



# SYSTEM DESIGN DOCUMENT

Being Seen Mobile App

Designed by: Team Brute Forced Solutions

## Contents

CRC Cards.....	2
Front end.....	2
Back end.....	8
System Architecture Diagram .....	10
Diagram.....	10
References .....	10

## CRC Cards

### Front end

<b>Class Name:</b> Button	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Allows users to submit a form</li><li>• Links users to another screen upon press</li><li>• Opens/closes a screen or menu</li></ul>	<b>Collaborators:</b> <ul style="list-style-type: none"><li>•</li></ul>

<b>Class Name:</b> Header	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b> PrimaryHeader, SecondaryHeader, TertiaryHeader	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Provide headings to indicate sections of text</li></ul>	<b>Collaborators:</b> <ul style="list-style-type: none"><li>•</li></ul>

<b>Class Name:</b> PrimaryHeader	
<b>Parent Class (if any):</b> Header <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Exists as the biggest, primary heading</li></ul>	<b>Collaborators:</b> <ul style="list-style-type: none"><li>•</li></ul>

<b>Class Name:</b> SecondaryHeader	
<b>Parent Class (if any):</b> Header <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Exists as the second biggest, secondary heading</li></ul>	<b>Collaborators:</b> <ul style="list-style-type: none"><li>•</li></ul>

<b>Class Name:</b> TertiaryHeader	
<b>Parent Class (if any):</b> Header <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"><li>• Exists as the third biggest, tertiary heading</li></ul>	<b>Collaborators:</b> <ul style="list-style-type: none"><li>•</li></ul>

<b>Class Name:</b> TextInput	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b> TextField, TextArea	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Allows users to input text that can be sent to the program for processing</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> TextField	
<b>Parent Class (if any):</b> TextInput	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Allows users to input a single line of text</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> TextArea	
<b>Parent Class (if any):</b> TextInput	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Allows users to input multiple lines of text for processing</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> UnderlinedLink	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Lets users click underlined text that links them to another screen or website</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> LoginScreen	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Lets users enter a form to log into the app</li> <li>• Links users to the relevant screens if they cannot log in</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• TextField</li> <li>• PrimaryHeader</li> <li>• UnderlinedLink</li> <li>• Button</li> </ul>

<b>Class Name:</b> PasswordRecoveryScreen	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Lets users enter an email or SMS for next steps if they forget their account password</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• TextField</li> <li>• Button</li> <li>• PrimaryHeader</li> </ul>

<b>Class Name:</b> Text	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Displays normal text</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>•</li> </ul>

<b>Class Name:</b> MenuOption	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Used inside a menu to link users to another part of the menu with more specific options</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• Text</li> </ul>

<b>Class Name:</b> Image	
<b>Parent Class (if any):</b> <b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Renders an image</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>•</li> </ul>

<b>Class Name:</b> HamburgerMenu	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Shows users a summary of their account details, including profile picture, username, and account balance Lets users access their profile</li> <li>Lets users access the settings</li> <li>Allows users to log out of their account in the app</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>MenuOption</li> <li>Image</li> <li>Text</li> <li>UnderlinedLink</li> <li>Button</li> </ul>

<b>Class Name:</b> ProfileScreen	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Shows the user their account info</li> <li>Lets users access the settings</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>NavigationBar</li> <li>Button</li> <li>Image</li> <li>PrimaryHeader</li> <li>SecondaryHeader</li> <li>Text</li> <li>Button</li> </ul>

<b>Class Name:</b> SearchBar	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Allows users to search for a social service, another profile, etc</li> <li>Lets users choose filters to restrict their search results</li> <li>Gives search results based on query</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>TextField</li> <li>Button</li> </ul>

<b>Class Name:</b> ListItem	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Displays summarized information regarding a social service, job etc.</li> <li>• Clicking on the box links the user to a page with more detailed information</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• Image</li> <li>• SecondaryHeader</li> <li>• Text</li> <li>• InfoPage</li> </ul>

<b>Class Name:</b> InfoPage	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Displays full information regarding a social service, job etc.</li> <li>• Allows users to click links for next steps, e.g. to apply to a job</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• PrimaryHeader</li> <li>• SecondaryHeader</li> <li>• TertiaryHeader</li> <li>• Button</li> <li>• Text</li> <li>• Image</li> </ul>

<b>Class Name:</b> Tag	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Lets users show/hide displayed services, jobs etc. belonging to a certain category</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• Button</li> </ul>

<b>Class Name:</b> NavigationBar	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Links the user to a different screen of the app, with there being multiple options</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• Button</li> </ul>

<b>Class Name:</b> ListingScreen	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b> SheltersScreen, ServicesScreen, EducationScreen, JobsScreen	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Lists items belonging to a specific category of social service</li> <li>• Provides a hamburger menu for navigation to profile, settings, or log out</li> <li>• Contains a search bar for social services</li> <li>• Contains tags to restrict displayed social services</li> <li>• Contains a navigation menu to other listing screens and profile</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• Image</li> <li>• Button</li> <li>• Tag</li> <li>• SearchBar</li> <li>• PrimaryHeader</li> <li>• HamburgerMenu</li> <li>• NavigationBar</li> </ul>

<b>Class Name:</b> SheltersScreen	
<b>Parent Class (if any):</b> ListingScreen	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Gives a list of nearby homeless shelters</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• SecondaryHeader</li> <li>• TertiaryHeader</li> <li>• ListItem</li> <li>• Text</li> </ul>

<b>Class Name:</b> ServicesScreen	
<b>Parent Class (if any):</b> ListingScreen	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Gives a list of miscellaneous social services like soup kitchens, safe injection sites, etc.</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• SecondaryHeader</li> <li>• TertiaryHeader</li> <li>• ListItem</li> <li>• Text</li> </ul>

<b>Class Name:</b> EducationScreen	
<b>Parent Class (if any):</b> ListingScreen	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>• Gives a list of mentorship, education opportunities</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>• SecondaryHeader</li> <li>• TertiaryHeader</li> <li>• ListItem</li> <li>• Text</li> </ul>



<b>Class Name:</b> JobsScreen	
<b>Parent Class (if any):</b> ListingScreen	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Gives a list of available jobs openings</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>SecondaryHeader</li> <li>TertiaryHeader</li> <li>ListItem</li> <li>Text</li> </ul>

## Back end

<b>Class Name:</b> Service	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b> Shelter, Job, Education, MiscService	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Encapsulating basic data that a service's schema may require</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> Shelter	
<b>Parent Class (if any):</b> Service	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Responsible for keeping track of a given shelter/social services' information including address, reviews, etc.</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>Review</li> <li>Tag</li> </ul>

<b>Class Name:</b> Review	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Responsible for encapsulating all data about a given review such as reviewer, date, rating, etc.</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li>Youth</li> </ul>

<b>Class Name:</b> Tag	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Responsible for encapsulating all data about a given tag to make finding information easy</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> Youth	
<b>Parent Class (if any):</b>	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Encapsulating data about an user account belonging to a homeless youth ie their balance, story</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

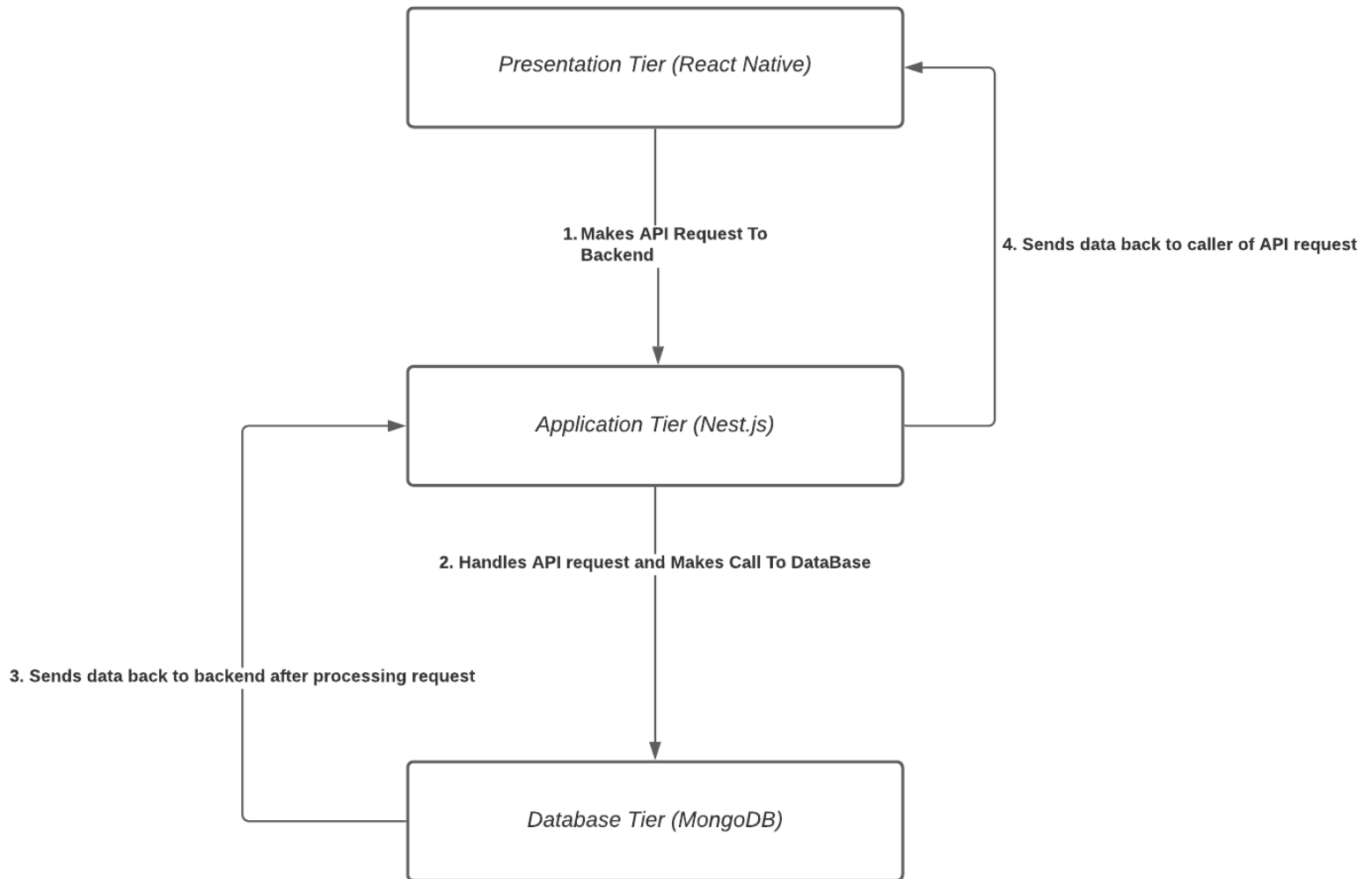
<b>Class Name:</b> Education	
<b>Parent Class (if any):</b> Service	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Encapsulating data about an educational/mentorship service</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> Job	
<b>Parent Class (if any):</b> Service	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Encapsulating data about a job opening</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

<b>Class Name:</b> MiscService	
<b>Parent Class (if any):</b> Service	
<b>Subclasses (if any):</b>	
<b>Responsibilities</b> <ul style="list-style-type: none"> <li>Encapsulating data about a miscellaneous social service like soup kitchens, safe injection sites etc.</li> </ul>	<b>Collaborators:</b> <ul style="list-style-type: none"> <li></li> </ul>

# System Architecture Diagram

## Diagram



## References

<https://www.ibm.com/cloud/learn/three-tier-architecture>