

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 a pache 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 Fly Away 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;

2) 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,'Go Air'),(3,'Air India'),(4,'AirAsia'),(5,'Vistara');
UNLOCK TABLES;
```

f_places Tables:-

```
DROPTABLE 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 Pra desh'),(8,'Mumbai');

UNLOCK TABLES;
```

f_flights Tables:-

```
DROPTABLE 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;
```

3) To view any table data :

```
select * from table name;
select * from f_flights;
```

END OF SQL DATA CREATION
