**Capstone Project - Testing an Airline Booking Website - WriteUp**

**Softwares Required:**

1) flyaway.war Application

2) Wampserver

3) Apache Tomcat

4) MySQL

5) Eclipse

6) Java 1.8

7) Selenium standalone server 3.141.59

8) TestNG

9) Cucumber

10) Jenkins Server

11) Postman

12) Jmeter

**Steps Performed :**

1) Install Wampserver and Apache tomcat

2) Start MySQL service in wampserver and start creating Database for flyaway application.

3) Extract flyaway.war from webaspps folder in apache tomcat from command prompt and check whether flyaway application is running on localhost:8080

4) Start eclipse and create Maven Project to test the flyaway application and convert into testNG

5) Add the required dependencies in pom.xml

6) Write the code in page object model and run as TESTNG Suite

7) Create Git repository and push the code to GIT Repository

8) Run Jenkins Server and Create new Jenkin Project

9) Configure the project using GIT URL and schedule test the build process according to our requirement .

10) Open Post man and create Collection with name FlyAway and Tested Signup, Login, FlightBooking and Logout functions.

11) Open Jmeter and add thread groups from Threads , HTTP request from Sampler and View Results tree from Listeners.

**Dependencies Required:**

1)cucumber core

2)cucumber java

3)cucumber testng

4)cucumber -jvm-deps

5)cucumber reporting

6)gherkin

7)testng

8)jcommander

9)selenium java 3.141.59

10)extent reports

11)loj4j

11)log4j-api

12)log4j-core

13)loj4j-1.2-api

14)rest-assured

15)json-simple

16)hamcrest-all

17)mockito-all

18)json-scheme validator

19)json-path

20)java-hamcrest

21)hamcrest-core

22)hamcrest-library

23)xml-path

24)javax.mail

**SQL Data Creation :**

1. Create database with name flyaway and use the database

**create database flyaway;**

**use flyaway;**

1. Create tables in the Database

**f\_admin Table:-**

DROP TABLE IF EXISTS `f\_admin`;

CREATE TABLE `f\_admin` (

`ID` bigint(250) NOT NULL AUTO\_INCREMENT,

`admin\_id` varchar(250) DEFAULT NULL,

`admin\_pwd` varchar(250) DEFAULT NULL,

PRIMARY KEY (`ID`)

) ENGINE=InnoDB AUTO\_INCREMENT=2 DEFAULT CHARSET=latin1;

LOCK TABLES `f\_admin` WRITE;

INSERT INTO `f\_admin` VALUES (1,'venkatasaiswabhanu@gmail.com','venkat@123');

UNLOCK TABLES;

**f\_airlines Table:-**

DROP TABLE IF EXISTS `f\_airlines`;

CREATE TABLE `f\_airlines` (

`ID` bigint(250) NOT NULL AUTO\_INCREMENT,

`name` varchar(250) DEFAULT NULL,

PRIMARY KEY (`ID`)

) ENGINE=InnoDB AUTO\_INCREMENT=9 DEFAULT CHARSET=latin1;

LOCK TABLES `f\_airlines` WRITE;

INSERT INTO `f\_airlines` VALUES (1,'SpiceJet'),(2,'GoAir'),(3,'Air India'),(4,'AirAsia'),(5,'Vistara');

UNLOCK TABLES;

**f\_places Tables:-**

DROP TABLE IF EXISTS `f\_place`;

CREATE TABLE `f\_places` (

`ID` bigint(250) NOT NULL AUTO\_INCREMENT,

`name` varchar(250) DEFAULT NULL,

PRIMARY KEY (`ID`)

) ENGINE=InnoDB AUTO\_INCREMENT=12 DEFAULT CHARSET=latin1;

LOCK TABLES `f\_places` WRITE;

INSERT INTO `f\_places` VALUES (1,'Bangalore'),(2,'Hyderabad'),(3,'New Delhi'),(4,'Chennai'),(5,'Kolkatta'),(6,'Kerala'),(7,'Madhya Pradesh'),(8,'Mumbai');

UNLOCK TABLES;

**f\_flights Tables:-**

DROP TABLE IF EXISTS `f\_flights`;

CREATE TABLE `f\_flights` (

`ID` bigint(250) NOT NULL AUTO\_INCREMENT,

`source` bigint(250) NOT NULL,

`destination` bigint(250) NOT NULL,

`airline\_id` bigint(250) NOT NULL,

`departure` varchar(250) DEFAULT NULL,

`arrival` varchar(250) DEFAULT NULL,

`time\_taken` varchar(250) DEFAULT NULL,

`price` decimal(20,2) DEFAULT NULL,

PRIMARY KEY (`ID`),

KEY `constraint\_airline` (`airline\_id`),

KEY `constraint\_source` (`source`),

KEY `constraint\_destination` (`destination`),

CONSTRAINT `constraint\_airline` FOREIGN KEY (`airline\_id`) REFERENCES `f\_airlines` (`ID`) ON DELETE CASCADE ON UPDATE CASCADE,

CONSTRAINT `constraint\_destination` FOREIGN KEY (`destination`) REFERENCES `f\_places` (`ID`) ON DELETE CASCADE ON UPDATE CASCADE,

CONSTRAINT `constraint\_source` FOREIGN KEY (`source`) REFERENCES `f\_places` (`ID`) ON DELETE CASCADE ON UPDATE CASCADE

) ENGINE=InnoDB AUTO\_INCREMENT=9 DEFAULT CHARSET=latin1;

LOCK TABLES `f\_flights` WRITE;

INSERT INTO `f\_flights` VALUES (1,4,5,2,'9:50 PM','11:30 PM','1:50 HOURS',2000.00),(2,4,6,4,'8:00 PM','9:30 PM','1:50 HOURS',2000.00),(3,1,4,3,'8:50 PM','10:30 PM','1:50 HOURS',2000.00),(4,6,3,5,'6:45 PM','9:45 PM','3:00 HOURS',5584.00),(5,2,5,1,'6:00 AM','8:25 AM','2:25 HOURS',4200.00),(6,1,2,3,'7:45 PM','8:55 PM','1:10 HOURS',2800.00),(7,1,2,4,'7:45 PM','8:55 PM','1:10 HOURS',2800.00),(8,3,1,2,'1:10 PM','4:30 PM','3:20 HOURS',3233.00),(9,2,1,5,'2:20 PM','3:30 PM','1:10 HOURS',3635.00),(10,5,3,1,'8:50 AM','10:30 PM','1:40 HOURS',6500.00);

UNLOCK TABLES;

**f\_bookings table:-**

DROP TABLE IF EXISTS `f\_bookings`;

CREATE TABLE `f\_bookings` (

`ID` bigint(20) NOT NULL AUTO\_INCREMENT,

`user\_id` bigint(20) NOT NULL,

`flight\_id` bigint(20) NOT NULL,

`price` decimal(10,2) DEFAULT NULL,

`booking\_date` datetime DEFAULT NULL,

`flight\_date` datetime DEFAULT NULL,

PRIMARY KEY (`ID`),

KEY `constraint\_flights` (`flight\_id`),

CONSTRAINT `constraint\_flights` FOREIGN KEY (`flight\_id`) REFERENCES `f\_flights` (`ID`) ON DELETE CASCADE ON UPDATE CASCADE

) ENGINE=InnoDB AUTO\_INCREMENT=19 DEFAULT CHARSET=latin1;

LOCK TABLES `f\_bookings` WRITE;

INSERT into `f\_bookings` VALUES (1,1,6,2800.00,'2022-03-26 19:07:11','2022-03-29 09:50:00'),(2,1,2,2000.00,'2022-03-27 22:27:11','2022-03-31 08:00:00'),(3,1,1,2000.00,'2022-03-28 07:20:45','2022-03-29 09:50:00'),(4,1,8,3233.00,'2022-03-27 22:15:11','2022-03-31 08:00:00');

UNLOCK TABLES;

**f\_user table :-**

DROP TABLE IF EXISTS `f\_user`;

CREATE TABLE `f\_user` (

`ID` bigint(20) NOT NULL AUTO\_INCREMENT,

`name` varchar(50) DEFAULT NULL,

`email` varchar(50) DEFAULT NULL,

`date\_signup` datetime DEFAULT NULL,

`address` varchar(100) DEFAULT NULL,

`city` varchar(50) DEFAULT NULL,

`pwd` varchar(10) DEFAULT NULL,

PRIMARY KEY (`ID`)

) ENGINE=InnoDB AUTO\_INCREMENT=3 DEFAULT CHARSET=latin1;

LOCK TABLES `f\_user` WRITE;

INSERT INTO `f\_user` VALUES (1,'Swabhanu','swabhanu.b@gmail.com','2022-03-26 17:40:10','Ramalayam Street','Lakkavaram','Hello@123'),(2,'Sai Chakri','saichakribk9@gmail.com.com','2022-03-26 12:10:44','Kukatpally','Hyderabad','Hi@123');

UNLOCK TABLES;

1. To view any table data :

**select \* from table name;**

**select \* from f\_flights;**

**END OF SQL DATA CREATION**

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