

REQUIREMENTS MODEL

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Customer Priority Legend

1 - Base Functionality **Must Have**

These items must be implemented for the most basic of functions to be accessible. This will include the abilities to locate the user, input a route, and provide route recommendation.

2 - Base Functionality **Should Have**

These items represent secondary functions that most affect the capability and use of the Android Application. This requirement mostly include the ability to register an account, user login, retrieve password, bookmarking routes, etc.

3 - Base Functionality Support and **Customer Should Have**

These items include two primary forms of functionality. First, these include requirements whose sole purpose is to support those secondary requirements which receive a Priority: 2 category inclusion. Second, these requirements also include requested items from the customer. This category often includes functions like route taking history, update user information, update user pictures, etc.

4 - Enhance Functionality **Could Have**

These items include a list of functionalities that would enhance the user experience of the application. This category includes features like checking classroom availability, landmark map, ability to sharing a route, etc.

Type - User Account

UA - 1: User Registration
Priority Level: 1
The user shall be able to register for their own account to become registered user.
Status: Unimplemented.
UC 1

UA - 2: User Login
Priority Level: 1
The registered user shall be able to login to their own account.
Status: Unimplemented.
UC 2

UA - 3: User Login
Priority Level: 1
Unregistered user shall be able to login to the visitor account.
Status: Unimplemented.
UC 2

UA - 4: Retrieve Password
Priority Level: 1
The registered user shall be able to retrieve their passwords when they forgot theirs.
Status: Unimplemented.
UC 3

UA - 5: Retrieve Password
Priority Level: 1
The system shall send the requested password to the user by email.
Status: Unimplemented.
UC 3

UA - 6: Update User Information
Priority Level: 2
The registered user shall be able to make change to their information in their own account.
Status: Unimplemented.
UC 4

UA - 7: Upload User Pictures
Priority Level: 4
The registered user shall be able to upload a profile picture for their own account.
Status: Unimplemented.
UC 5

UA - 8: Upload User Pictures
Priority Level: 4
Unregistered user shall be able to get a randomly assigned profile picture.
Status: Unimplemented.
UC 5

UA - 9: Upload User Pictures
Priority Level: 4
The system shall randomly generate a profile picture for unregistered user.
Status: Unimplemented.
UC 5

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Type - Path-Finding

PF - 1: Route Recommendation
Priority Level: 1
Regular user and registered user shall be able to find the fastest path from their own location to destination.
Status: Unimplemented.
UC 6

PF - 2: Route Recommendation
Priority Level: 1
The system shall offer the fastest route to the user depend on their transportation.
Status: Unimplemented.
UC 6

PF - 3: Parking Recommendation
Priority Level: 4
Regular user and registered user shall be able to get parking recommendation around their own destination.
Status: Unimplemented.
UC 7

PF - 4: Route History
Priority Level: 2
Registered user shall be able to see the routes they previously taking as a list.
Status: Unimplemented.
UC 8

PF - 5: Retake Previously Taken Routes
Priority Level: 2
Registered user shall be able to retake their previously taken routes from their own route history.
Status: Unimplemented.
UC 9

PF - 6: Estimated Route Times
Priority Level: 1
Unregistered user and registered user shall be able to get estimated route time from their own location to destination. (Walk there)
Status: Unimplemented.
UC 10

PF - 7: Estimated Route Times
Priority Level: 1
Unregistered user and registered user shall be able to get estimated route time from their own location to destination. (Bike or Skateboard)
Status: Unimplemented.
UC 10

PF - 8: Estimated Route Times
Priority Level: 1
Unregistered user and registered user shall be able to get estimated route time from their own location to destination. (Driving)
Status: Unimplemented.
UC 10

PF - 9: Destination Recommendation
Priority Level: 2
Registered user shall be able to get a destination recommend to them based on their own recent search.
Status: Unimplemented.
UC 11

PF - 10: Destination Recommendation
Priority Level: 2
Unregistered user shall be able to get a popular destination (on campus landmarks) recommend to them.
Status: Unimplemented.
UC 11

PF - 11: Bookmarking Routes
Priority Level: 3
Registered user shall be able to bookmark their favorite routes and save them under their own account.
Status: Unimplemented.
UC 12

PF - 12: Remove Routes from Bookmarking
Priority Level: 3
Registered user shall be able to remove routes from their own bookmarking list.
Status: Unimplemented.
UC 13

PF - 13: Remove Routes from Bookmarking
Priority Level: 3
The System shall request verification of the deletion of any bookmarked routes.
Status: Unimplemented.
UC 13

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Type - Inputting Paths

IP - 1: Inputting Routes using GPS
Priority Level: 1
Registered user shall be able to input routes using GPS location service.
Status: Unimplemented.
UC 14

IP - 2: Inputting Routes using GPS
Priority Level: 1
Unregistered user shall be able to input routes using GPS location service.
Status: Unimplemented.
UC 14

IP - 3: Inputting Routes using GPS
Priority Level: 1
The system shall follow the route created by user's GPS service.
Status: Unimplemented.
UC 14

IP - 4: Inputting Routes using GPS
Priority Level: 1
The system shall save the route created by GPS service into the database.
Status: Unimplemented.
UC 14

IP - 5: Inputting Routes using Drawing feature
Priority Level: 2
Registered and unregistered user shall be able to input routes using drawing feature.
Status: Unimplemented.
UC 15

IP - 6: Inputting Routes using Drawing feature
Priority Level: 2
The system shall save the route entered by user into the database.
Status: Unimplemented.
UC 15

IP - 7: Adjust Routes Inputted by Drawing
Priority Level: 2
Registered user shall be able to update and adjust their draw routes saved in their own account.
Status: Unimplemented.
UC 15

IP - 8: Adjust Routes Inputted by Drawing
Priority Level: 2
Unregistered user shall be able to update and adjust their draw routes saved in their own local visitor account.
Status: Unimplemented.
UC 15

IP - 9: Save Inputted Routes into the User Account
Priority Level: 1
The system shall save the routes inputted by registered users into their own account.
Status: Unimplemented.
UC 14-15

IP - 10: Save Inputted Routes into the User Account
Priority Level: 1
The system shall save the routes inputted by unregistered users into their own local visitor account.
Status: Unimplemented.
UC 14-15

IP - 11: Save Inputted Routes into the Database
Priority Level: 1
The system shall save the routes inputted by both registered and unregistered users into Parse database.
Status: Unimplemented.
UC 14-15

IP - 12: Route Rating
Priority Level: 4
Registered user shall be able to rate specific routes on a 5-star scale.
Status: Unimplemented.
UC 16

IP - 13: Route Rating
Priority Level: 4
The system shall save the rating inputted by user into the database.
Status: Unimplemented.
UC 16

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Type - Map Interactions

MI - 1: Get Current Location
Priority Level: 1
Registered and unregistered user shall be able to see their own current location on the map.
Status: Unimplemented.
UC 6, 7, 9, 14, 17, 18

MI - 2: Show Current Location
Priority Level: 1
The system shall be able to show user's location on the map.
Status: Unimplemented.
UC 6, 7, 9, 14, 17, 18

MI - 3: Classroom Availability
Priority Level: 4
The system shall show the availability condition of nearby classrooms to the users.
Status: Unimplemented.
UC 17

MI - 4: Classroom Availability
Priority Level: 4
Registered and unregistered user shall be able to see the availability condition of classrooms around them on the map.
Status: Unimplemented.
UC 17

MI - 5: Shuttle Stop Location
Priority Level: 4
Registered and unregistered user shall be able to see nearby shuttle stops on the map.
Status: Unimplemented.
UC 18

MI - 6: Shuttle Schedule
Priority Level: 4
Registered and unregistered user shall be able to access the stop's specific time schedule.
Status: Unimplemented.
UC 18

MI - 7: Shuttle Schedule
Priority Level: 4
The System shall display the live shuttle schedule to the user.
Status: Unimplemented.
UC 18

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