## **Appendix A**

## **Functional and Interface Testing**

Requirement	Input	Expected outcome	Pass/Fail	Notes
The user can add an item to the inventory.	Once the user has filled in all the required information and pressed the add item button.	This data is then inserted in to the database and updated on the front end	PASS	
The user can edit an item in the inventory.	Once the user has filled in all the required information that needed to be edited and pressed the save button.	all the updated on the database and updated on the front and pressed updated on the front		
The user can delete an item in the inventory.	User clicks on the 'delete' button.	The item will be removed from the inventory.	PASS	
The user can add a beacon to the system.	Once the user has filled in all the required information and pressed the add item button.	This data is then inserted in to the database and updated on the front end.	PASS	
The user can edit a beacon in the system.	Once the user has filled in all the required information that needed to be edited and pressed	This data is then updated on the database and updated on the front end	PASS	
The user can delete a beacon in the system.	User clicks on the 'delete' button.	The beacon will be removed from the system.	PASS	
The user view the real time eat map.	The heatmap page is used to display the active users in the store in a visual representation by using a heatmap. This page will make concurrent request every 5 seconds so that it will display the real-time data on the page.	The heap map will show which zone and what activity is a specific user is doing real time. The congestion of a zone is displayed by shades of colors ranging from red to blue.	PASS	The Full testing of the tracking algorithm and real time heat map can be seen in main report's testing stage.

Unload of the app, it will display the products.	The user open the app.	Will load all the products onto the page.	PASS	
When clicking on the category section in the mobile app it will navigate the user to the category page.	The user clicks on a category section.	Navigate the user to the category page.	PASS	
When on the specific product in the mobile app it will navigate to the detailed product view page.	The user clicks on a specific product.	Navigate the user to the specific product page.	PASS	

## **User Acceptance Test Results**

User No	How easy was it to complete a task?	Did you face any problems with the application ?	Did you feel lost at any point on the system?	Do you think the mobile application reacted well when entering a beacons proximal range?	Do you think the application can be improved? If so, how do you think the application can be improved?
1	Relatively okay, the simple layout of the app makes it very easy to navigate.	No	No, the layout made it smoother to navigate with in the application.	I was so surprised how well it picked up my region.	Having a feature that allows me to see my position in relative to another store region will be very useful.
2	It was very easy to carry out the task.	No, I did not find any problems while using it	No	It worked well, but was very slow at some times.	Add more advanced features, such as view products in the region.
3	Easy	Nothing particularly, anything	No, easy to navigate through out the app.	yes	Having promotions instore, is a specific region when I enter a that region would be nice
4	Very simple	No	No	This was very accurate and almost instant, very cool system.	no