Software Engineering proposal

"Airline Ticketing System"

1. Purpose

The airline ticketing system provides a user-friendly interface that is supported by a well-designed database which contains all available air flight information that is integrated together and can be accessed easily through the website so this system helps in speedy information retrieval.

The system is designed in such a way that the booking list is available on time before the scheduled departure time, Moreover the system supports cancelation so that another customer can book it thus exploiting the system efficiently in order to do that the booking list should reflect the latest status at any given time. The system enables customers to look at the airline tickets' cost.

System stakeholders:

- Customers
- Administrative

2. Definitions

Admin => The administrative that can access and manage all bookings (add, remove,edit).

Airline ticketing System => A system that aims to help customers to reserve their desired airline ticket with the appropriate cost and accessibilities.

Website => Consists of webpages that are easy to use.

Database => Collection of information in a structured form, holds admin's data, customers' data, booked and unbooked tickets, the flights, the prices.

Password => Each user has a specific word to gain admission into the system.

Developer => Someone that is involved in creating website front-end and back-end.

GUI => Graphical User Interface which include buttons, dropdown menu, graphical components have to be user friendly.

Report => That covers the sales for a certain period of time having the total sale for each customer, number of tickets (adult/child), prices and packaging.

3. Goals & Objectives

- Ability to track all booked and unbooked tickets, customers, packages and billing by the admin .
- To ensure that ticket reservation is easy and user friendly for customers.
- Satisfy customers' needs in booking a ticket from their place.
- Reduce the work load of the ticket officers.
- Provide large number of ticket reservation and cancelation service in a few time.

4. Plan

We will be using incremental delivery method as we care about working software more than comprehensive documentation, responding to change over following a plan, giving the instructor the ability to track the development. Specification, design, implementation and testing are interleaved during the development process.
We are planning to deliver the project due date: 22 May 2022, last week will be for testing however unit testing will be included in the other three weeks accompanied with specification, design, implementation

The website needs three members to fulfill the following plan:

- Collecting Information about the ticketing system
- Requirements Specification (Dividing requirements into tasks non-functional and functional requirements)
  Functional requirements: Registration, new flight, add ticket, add customer, add price, generate report, edit ticket, edit customer, edit price, edit flight ,Database information
  Non-Functional Requirements: Capacity, Errors, Availability, Security, Speed, Performance
- Designing the project UML diagrams, specifying the architecture pattern and database design
- Code implementation (starting with the front-end and after finishing its testing we will start to develop the back-end including all the requirements "functional and non-functional requirements")
- Debugging & testing
- Final-report

5. Deliveries

- Diagrams
- Function Priorities
- Changes If any
- Code
- Final report including: design, implementation and testing