understand the main purpose of the site which is to find essential services within a certain area.
    - As a First Time Visitor, I want to be able to easily navigate throughout the site to find content.
    - As a First Time Visitor, I want to quickly search an area and find local amenities.
  + **Returning Visitor Goals**
    - As a Returning Visitor, I want to perform different types of searches in different areas.
  + **Frequent User Goals**
    - As a Frequent User, I want to find the essential services in the places that matter to them.
* **Design**
  + **Colour Scheme**
    - The two main colours used are grey and white to allow the map in the center to be the main feature.
  + **Typography**
    - Bootstrap fonts are used throughout the site.
  + **Imagery**
    - The site logo was created on canva.com and forms the home button in the top left of the page
* **Wireframes**
  + Home Page Wireframe - [View](https://github.com/)
  + Mobile Wireframe - [View](https://github.com/)

## **Features**

* Responsive on all device sizes
* geo location from users IP address allows the search to be tailored to the user
* Interactive google map
* Autocomplete in the search box

## **Technologies Used**

### **Languages Used**

* [HTML5](https://en.wikipedia.org/wiki/HTML5)
* [CSS3](https://en.wikipedia.org/wiki/Cascading_Style_Sheets)
* [Javascript](https://en.wikipedia.org/wiki/JavaScript)

### **Frameworks, Libraries & Programs Used**

1. [Bootstrap 4.4.1:](https://getbootstrap.com/docs/4.4/getting-started/introduction/)
   * Bootstrap was used to assist with the responsiveness and styling of the website.
2. [jQuery:](https://jquery.com/)
   * jQuery came with Bootstrap to make the navbar responsive but was also used for the smooth scroll function in JavaScript.
3. [Google Maps Javascript API](https://developers.google.com/maps/documentation/javascript/overview):
   * The google maps API was used to generate the interactive map and search for places. The google maps autocomplete function was used in the search box.
4. [Git](https://git-scm.com/)
   * Git was used for version control by utilizing the Gitpod terminal to commit to Git and Push to GitHub.
5. [GitHub:](https://github.com/)
   * GitHub is used to store the projects code after being pushed from Git.
6. [Canva:](https://www.canva.com/tools/logo-maker-q1/?utm_source=google_sem&utm_medium=cpc&utm_campaign=REV_UK_EN_CanvaPro_Logo_EM&utm_term=REV_UK_EN_CanvaPro_Logo%20Maker_EM&gclsrc=aw.ds&&gclid=Cj0KCQjw2or8BRCNARIsAC_ppyaKkn1KSxs_8MEJmqWqoUm4veezeaFuc7bwL394LCWu1iYpK-pZe4MaAiBFEALw_wcB&gclsrc=aw.ds)
   * Canva was used to create the logo for the website.
7. [Balsamiq:](https://balsamiq.com/)
   * Balsamiq was used to create the [wireframes](https://github.com/) during the design process.

## **Testing**

The W3C Markup Validator and W3C CSS Validator Services were used to validate every page of the project to ensure there were no syntax errors in the project.

* [W3C Markup Validator](https://jigsaw.w3.org/css-validator/#validate_by_input) - [Results](https://github.com/)
* [W3C CSS Validator](https://jigsaw.w3.org/css-validator/#validate_by_input) - [Results](https://github.com/)

### **Testing User Stories from User Experience (UX) Section**

* **First Time Visitor Goals**
  1. As a First Time Visitor, I want to easily understand the main purpose of the site and learn more about the organisation.
     1. Upon entering the site, users are greeted with a navigation barrier that explains the main purpose of the website which is to find essential services in the area.
     2. The logo in the navbar depicts a map with a radius around it which is a visualisation of the map when results are generated.
  2. As a First Time Visitor, I want to be able to easily be able to navigate throughout the page to find content.
     1. As the site is only one page the user need only scroll down to find the man content of the site. The user can quickly see the input bar at the top, the search button below and the interactive google map being the main content of the page.
  3. As a First Time Visitor, I want to quickly search an area and find local amenities.
     1. Directly below the navbar is a clean and easily readable input bar. The inputs are organised into 3 sections and follow an order to arrange inputs into 1 easy directive sentence.
     2. The user has the option to select the type, radius and central location for their search.
     3. To generate the search there is a large search button that generates results on the map below.
* **Returning Visitor Goals**
  1. As a Returning Visitor, I want to perform different types of searches in different areas
     1. Beside the search button is a clear results button that clears the map and allows the user to perform another search and if they wish to select different inputs to the first search, they can do so.
* **Frequent User Goals**
  1. As a Frequent User, I want to find the essential services in the places that matter to them.
     1. The user would already be comfortable with the website layout and can easily select the parameters that they wish to search for on the map.
     2. Within the map the user can select the icons in the map results and find the names of the services.

### **Further Testing**

* The Website was tested on Google Chrome, Internet Explorer, Microsoft Edge and Safari browsers.
* The website was viewed on a variety of devices such as Desktop, Laptop, iPhone7, iPhone 8 & iPhoneX.
* A large amount of testing was done to ensure that all pages were linking correctly.
* Friends and family members were asked to review the site and documentation to point out any bugs and/or user experience issues.

### **Known Bugs**

* Within the console log, there is an error message of “Cannot read property 'geometry' of undefined” however this does not impact the functionality of the page nor can the user see any issues when looking at the page.

## **Deployment**

### **GitHub Pages**

The project was deployed to GitHub Pages using the following steps...

1. Log in to GitHub and locate the [GitHub Repository](https://github.com/)
2. At the top of the Repository (not top of page), locate the "Settings" Button on the menu.
   * Alternatively Click [Here](https://raw.githubusercontent.com/) for a GIF demonstrating the process starting from Step 2.
3. Scroll down the Settings page until you locate the "GitHub Pages" Section.
4. Under "Source", click the dropdown called "None" and select "Master Branch".
5. The page will automatically refresh.
6. Scroll back down through the page to locate the now published site [link](https://github.com/) in the "GitHub Pages" section.

### **Forking the GitHub Repository**

By forking the GitHub Repository we make a copy of the original repository on our GitHub account to view and/or make changes without affecting the original repository by using the following steps...

1. Log in to GitHub and locate the [GitHub Repository](https://github.com/)
2. At the top of the Repository (not top of page) just above the "Settings" Button on the menu, locate the "Fork" Button.
3. You should now have a copy of the original repository in your GitHub account.

### **Making a Local Clone**

1. Log in to GitHub and locate the [GitHub Repository](https://github.com/)
2. Under the repository name, click "Clone or download".
3. To clone the repository using HTTPS, under "Clone with HTTPS", copy the link.
4. Open Git Bash
5. Change the current working directory to the location where you want the cloned directory to be made.
6. Type git clone, and then paste the URL you copied in Step 3.

$ git clone https://github.com/YOUR-USERNAME/YOUR-REPOSITORY

1. Press Enter. Your local clone will be created.

$ git clone https://github.com/YOUR-USERNAME/YOUR-REPOSITORY

> Cloning into `CI-Clone`...

> remote: Counting objects: 10, done.

> remote: Compressing objects: 100% (8/8), done.

> remove: Total 10 (delta 1), reused 10 (delta 1)

> Unpacking objects: 100% (10/10), done.

Click [Here](https://help.github.com/en/github/creating-cloning-and-archiving-repositories/cloning-a-repository#cloning-a-repository-to-github-desktop) to retrieve pictures for some of the buttons and more detailed explanations of the above process.

## **Credits**

### **Code**

* [Bootstrap4](https://getbootstrap.com/docs/4.4/getting-started/introduction/): Bootstrap Library used throughout the project mainly to make site responsive using the Bootstrap Grid System.
* [Google Maps Javascript API](https://developers.google.com/maps/documentation/javascript/overview): The google maps API was used to generate the interactive map and search for places. The google maps autocomplete function was used in the search box.

### **Content**

* All content was written by the developer.

### **Media**

* All Images were created by the developer.

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