

# Health Disparities App Requirements

Team Radio Star  
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## 1 USER REQUIREMENTS

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### 1.1 USER CHARACTERISTICS

This program will be used by patients from all backgrounds with varying levels of technical and computing proficiency. The app will be targeted primarily at users that are disadvantaged and underserved. In some cases, users will have limited literacy and may also not be computer literate. Additionally, users may not own any technological devices and may be accessing the app via public internet resources, such as a library.

### 1.2 SYSTEM'S FUNCTIONALITY

This application will assist users by identifying options for receiving health care services in close proximity to their work, home, and current location, based on the symptoms they provide.

### 1.3 USER INTERFACES

The application is a web-app, so users will interface with the program via a web browser. The web browser can be run on any capable electronic device, so phones, computers, tablets, etc. Within the browser the app will look like and emulate a native mobile app with a focus on larger “touchable” interfaces. Target audience will likely be interacting with UI with either a mouse, keyboard, or touch screen. Overall, UI needs to be easy to use for computer illiterate users.

## 2 SYSTEM REQUIREMENTS

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### 2.1 FUNCTIONAL REQUIREMENTS

- 2.1.1 Application needs to work on all major Desktop and Mobile Web Browsers:
  - 2.1.1.1 Recent Google Chrome (incl. mobile), Recent Mozilla Firefox, Microsoft Internet Explorer 11, Recent Microsoft Edge, Apple Safari (incl. mobile)
- 2.1.2 Application must support these health care resources:
  - 2.1.2.1 Food kitchens, Shelters, Social Services, Rehabilitation Services, Urgent Care, Mini-Clinics, Dentists, and Emergency Rooms
- 2.1.3 Application must support these geographic locations:
  - 2.1.3.1 Atlanta, GA
  - 2.1.3.2 Should be easily expandable to include additional cities and service areas
- 2.1.4 Application must support multiple transit methods:
  - 2.1.4.1 Walking, Public Transportation, Driving
  - 2.1.4.2 Should ask user for their method of transportation prior to returning any results
  - 2.1.4.3 User should be able to toggle between options easily, with appropriate results returned for each method
- 2.1.5 Application should support multiple location settings for discovering resources:
  - 2.1.5.1 Current Location – Ask user if the app can use user’s current location
  - 2.1.5.2 Specific Address – User inputs the address (home or work) where they want to find resources near
- 2.1.6 Application must allow users to discover the resource they need or are looking for
  - 2.1.6.1 Should include a search bar for finding resources based on symptoms
  - 2.1.6.2 Should include a “Find by Resource Type” option that allows user to search directly for a resource by type if they already know what they’re looking for
  - 2.1.6.3 Supported symptoms will be provided by Dr. Oiyemhonlan
- 2.1.7 Application must determine the correct resource provider for the user based on the symptom provided by the user

- 2.1.7.1 Should query the symptom-provider database/lookup table to determine the correct resource to return
  - 2.1.7.2 DB/Lookup table will be provided by Dr. Oiyemhonlan
- 2.1.8 Application must limit the number of resources returned to the user for a query based on location
  - 2.1.8.1 For Walking, only resources within 2 miles should be returned by default
  - 2.1.8.2 For Public Transportation, only resources that can be reached without having to walk greater than 2 miles should be returned by default
  - 2.1.8.3 For Driving, only resources within 10 miles should be returned by default
  - 2.1.8.4 Application should provide the option for user to “zoom out” allowing additional resources outside of these boundaries to be populated
- 2.1.9 Application should allow users to view specific resource information
  - 2.1.9.1 Resource Name, Resource Type, Address, Phone Number, Resource Website (if exists), Distance from Location
- 2.1.10 About/Help section must be included which will further assist users by detailing how to use the application, the types of services supported, and a medical disclaimer

## 2.2 NON-FUNCTIONAL REQUIREMENTS

- 2.2.1 Application will be presented in English
- 2.2.2 Application will be written in HTML/CSS/JS
- 2.2.3 Application will be deployable on MS Azure
- 2.2.4 Supported Symptom list will be provided by Dr. Oiyemhonlan
- 2.2.5 Symptom-Resource lookup will be performed against data provided by Dr. Oiyemhonlan
- 2.2.6 Resource lookup and location/distance will be performed using Google Maps API and queries

## 3 ENHANCEMENTS

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Enhancements will be made to the application depending on time remaining once core functionality is built into the app. Enhancements will be dealt with on a priority basis with the highest priority items being worked on first.

## 3.1 FUNCTIONALITY ENHANCEMENTS

3.1.1 Include an avatar which can be clicked on for narrowing and determining symptoms.

3.1.1.1 Estimated Difficulty:

3.1.1.2 Priority:

3.1.2 Application should allow user to export resource information outside of the app:

Send Text – Resource information will be sent by Text Message to phone number provided by user

Send Email – Resource information will be sent by Email to email address provided by user

3.1.2.1 Estimated Difficulty:

3.1.2.2 Priority:

3.1.3