

Functional Requirements		
Theme, As a _____	I would like to	Need to add "if time follows"
User(Student and visitor)	open the application	No
User(Student and visitor)	have a solid database which stores all the map data	No
User(Student and visitor)	have a qr-code scanner	No
User(Student and visitor)	have easy-to-find qr code on the wall at every corner,crossroad and entrance	No
User(Student and visitor)	use the qr-code scanner to get information to determine the location from the map data	No
User(Student and visitor)	have a interface to input the destination	No
User(Student and visitor)	use the short distance algorithm to get to the destination	No
User(Student)	have several popular destinations for quicker access (for example, room 224 for CL50 building).	No
Administrator (Building Owner)	have an API to add destination and new map data	Yes
User(Student and visitor)	be able to communicate with people (or friends) who are currently inside the building.	Yes
Non-Functional Requirements		
Type	Details	Need to add "if time follows"
Response Time	The response time after user starts walking should not be more than 1 second	No

Scalability	The app should work with any building with basic structure.	No
Reliability	The app should lead the user to the destination as quickly and precisely as possible.	No
Size	The size of the app should be small (i.e. the user should be able to download it in less than 2 minutes).	No
Supportability	The app should work without having the developers add the map and checkpoints manually.	Yes
Security	(For knowing friends' location part) ,strangers can not access any information of users, including the chatting contents and friends list.	Yes