Appraisal

7.2 Changes to initial designs and requirements

The initial intention was to strictly use agile method to compile requirements using the list of items In the product backlog and sprint backlog, but due to the fact that security as an utmost priority in this project, the developer/ researcher consider using “use and misuse case” diagram to enable a wider view of the possible threats or attack and how it should be mitigated or prevented. This decision leads to a significant achievement in the development process, since the developer was able to point out possible attacks like; unauthorised access, cheats and denial issues, and implementation flaws (CSFR, XSS, SQL Injection). The solutions to these attack were handle using preventive measures such as authenticating all users, keeping user logs, user input validation (striping and disallowed the input of unwanted characters by users) and use of one time tokens with sessions. The use of persona was also another decision that was considered, this is to ensure that user have better experience when interacting with the system. Other decisions and changes made in the design process were mentioned in chapter 4, such as changes made to the front and back end of the system.

product with product Initially in Use Case Specification 7, 8 and 9, the administrator was to use the same login portal as the customer to the main website to gain access to the back end of the website in order to perform CRUD operations. With the built-in feature of Django, as mentioned in Chapter Five, the administrator has their own login portal to manage all users, bookings and online orders.

7.2.2 Online Order System The cart for the online ordering system had initially been designed to be displayed on the same page as the list of products so that users could keep track of what they have ordered (Figure 4). However due to time constraints this could not be implemented and therefore a separate web page was built instead to list all added items.

7.2.3 Highlighting the current page As mentioned in Chapter 4, a recommendation was made to highlight the navigation menu item in order to let the user know where they were in the website. This was a simple yet useful feature to implement using Bootstrap’s class=”active” syntax on an unordered list item. The code and result of the feature can be seen in Figures 46 and 47 below.

Figure 46 – Navigation bar menu code to highlight current page

Figure 47 – Result of code in Figure 46

34

7.3 Wider Context The aim of the Restaurant X website was to create a website with an online reservation system and online food ordering system. This project and its website can be used in a wider context in future for the following reasons: • The website contains generic web pages such as Contact and Locations which are easily adaptable to any project. Additional webpages could be added as part of the navigation bar. • The booking system could be changed and adapted for an appointments or meetings booking system. • The online shop lists all products available sorted by categories. The types of products and categories can all be changed to reflect the type of products on offer by any company. • Each product’s name is hyperlinked to a more detailed page where a description can be found. There is also the option to add images to each detailed page to give the user a visual representation of the product.

7.4 Self-Appraisal While a schedule was produced at the start of this project, as mentioned in Chapter Three, during the course of this project, the schedule proved difficult to follow and milestones were not always met on time. This was, for the most part, due to unforeseeable difficulties while developing the website. This included importing pre-existing HTML files with finalised stylings applied to the Django Project. Once imported, some stylings of the HTML were incorrect due to the path files to where Django stores its CSS files.

It was also decided that the Bootstrap library would be adopted into the project during mid development in order to make the website mobile friendly. This proved to be a difficult adoption due to the pre-existing stylings within the project meaning restyling was necessary for the second time in the project. It would have been advantageous to have adopted Bootstrap from the beginning to avoid restyling again.

While these difficulties were overcome, this did lead to delays in developing and implementing other features of the website. Having gone through the whole process of this project, with hindsight, it would have been beneficial to have implemented more slack time to certain parts of the project to accommodate unforeseeable situations that caused a delay and also set out longer durations for the bigger features such as the online ordering system as these took longer to develop.

Despite all the issues encountered, this project gave me the opportunity to learn a new skill of developing a fully operational, dynamic website and database, to learn new programming languages, and to experience working with a Framework like Django. With these skills, I was able to successfully implement an online booking and food ordering system which test participants were able to successfully use.