American International University- Bangladesh

CSC 1205: Object Oriented Programming 1 (JAVA)

Project Concluding Report
Fall21-22

Group ID: 02
Project Title: International Flight Ticket Management System.

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Introduction:

International Flight Ticket Management System

International Flight Ticket Management system is a Java project which maintains the ticket booking and other heavy works of an Airport. This system is very much easy and is user-friendly. Anyone can use this system without any difficulty. This is an integrated service which provide all information about the flight and it's ticket booking for passengers. The proposed system is an application which provides information regarding timings, Ticket booking, Transactions of booking ticket etc. The employee is a panel consisting of a group of authorized persons. The purpose of the International Flight Ticket Management System is to allow customer to interact that gives some basic information such as all flights information, ticket booking, class type like Business Class/Economy Class. This Project is mainly doing for application ticket booking, where employee can book all types of ticket and all types of transaction.

Problem Analysis:

In this project mainly we are going to concentrate on flight ticket booking function, this function will take the user inputs like their requirements ,after entering all of his/her requirements in this application, it can check at backend & provide us the total information about flights. When we open the first page of this project we can find the basic information about flight. There are two types of flight here. Such as Business Class and Economy Class. In International flights module the employee allows users to create their username and they can search their requirements of international flights, if any flight is available they can book the International flight tickets. In order to eliminate, an application has been developed due to which the user need not to waste his valuable time in booking, the ticket and instead of server is built that takes care of every action thereby reducing the size & effort of all users.
As a whole, the system does the necessary tasks for the International Flight.

UI Design Analysis:

International Flight Ticket management system is a online ticket booking application, which is capable of booking ticket and search the flight availability. This application is mainly created to fulfill the following requirements, it comprises of the following properties:-An application based that will provide real- time information about the availability of tickets their prices .Every employee is able to view booking id that has been made in passenger's name. The booking window contains all the facilities at one place, the employee can simply book passenger's ticket. It will improve if we can connect this application with GPS. For That reason all passengers and employee can see all the flight's actual original location. In the existing system if any person wants to travel somewhere by flight he should take some basic steps to get ticket like he should go to airport to book the flight ticket. This project allows users to view flight details and to reserve, view and cancel tickets by logging in or registering with a new account and reporting any issue if required. Employee is provided with rights to see flight details, reservations, user contacts and some functions like adding flights and collecting reports given by users.

Logical Analysis:

There are different types of logical analysis have been used in the project. They work properly in this project. This project allows users to view flight details and to reserve, view and cancel tickets. Employee is provided with rights to see flight details, reservations, user contacts and some functions like adding flights and collecting reports given by users. Using the distributed technology we can handle these project easily. In this Project here employee can edit existing flights using their Id, Delete existing flights using their Id, Create new Flights. Note that all of the fields that can be entered by user is validated and exception handled. In general, a distributed process means that a program in execution makes use of resources in other machine. There are no logical limitation for this project.

International Flight Ticket Management System

OOP Concept Analysis:

There are many OOP principles used in this project. They are Class, Object, Method and Method Passing, Abstraction, Encapsulation, Inheritance, Polymorphism. In this application firstly we use class. A class is a user defined blueprint or prototype from which objects are created. It represents the set of properties or methods that are common to all objects of one type. Then we use Object. Object is a basic unit of Object Oriented Programming and represents the real life entities. A typical Java program creates many objects, which as you know, interact by invoking methods. A method is a collection of statements that perform some specific task and return result to the caller. A method can perform some specific task without returning anything. Methods allow us to reuse the code without retyping the code. Data Abstraction is the property by virtue of which only the essential details are displayed to the user. The trivial or the non-essentials units are not displayed to the user. Ex: A car is viewed as a car rather than its individual components. Data Abstraction may also be defined as the process of identifying only the required characteristics of an object ignoring the irrelevant details. The properties and behavior of an object differentiate it from other objects of similar type and also help in classifying/grouping the objects. Encapsulation is defined as the wrapping up of data under a single unit. It is the mechanism that binds together code and the data it manipulates. Another way to think about encapsulation is, it is a protective shield that prevents the data from being accessed by the code outside this shield. Inheritance is an important pillar of OOP (Object Oriented Programming). It is the mechanism in java by which one class is allow to inherit the features (fields and methods) of another class. It refers to the ability of OOPs programming languages to differentiate between entities with the same name efficiently. This is done by Java with the help of the signature and declaration of these entities. These different types of OOP principals are used in this project.

Impact of this Project:

In this application, user can easy book, buy ticket. This project will impact in economy and society because a user can easily buy ticket by using this application and people are also benefited because they don't need to go to the counter for buy ticket. Time will be safe for this application user. So that we think by using this application people will be benefited.

Limitations and Possible Future Improvements:

The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a application for Flight Ticket Management . This project helped us in gaining valuable information and practical knowledge on several topics. The entire system is secured. Also the project helped us understanding about the development phases of a project and software development life cycle. This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications. There is a scope for further development in our project to a great extend. The project entitled International Flight Ticket Management System was completed successfully.