



Dharmsinh Desai University, Nadiad

Faculty of Technology

Department of Computer Engineering

B. Tech. CE Semester – VI

Subject: Service Oriented Computing

Project title: eTicketing System(AirLine)

By:

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Year : March 2022

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CERTIFICATE

This is to certify that the project entitled as “eTicketing System(AirLine)” is a bonafide report of the work carried out by

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of Department of Computer Engineering, semester VI, under the guidance and supervision of **Prof. Prashant M Jadav & Prof. Ankit P Vaishnav** for the subject System Design Practice during the academic year 2021-2022.

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Abstract

The main purpose of this project is to reduce manual error involved in airline reservation process and make it convenient for the customers to book the flights as when they require such that they can utilize this project to make reservations, modify reservations or cancel a particular reservation.

Purpose

The purpose of this document is to collect and present ideas, requirements & analysis done in order to develop this system. This document provides a detailed overview of the system, details of the functionalities provided to users, target audience of the system and their user interfaces.

Scope

The scope of the system is providing a handy web application to users for reserve ticket. Any user with a registered account on the system can use the functionalities & get benefits of the provided features.

Introduction

The eTicketing system is a project that will help the airline ticket booking business provide its clients with an easy way and automated processing system online. This project has two sides of user's restriction, which are the admin and the client/website visitor. The admin will store all flight schedules into the system along with the airline information and flight details and with this data will be filtered according to the client's desired schedule to book to the website. The client will browse the airline ticketing website and find his/her desired schedule for booking.

Technology/Platform/Tools used

Technology :

WCF framework.

Dot net core WEB API framework

ASP.NET framework

SQL Server database.

Javascript

Bootstrap

Platform : Windows

Tools : Visual Studio 2019

Software Requirement Specification

R1 Account Module

R1.1 Register :

Description: User can login to the system

Exception flow: If username is already taken or insufficient data is provided

Input: User data

Output: Redirects to Login page with success message

R1.2 Login :

Description: User can login to the system

Exception Flow: If credentials are incorrect or insufficient data is provided

Input: User data

Output: Redirects to Dashboard

R.1.3 Logout :

Input: User selection

Output: Redirects to Login page with success message

R2 Flight Module

R2.1 Add Flights :

Description : add flights by admin

Input : flight detail

Output : flight details to be added.

R2.2 Update Flight Details :

Description : update flight details

Input : flight details which you have to update

Output : flights details to be updated.

R2.3 Display Flight Details :

Description : show flight details

Output : display all flights data.

R2.4 Delete Flight details :

Description : delete flight details

Input : flights details which you have to delete.

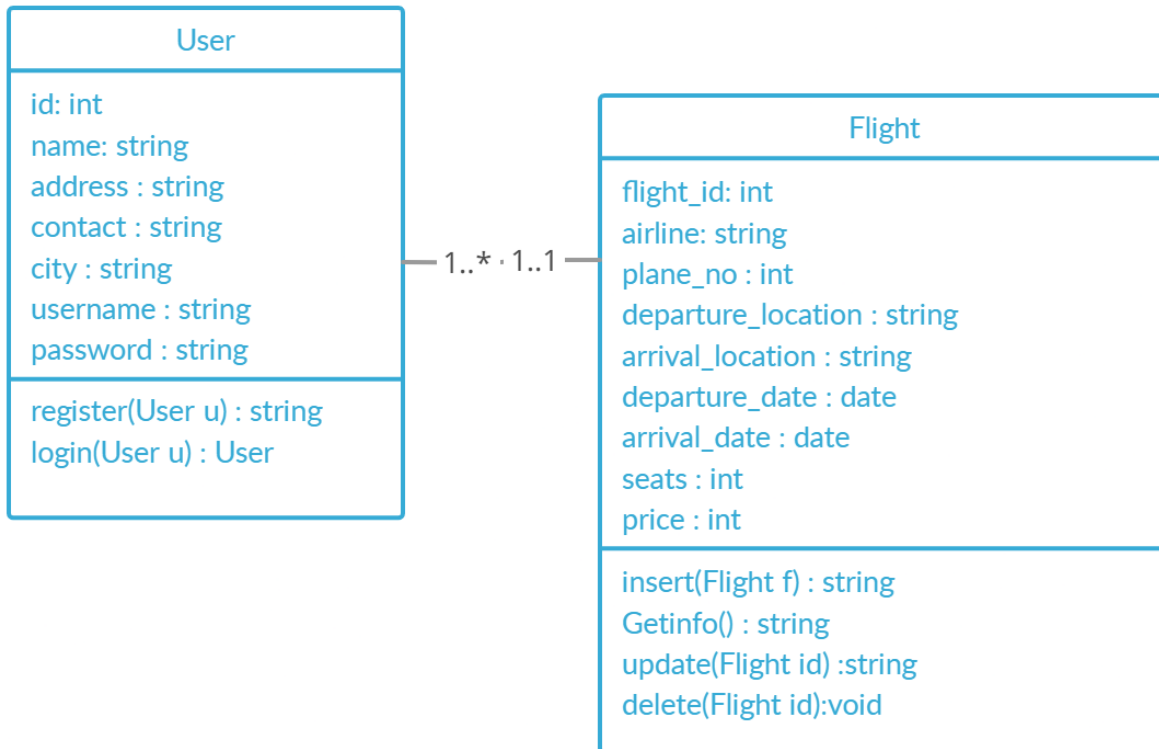
Output : flights details to be deleted.

Design :

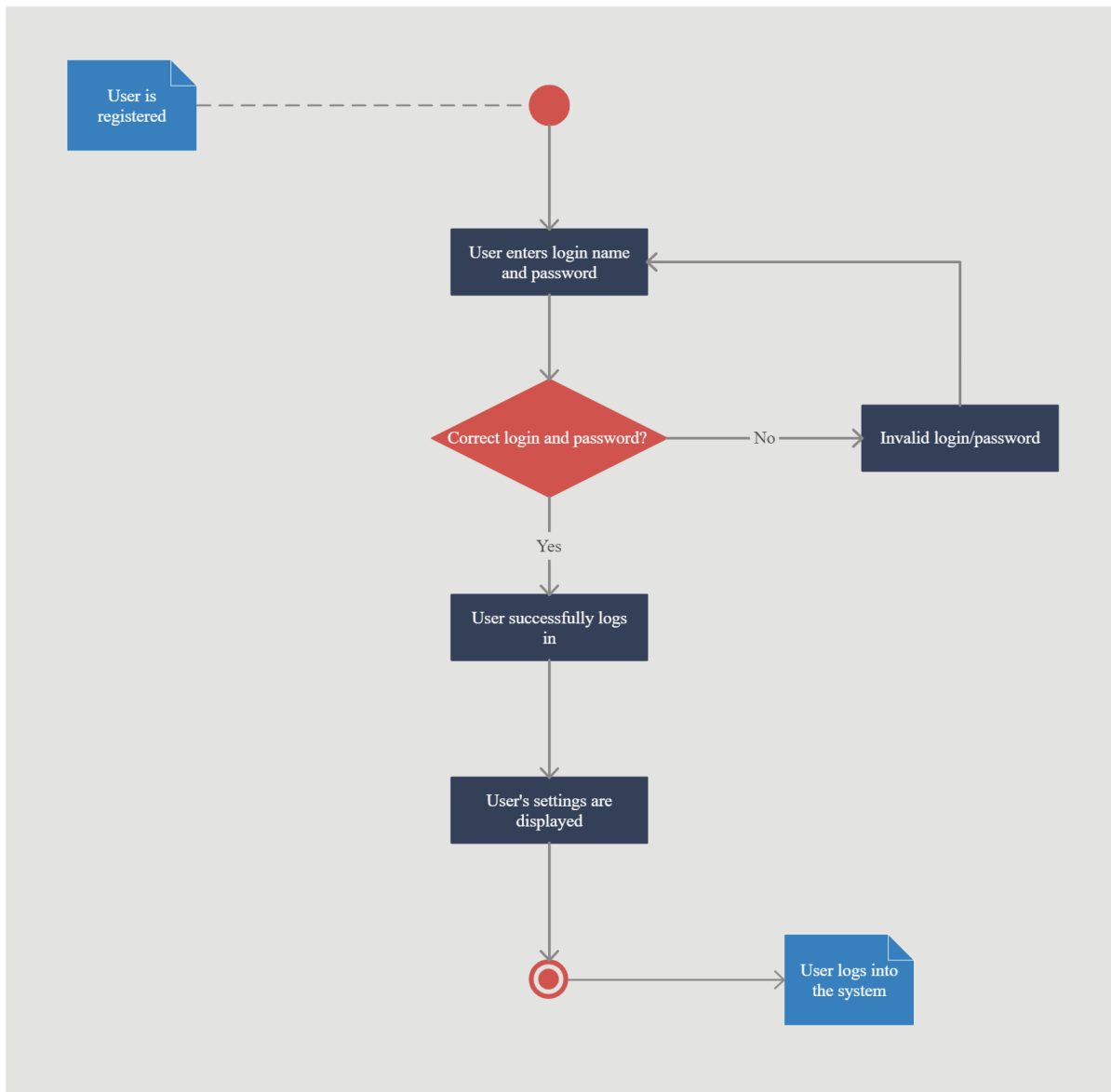
Use Case Diagram :

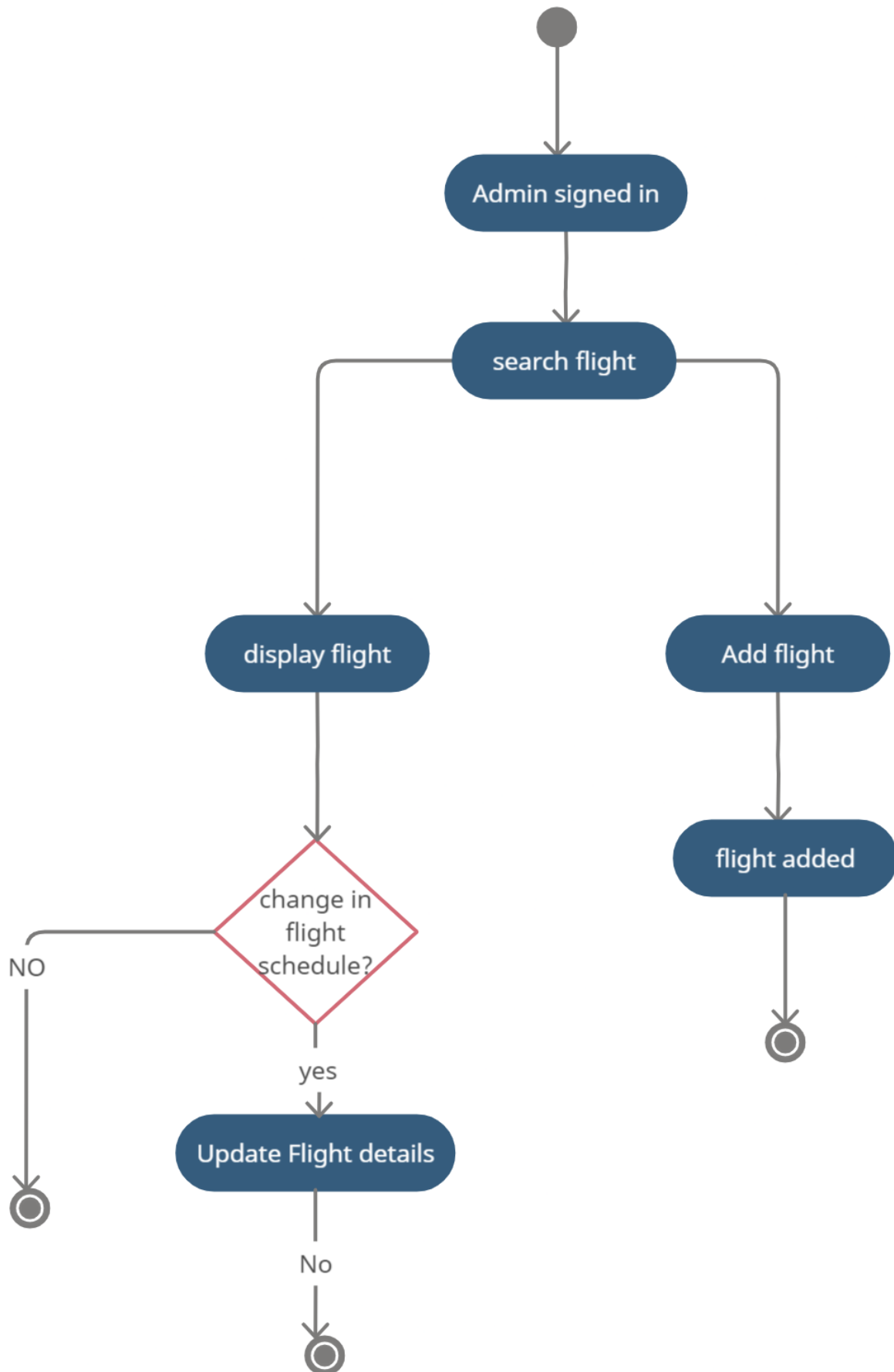


Class Diagram :



Activity Diagram :





Data Dictionary :

User :

	Column Name	Data Type	Allow Nulls
🔑	id	int	<input type="checkbox"/>
▶	name	nchar(10)	<input checked="" type="checkbox"/>
	address	nchar(50)	<input checked="" type="checkbox"/>
	contact	nchar(10)	<input checked="" type="checkbox"/>
	city	nchar(10)	<input checked="" type="checkbox"/>
	username	nchar(20)	<input checked="" type="checkbox"/>
	password	nchar(20)	<input checked="" type="checkbox"/>

Flight :

	Column Name	Data Type	Allow Nulls
▶	Flight_id	int	<input checked="" type="checkbox"/>
	airline	nchar(10)	<input checked="" type="checkbox"/>
	plane_no	nchar(10)	<input checked="" type="checkbox"/>
	departure_location	nchar(10)	<input checked="" type="checkbox"/>
	arrival_location	nchar(10)	<input checked="" type="checkbox"/>
	departure_date	date	<input checked="" type="checkbox"/>
	arrival_date	date	<input checked="" type="checkbox"/>
	seats	int	<input checked="" type="checkbox"/>
	price	int	<input checked="" type="checkbox"/>

Implementation Details :

Following is brief descrip.on about important class and methods of project

Flight

Represent flights, This class is annotated as data contract and it is main entity on which crud operations are done. Following all methods are annotated as operation contract

insert(Flight f) : used to insert flights on database.

Getinfo() : used to get all data of flights table.

update(Flight flight_id) : update specific flight details.

delete(Flight flight_id) : delete specific flight details.

User

Represent users, This class is annotated as data contract and it is main entity on which crud operations are done. Following all methods are annotated as operation contract

register(User u) : used to register users.

login(User u): used to login user on website.

Screenshots :

Travel Agency

Home Register Login

Register here !!

Enter Your Name

Address

Contact

City

UserName

Password

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Travel Agency

Home Register Login

Login

UserName

Password

Update password?

Username

Password

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admin side : all flights page

Travel Agency

Home All Flight Logout

Flight_id	airline	plane_no	departure_location	arrival_location	departure_date	arrival_date	seats	price	Action	Action
102	flight1	406	ahemdabad	delhi	8/6/2022 12:00:00 AM	9/6/2022 12:00:00 AM	56	8500	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
103	flight3	234	delhi	mumbai	9/9/2023 12:00:00 AM	10/9/2023 12:00:00 AM	89	4500	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
104	flight4	345	kolkata	mumbai	2/3/2022 12:00:00 AM	3/3/2022 12:00:00 AM	78	5200	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
105	flight5	897	delhi	kolkata	4/9/2021 12:00:00 AM	5/9/2021 12:00:00 AM	45	5689	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
106	flight10	456	jammu	nadiad	4/8/2022 12:00:00 AM	8/8/2022 12:00:00 AM	98	4500	<input type="button" value="Update"/>	<input type="button" value="Delete"/>

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add flight :

[f](#)
[t](#)
[G+](#)
[in](#)

+021 365 777
132 New Lenox, 868 1st Avenue

Travel Agency

[Home](#)
[All FLight](#)
[Logout](#)

Flight_id	airline	plane_node	departure_location	arrival_location	departure_date	arrival_date	seats	price	Action	Action
102	flight1	406	ahemdabad	delhi	8/6/2022 12:00:00 AM	9/6/2022 12:00:00 AM	56	8500	Update	Delete
103	flight3	234	delhi	mumbai	9/9/2023 12:00:00 AM	10/9/2023 12:00:00 AM	89	4500	Update	Delete
104	flight4	345	kolkata	mumbai	2/3/2022 12:00:00 AM	3/3/2022 12:00:00 AM	78	5200	Update	Delete
105	flight5	897	delhi	kolkata	4/9/2021 12:00:00 AM	5/9/2021 12:00:00 AM	45	5689	Update	Delete
106	flight10	456	jammu	nadiad	4/8/2022 12:00:00 AM	8/8/2022 12:00:00 AM	98	4500	Update	Delete
107	flight17	1002	banglore	chennai	7/8/2022 12:00:00 AM	7/8/2022 12:00:00 AM	56	8500	Update	Delete

Add Flight
Search

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delete record :

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[Logout](#)

Flight_id	airline	plane_node	departure_location	arrival_location	departure_date	arrival_date	seats	price	Action	Action
102	flight1	406	ahemdabad	delhi	8/6/2022 12:00:00 AM	9/6/2022 12:00:00 AM	56	8500	Update	Delete
103	flight3	234	delhi	mumbai	9/9/2023 12:00:00 AM	10/9/2023 12:00:00 AM	89	4500	Update	Delete
104	flight4	345	kolkata	mumbai	2/3/2022 12:00:00 AM	3/3/2022 12:00:00 AM	78	5200	Update	Delete
105	flight5	897	delhi	kolkata	4/9/2021 12:00:00 AM	5/9/2021 12:00:00 AM	45	5689	Update	Delete
107	flight17	1002	banglore	chennai	7/8/2022 12:00:00 AM	7/8/2022 12:00:00 AM	56	8500	Update	Delete

Add Flight
Search

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Conclusion

Our project is able to successfully demonstrate Crud operation on an entity in SQL server database via WCF service/Web API hosted locally and is able to be consumed by ASP.NET web client application.

Limitation and Future Extension

Currently this project is implemented for adding flights and its CRUD by admin side later can be extended to add airports and many more functionalities and user side reservation part to overcome the problem of the system.

Bibliography

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