SYSTEM DESIGN DOCUMENT

Being Seen Mobile App

Designed by: Team Brute Forced Solutions

Contents

CRC Cards

Front end

Class Name: Button	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
- Allows users to submit a form - Links users to another screen upon press - Opens/closes a screen or menu	

Class Name: Header	
Parent Class (if any):	
Subclasses (if any): PrimaryHeader, SecondaryHeader, TertiaryHeader	
Responsibilities	**Collaborators:**
Provide headings to indicate sections of text	

Class Name: PrimaryHeader	
Parent Class (if any): Header	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Exists as the biggest, primary heading	

Class Name: SecondaryHeader	
Parent Class (if any): Header	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Exists as the second biggest, secondary heading	

Class Name: TertiaryHeader	
Parent Class (if any): Header	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Exists as the third biggest, tertiary heading	

Class Name: TextInput	
Parent Class (if any):	
Subclasses (if any): TextField, TextArea	
Responsibilities	**Collaborators:**
• Allows users to input text that can be sent to the program for processing	•

Class Name: TextField	
Parent Class (if any): TextInput	
Subclasses (if any):	
Responsibilities	**Collaborators:**
• Allows users to input a single line of text	•

Class Name: TextArea	
Parent Class (if any): TextInput	
Subclasses (if any):	
Responsibilities	**Collaborators:**
• Allows users to input multiple lines of text for processing	•

Class Name: UnderlinedLink	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
• Lets users click underlined text that links them to another screen or website	•

Class Name: LoginScreen	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
- Lets users enter a form to log into the app - Links users to the relevant screens if they cannot log in	- TextField - PrimaryHeader - UnderlinedLink - Button

Class Name: PasswordRecoveryScreen	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Lets users enter an email or SMS for next steps if they forget their account password	- TextField - Button - PrimaryHeader

Class Name: Text	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Displays normal text	

Class Name: MenuOption	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Used inside a menu to link users to another part of the menu with more specific options	Text

Class Name: Image	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Renders an image	

Class Name: HamburgerMenu	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
- Shows users a summary of their account details, including profile picture, username, and account balance Lets users access their profile - Lets users access the settings - Allows users to log out of their account in the app	- MenuOption - Image - Text - UnderlinedLink - Button

Class Name: ProfileScreen	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
- Shows the user their account info - Lets users access the settings	- NavigationBar - Button - Image - PrimaryHeader - SecondaryHeader - Text - Button

Class Name: SearchBar	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
- Allows users to search for a social service, another profile, etc - Lets users choose filters to restrict their search results - Gives search results based on query	- TextField - Button

Class Name: ListItem	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
- Displays summarized information regarding a social service, job etc. - Clicking on the box links the user to a page with more detailed information	- Image - SecondaryHeader - Text - InfoPage

Class Name: InfoPage	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
- Displays full information regarding a social service, job etc. - Allows users to click links for next steps, e.g. to apply to a job	- PrimaryHeader - SecondaryHeader - TertiaryHeader - Button - Text - Image

Class Name: Tag	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Lets users show/hide displayed services, jobs etc. belonging to a certain category	Button

Class Name: NavigationBar	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Links the user to a different screen of the app, with there being multiple options	Button

Class Name: ListingScreen

Parent Class (if any):

Subclasses (if any): SheltersScreen, ServicesScreen, EducationScreen, JobsScreen

Responsibilities	Collaborators:
- Lists items belonging to a specific category of social service - Provides a hamburger menu for navigation to profile, settings, or log out - Contains a search bar for social services - Contains tags to restrict displayed social services - Contains a navigation menu to other listing screens and profile	- Image - Button - Tag - SearchBar - PrimaryHeader - HamburgerMenu - NavigationBar

Class Name: SheltersScreen

Parent Class (if any): ListingScreen

Subclasses (if any):

Responsibilities	Collaborators:
Gives a list of nearby homeless shelters	- SecondaryHeader - TertiaryHeader - ListItem - Text

Class Name: ServicesScreen

Parent Class (if any): ListingScreen

Subclasses (if any):

Responsibilities	Collaborators:
Gives a list of miscallaneous social services like soup kitchens, safe injection sites, etc.	- SecondaryHeader - TertiaryHeader - ListItem - Text

Class Name: EducationScreen

Parent Class (if any): ListingScreen

Subclasses (if any):

Responsibilities	Collaborators:
Gives a list of mentorship, education opportunities	- SecondaryHeader - TertiaryHeader - ListItem - Text

Class Name: JobsScreen	
Parent Class (if any): ListingScreen **Subclasses (if any):**	

Responsibilities
   • Gives a list of available jobs openings
	Collaborators:
	   • SecondaryHeader
	   • TertiaryHeader
	   • ListItem
	   • Text

Back end

Class Name: Service	
Parent Class (if any): **Subclasses (if any):** Shelter, Job, Education, MiscService	

Responsibilities
   • Encapsulating basic data that a service's schema may require
	Collaborators:
	   •

Class Name: Shelter	
Parent Class (if any): Service **Subclasses (if any):**	

Responsibilities
   • Responsible for keeping track of a given shelter/social services' information including address, reviews, etc.
	Collaborators:
	   • Review
	   • Tag

Class Name: Review	
Parent Class (if any): **Subclasses (if any):**	

Responsibilities
   • Responsible for encapsulating all data about a given review such as reviewer, date, rating, etc.
	Collaborators:
	   • Youth

Class Name: Tag	
Parent Class (if any): **Subclasses (if any):**	

Responsibilities
   • Responsible for encapsulating all data about a given tag to make finding information easy
	Collaborators:
	   •

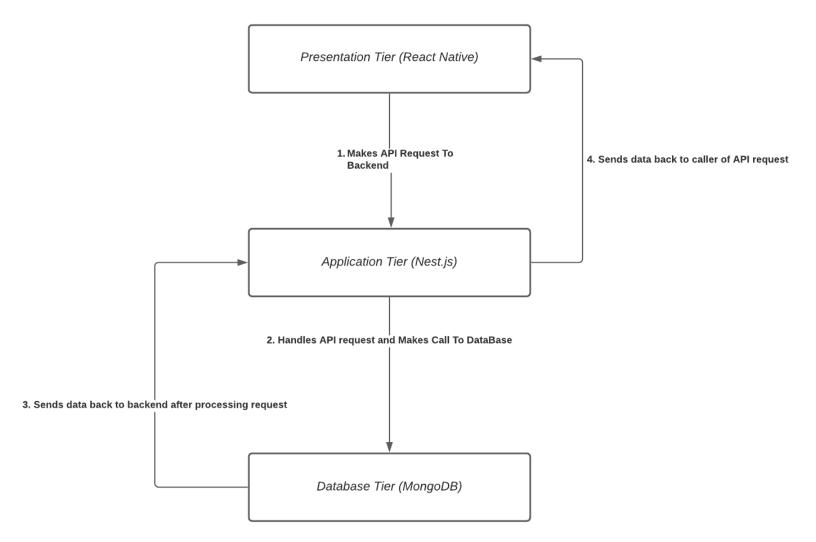| **Class Name:** Youth	
Parent Class (if any):	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Encapsulating data about an user account belonging to a homeless youth ie their balance, story	

Class Name: Education	
Parent Class (if any): Service	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Encapsulating data about an educational/mentorship service	

Class Name: Job	
Parent Class (if any): Service	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Encapsulating data about a job opening	

Class Name: MiscService	
Parent Class (if any): Service	
Subclasses (if any):	
Responsibilities	**Collaborators:**
Encapsulating data about a miscellaneous social service like soup kitchens, safe injection sites etc.	

System Architecture Diagram

Diagram

Presentation Tier (React Native)

1. Makes API Request To Backend

4. Sends data back to caller of API request

Application Tier (Nest.js)

2. Handles API request and Makes Call To DataBase

3. Sends data back to backend after processing request

Database Tier (MongoDB)

References

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