**Software Engineering Coursework 1**

**Travel Booking Website**

**Purpose and Scope**

The purpose of the website is to provide a service to the audience to be able to book a flight with relative ease. It should be a walk up and use system, eliminating any possible thought of confusion or doubt. The website will be able to guide all users easily from the start of the booking procedure to the end.

With regards to scope, the website concerns plane tickets regarding a certain selection of airlines and airports. The target audience has an open age and profession limit, where executives to students and teenagers to seniors can use the website to book their journey. The airports included will be restricted to Europe concerning most of the popular and major cities.

**Key Features and Behaviours**

Concerning the key features of the website, the user is given a search form in which he/she can input details regarding the journey and the system will use the queries provided and return a list of flights. To help the user input the details there are graphical helps such as the calendars for dates to ensure validation.

The user is also prompted with many checkpoints where he/she can review her choices so far along the procedure.

Payment is online and tickets are picked up at the airport.

There is an extensive FAQ section and also a list of current discount flights.

Returning users can log into their account to make payment easier and also prompt suggested flights based on recent bookings.

Concerning behaviours, the website finds a route from A-B and books the ticket. The user is given seat and class choice. Lowest price flights are highlighted. The user is also given the choice of multi and one stop flights to their convenience.

After the user selects the choice of flight, class, seat and meal choice, the system confirms the choices made and presents the user with the payment page.

**Functional Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Functional Requirements** | **Priority** | |
| User Accounts | | | |
| 1 | The system will let a user make an account | M | |
| 2 | The user account will have a username and password | M | |
| 3 | Details of the user account are confirmed via email | S | |
| 4 | The system has a database with the user account details | M | |
| 5 | When registering a new account, the user enters their details which is saved into a database | M | |
| Journey Planning | | | |
| 6 | The user has the choice of destinations and departures for their journey | M | |
| 7 | The user is given the choice of date(s) for travel | M | |
| 8 | The user is be able to make a one way or return journey | M | |
| 9 | The user is able to pick flights based on time of day | M | |
| 10 | The user can pick the number and type of passenger(s) | M | |
| 11 | The user can choose the class of travel | S | |
| 12 | The user can choose the seat on the plane | C | |
|  | The user can specify his/her meal choice | C | |
| 13 |
| 14 | The user can amend the choices made | | S |
| Ticket | | | |
| 15 | The website shall support all major credit cards | S | |
| 16 | The system will send a confirmation email after booking | M | |
| 17 | The ticket will be picked up at the airport | M | |
| Other | | | |
| 18 | The website will have an extensive list of FAQs | S | |
| 19 | The website will monitor when flights are closed to fully booked and display messages appropriately | C | |
| 20 | Reminded emails are sent the day before the journey | C | |

**Non-Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **ID** | **Functional Requirements** | **Priority** |
| 1 | The website will be up 24 hrs a day all year | M |
| 2 | The website can handle 5,000 concurrent operations | M |
| 3 | The website will be coded in Java to support all browsers | M |
| 4 | The website will store data about all available flights and mark those on discount | M |