# CMPE 275 Lab 2 Report Airline Reservation System

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Hostname

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**Unit Tests** 

Java Docs

# 1. Group Members

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# 2. Cloud Service

**AWS (Amazon Web Services)** 

# 3. Hostname

http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com

# 4. Github

https://github.com/varun1524/AirlineReservationSystem

# 5. APIs

# (1) Get a passenger back as JSON

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger/6df2ab3a-3266-4dd 0-964d-a014d026fb88
Method	GET
Return	

```
"passenger": {
    "firstname": "varun",
    "gender": "male",
    "reservations": {
        "reservation": [
 2 <del>+</del> 3
 4
 5 -
  6 +
                                           "price": 100,
 8
 q
                                             reservationNumber": "7c003cd5-17df-4b88-b834-6134dca0a5c1",
                                           "flights": {
    "flight": [
10 -
11 -
12 -
                                                                "departureTime": "2018-05-17-13",
13
                                                                "plane": {
    "year": 1993,
    "model": "Boeing 747",
    "capacity": 100,
    "manufacturer": "airbus"
14 +
15
16
17
18
19
                                                                "price": 100,
"arrivalTime": "2018-05-17-17",
"description": "direct flight",
20
21
22 23
                                                                "from": "houston",
"to": "san jose",
"seatsLeft": 99,
"flightNumber": "135"
24
25
26
27
28
                                                  ]
29
                                           }
                                    }
30
31
                             ]
32
                        phone": "6692309310",
33
34
                        passengerId": "6df2ab3a-3266-4dd0-964d-a014d026fb88",
                      "age": 23,
"lastname": "shah"
35
36
37
               }
38
       }
```

# (2) Get a passenger back as XML

Positive Test

```
URL
                http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger/fd60652f-11a3-41a5-ace
                7-89e4ea476ac8?xml=true
Method
                GET
Return
                              <firstname>varun</firstname>
                              <gender>male</gender>
                      4+
                              <reservations>
                      5 +
                                  <reservation>
                                      <price>100.0</price>
                                       <reservationNumber>7c003cd5-17df-4b88-b834-6134dca0a5c1</reservationNumber>
                      8 +
                                      <flights>
                      9 +
                                           <flight>
                     10
                                               <departureTime>2018-05-17-13</departureTime>
                     11 +
                                               <plane>
                     12
                                                   <year>1993</year>
                                                   <model>Boeing 747</model>
                     13
                     14
                                                   <capacity>100</capacity>
                                                   <manufacturer>airbus</manufacturer>
                     16
                                               </plane>
                                               <price>100.0</price>
<arrivalTime>2018-05-17-17</arrivalTime>
                     17
                     18
                     19
                                               <description>direct flight</description>
                     20
                                               <from>houston</from>
                     21
                                               <to>san jose</to>
<seatsLeft>99</seatsLeft>
                     22
                     23
                                               <flightNumber>135</flightNumber>
                     24
                                           </flight>
                                      </flights>
                     25
                     26
                                  </reservation>
                     27
                              </reservations>
                              <phone>6692309310</phone>
                     29
                              <passengerId>6df2ab3a-3266-4dd0-964d-a014d026fb88</passengerId>
                              <age>23</age>
                     30
                     31
                              <lastname>shah</lastname>
                          </passenger>
```

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger/df2ab3a-3266-4dd0-964d -a014d026fb88?xml=true
METHOD	GET

## (3) Create a passenger

#### Positive Test

```
URL
           http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger?firstname=varu
           n&lastname=shah&age=23&gender=male&phone=9172309310
Method
           POST
Return
               1 - {
                     "passenger": {
               2 -
                      "firstname": "varun",
               3
               4
                        "gender": "male",
               5 -
                        "reservations": {
                           "reservation": []
               6
                      7
               8
               9
              10
              11
                    }
              12
              13 }
```

#### Negative Test

```
URL http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger?firstname=varun&lastname=shah&age=23&gender=male&phone=9172309310

Method POST

Return

| Total Control Contr
```

# (4) Update a passenger

```
URL http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger/fd60652f-11a3-41a5-ace7-89e4ea476ac8?firstname=ashna&lastname=shah&age=25&gender=female&phone=4089321247

Method PUT

Return 

| passengerId | fd60652f-11a3-41a5-ace7-89e4ea476ac8 | firstname | ashna | ashna | ashna | ashna | age | 25, gender | female | female | phone | female | phone | female | female | phone | female | female | phone | female | female | female | phone | female | female
```

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger/26cc83af-9443-4ec7-8913-945d3f983f0dbhbbu?firstname=ashna&lastname=shah&age=25&gender=female☎=4352343232
Method	PUT
Return	1   {

# (5) Delete a passenger

#### Positive Test

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger/fd60652f-11a3-41a5-ace7-89e4ea476ac8
Method	DELETE
Return	1 * Response> 2

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/passenger/fd60652f-11a3-4176ac8
METHOD	DELETE
RETURN	1

## (6) Get a reservation back as JSON

Positive Test

```
URL
                      http://localhost:8888/reservation/93ec62c8-9a08-47f7-9167-330e969ba6de
                      GET
Method
Return
                             1 - {
                                         "reservationNumber": "93ec62c8-9a08-47f7-9167-330e969ba6de",
                                         "price": 150,
                                          passenger": {
                             4.
                                               "passengerId": "26cc83af-9443-4ec7-8913-945d3f983f0d",
"firstname": "jinal",
"lastname": "shah",
                             6
                                              "age": 23,
"gender": "male",
"phone": "9172343232"
                             8
                             9
                            10
                            11
                                         },
"flights": [
                            12 -
                           13 +
                                                     "flightNumber": "121",
                            14
                                                    "price": 150,
"source": "Houston",
"destination": "San Jose",
"departureTime": "2018-05-16-20",
"arrivalTime": "2018-05-17-00",
                            15
                            16
                            17
                           18
                            19
                                                    "seatsLeft": 49,
"description": "Direct flight",
"plane": {
                            20
                            21
                            22 -
                                                           "capacity": 50,
"model": "Boeing 747",
"manufacturer": "airbus",
                            23
                            24
                            25
                                                           "year": 1993
                            26
                            27
                            28
                            29
                                         ]
                            30 }
```

|--|--|--|

#### (7) Make a reservation

#### Positive Test

```
URL
                      http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation?passengerId=c
                      99c980c-3eec-4fd8-87cb-be9320685a34&flightLists=100
                      POST
Method
Return
                                         "reservation": {
    "passenger": {
                                                     "firstname": "jinal",
"gender": "male",
"phone": "6572306757",
                             6
                                                     "passengerId": "c99c980c-3eec-4fd8-87cb-be9320685a34",
                                                     "age": 23,
"lastname": "shah"
                             8
                             9
                            10
                                                price": 100,
                            11
                                                reservationNumber": "53215eb5-177d-4468-9428-c8222bc9efc4",
                                               "flights": {
  "flight": [
                            13 +
                            14 -
                            15 -
                                                                 "departureTime": "2018-05-17-13",
                           16
                                                                 "plane": {
    "year": 1993,
    "model": "Boeing 747",
    "capacity": 250,
    "manufacturer": "airbus"
                            17 -
                            18
                            19
                            20
                            21
                            22
                                                                 "price": 100,
"arrivalTime": "2018-05-17-17",
"description": "direct flight",
                            23
                            24
                            25
                                                                 "from": "houston",
"to": "san jose",
"seatsLeft": 249,
"flightNumber": "100"
                            26
                            27
                            28
                            29
                            30
                                                     ]
                            31
                                              }
                            32
                            33
                                  }
                            34
```

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation?passengerId=c 93eec-4fd8-87cb-be9320685a34&flightLists=100
Method	POST
Return	<pre>1 * { 2 *</pre>

## (8) Update a reservation

#### Positive Test

```
URL
                       http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation/53215eb5-177
                       d-4468-9428-c8222bc9efc4?fliahtsAdded=101&fliahtsRemoved=100
Method
                       POST
Return
                                            "reservationNumber": "53215eb5-177d-4468-9428-c8222bc9efc4", 
"price": 100,
                                             passenger": {
                               4 +
                                                  "passengerId": "c99c980c-3eec-4fd8-87cb-be9320685a34",
"firstname": "jinal",
"lastname": "shah",
                               5
                               6
                                                  "age": 23,
"gender": "male",
"phone": "6572306757"
                               8
                               9
                             10
                             11
                                           },
"flights": [
                             12 -
                             13 -
                             14
                                                        "flightNumber": "100",
                                                       price": 100,

price": 100,

source": "houston",

destination": "san jose",

"departureTime": "2018-05-17-13",

"arrivalTime": "2018-05-17-17",

"seatsLeft": 249,

"description": "direct flight",
                             15
                             16
                             17
                             18
                             19
                             20
                             21
                             22 -
                                                         "plane": {
                                                               "capacity": 250,
"model": "Boeing 747",
"manufacturer": "airbus",
                             23
                             24
                             25
                             26
                                                               "year": 1993
                             27
                             28
                             29
                                           ]
                              30
```

#### Negative test

URL http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation/53215eb5-177
d-4468222bc9efc4?flightsAdded=101&flightsRemoved=100

```
Method POST

Return

| Total Content of the content
```

## (9) Search for reservations

#### Positive Test

```
URL
                       http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation?passengerId=c
                       99c980c-3eec-4fd8-87cb-be9320685a34&flightNumber=100
Method
                       GET
Return
                              1 - {
                                           "reservationNumber": "53215eb5-177d-4468-9428-c8222bc9efc4",
                                           "price": 100,
                              4 +
                                            passenger": {
                                                 "passengerId": "c99c980c-3eec-4fd8-87cb-be9320685a34",
"firstname": "jinal",
"lastname": "shah",
                              5
                              6
                                                 "age": 23,
"gender": "male",
"phone": "6572306757"
                              8
                              9
                             10
                             11
                                          },
"flights": [
                             12 -
                             13 +
                                                       "flightNumber": "100",
                             14
                                                       "flightNumber": "100",
"price": 100,
"source": "houston",
"destination": "san jose",
"departureTime": "2018-05-17-13",
"arrivalTime": "2018-05-17-17",
"seatsLeft": 249,
"description": "direct flight",
                             15
                             16
                             17
                             18
                             19
                             20
                             21
                                                       "plane": {
                             22 +
                                                             "capacity": 250,
"model": "Boeing 747",
"manufacturer": "airbus",
                             23
                             24
                             25
                                                              "year": 1993
                             26
                             27
                             28
                             29
                                          ]
                                   }
                             30
```

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation?passengerId= 99c980c-3eec-4fd8-87cb-be9320685a34&flightNumber=100
Method	GET

```
Return

1 * {
2 * "Bad_Request": {
    "msg": "No Reservations available for given input",
    "code": 484
    }
6 }
```

# (10) Cancel a reservation

## Positive Test

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation/93ec62c8-9a08-4 7f7-9167-330e969ba6de
Method	DELETE
Return	1 - <response> 2</response>

# Negative Test

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/reservation/93ec62c8-9a08-4 7f7-9167-330e969ba6de
Method	DELETE
Return	1

# (11) Get a flight back as JSON

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/flight/100
Method	GET

```
Return
                                                                             "flight": {
    "departureTime": "2018-05-17-13",
    "plane": {
        "year": 1993,
        "model": "Boeing 747",
        "capacity": 250,
        "manufacturer": "airbus"
                                                        4 +
                                                        8
                                                                                          },
"passengers": {
    "passenger": []
                                                        9
                                                      10 -
                                                      11
                                                                                         },

"price": 100,

"arrivalTime": "2018-05-17-17",

"description": "direct flight",

"from": "houston",

"to": "san jose",

"seatsLeft": 250,

"flightNumber": "100"
                                                       12
                                                      13
                                                      14
                                                      15
                                                      16
                                                      17
                                                      18
                                                      19
                                                      20
                                                      21 }
```

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/flight/1000
Method	GET
Return	<pre>1</pre>

# (12) Get a flight back as XML

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/flight/100?xml=true
Method	GET

```
1 - <flight>
Return
                              <departureTime>2018-05-16 13:00:00.0</departureTime>
                              <plane>
                     4
                                   <year>1993</year>
                                   <model>Boeing 747</model>
                                  <capacity>50</capacity>
                     6
                                   <manufacturer>airbus</manufacturer>
                     8
                              </plane>
                     9
                              <passengers></passengers>
                              <price>150.0</price>
<arrivalTime>2018-05-16 17:00:00.0</arrivalTime>
                    10
                    11
                              <description>Direct flight</description>
                    12
                              <from>Houston</from>
                    13
                              <to>San Jose</to>
                    14
                              <seatsLeft>50</seatsLeft>
<flightNumber>108</flightNumber>
                    15
                    16
                    17 </flight>
```

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/flight/101?xml=true
Method	GET
Return	<pre>"Bad Request": {     "msg": "FLight doesn not exist with number 101",     "code": 404 } </pre>

# (13) Create or update a flight

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/flight/100?price=100&from =Houston&to=San%20Jose&departureTime=2018-05-17-13&arrivalTime=2018-05-17-17&de scription=Direct%20flight&capacity=250&model=Boeing%20747&manufacturer=airbus&year =1993
Method	POST

```
Return
                                                                     "flightNumber": "100",
                                                                  "flightNumber": "100",
"price": 100,
"source": "houston",
"destination": "san jose",
"departureTime": "2018-05-17-13",
"arrivalTime": "2018-05-17-17",
"seatsLeft": 250,
"description": "direct flight",
"plane": {
    "capacity": 250,
                                                3
                                                5
                                                6
                                                8
                                                9
                                              10 -
                                                                              "capacity": 250,
"model": "Boeing 747",
"manufacturer": "airbus",
                                              11
                                              12
                                              13
                                                                              "year": 1993
                                              14
                                              15
                                                                      "passengers": null
                                              17 }
```

```
URL
                http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/flight/100?price=100&from
                =Houston&to=San%20Jose&departureTime=2018-05-17-13&arrivalTime=2018-05-17-17&de
                scription=Direct%20flight&capacity=0&model=Boeing%20747&manufacturer=airbus&year=1
                993
                POST
Method
Return
                  1 - {
                   2 +
                         "Bad Request": {
                             "msg": "Flight capacity less than already booked tickets ",
"code": 400
                   3
                   4
                   5
                         }
                   6 }
```

# (14) Delete a flight

#### Positive Test

URL	http://airlineresevation-springboot.us-west-1.elasticbeanstalk.com/flight/101
Method	DELETE
Return	1 *   Response >

# 6. Unit Tests

#### 1) Passenger

```
📭 Airport_Reservation_System 🖿 src 🗎 test 🖿 java 🖭 edu 🖿 sjsu 🖿 cmpe275 🖿 lab2 🖿 controller 🎯 FlightControllerTest 👫 🧰 FlightControllerTest 🔻 🔭 🕸 📑 🔻 😲 🗜
                                               PassengerService
                                                                                                                                       #/grest
public void stage1_createFlight() throws UnirestException {
   HttpResponse-JsonNode= jsonNesponse = Unirest.post( unit "http://localhost:8080/flight/1317pric.header( name: "accept", value: "application/json")
   .queryString( name: "apiKey", value: "131")
   .asJson()
                                             ReservationService
ResponseService
                                 ▼ 🔤 view
© FlightView
© PassengerView
                                     @ ReservationView Cab2Application
                                                                                                                                                 Assert.assertEquals(HttpStatus.OK.value(),jsonResponse.getStatus());
                                 ■ static
                                  templates
                                                                                                                                        /**

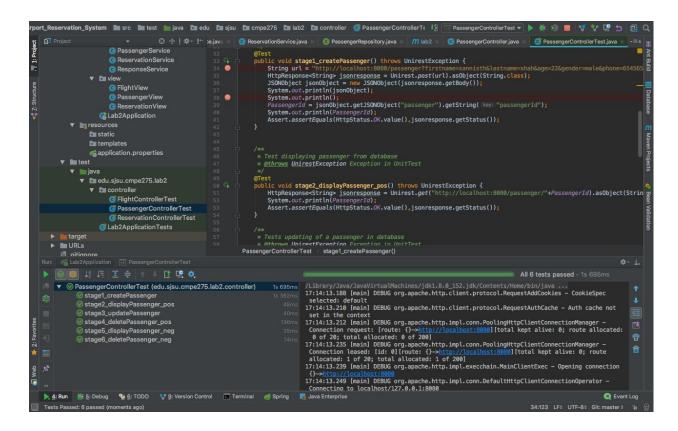
* Tests existence of flight in database

* <u>@throws UnirestException</u> Exception in UnitTest
*/
                                   application.properties

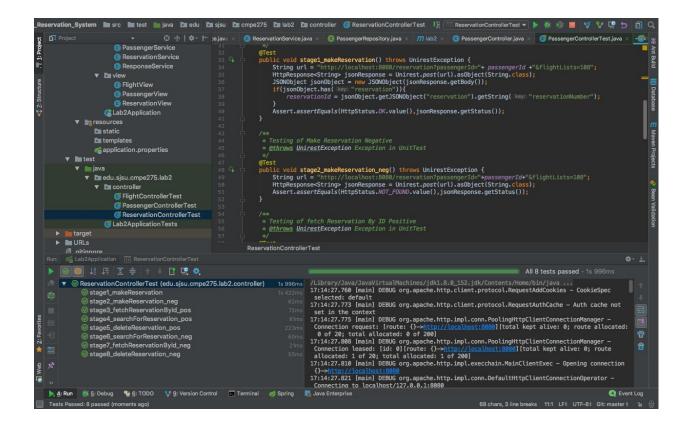
7/
6Test
public void stage2_fetchFlight_pos() throws UnirestException {
    HttpResponse<String> jsonresponse = Unirest.get("http://localhost:8080/flight/131").asObject(String.class);
    Assert.assertEquals(HttpStatus.OK.value(),jsonresponse.getStatus());

                                              FlightControllerTest
                                              PassengerControllerTest
                                              @ ReservationControllerTest
                                                                                                                                         /**
* Tests deleting a flight in database
* <u>@throws</u> <u>UnirestException</u> Exception in UnitTest
                                                                                                                                 FlightControllerTest
              ◎ ■ ↓₂ ♬ ∑ ÷ → ♪ 🗈 🖳 🦚
                                                                                                                                                                         /Library/Java/JavaVirtualMachines/jdkl.8.0_152.jdk/Contents/Home/bin/java ...
17:13:58.540 [main] DEBUG org.apache.http.client.protocol.RequestAddCookles - CookieSpec selected: default
17:13:58.553 [main] DEBUG org.apache.http.client.protocol.RequestAuthCache - Auth cache not set in the context
17:13:58.555 [main] DEBUG org.apache.http.impl.conn.PoolingHttpClientConnectionManager - Connection request: [route: {}-http://localhost:8989][total kept alive: 0; route allocated: 0 of 20]
17:13:58.585 [main] DEBUG org.apache.http.impl.conn.PoolingHttpClientConnectionManager - Connection leased: [di: 0][route: {}-http://localhost:8989][total kept alive: 0; route allocated: 0 of 20]
17:13:58.585 [main] DEBUG org.apache.http.impl.conn.PoolingHttpClientConnectionManager - Connection leased: [di: 0][route: {}-http://localhost:8989][total kept alive: 0; route allocated: 1 of 20; total allocated: 1 of 200]
17:13:58.588 [main] DEBUG org.apache.http.impl.execchain.MainClientExec - Opening connection {}-http://localhost:8989]
            ▼ ⊗ FlightControllerTest (edu.sjsu.cmpe275.lab2.controller) 2s 574ms
                          stage4_fetchFlight_neg
stage5_deleteFlight_neg
                                                                                                                                                                       {}->http://localhosti8080
17:13:58.599 [main] DEBUG org.apache.http.impl.conn.DefaultHttpClientConnectionOperator -
Connection to localhost/127.0.0.1:8080
     📐 4: Run 🌟 5: Debug 💝 6: TODO 😲 9: Version Control 🔽 Terminal 🥏 Spring
                                                                                                                                                                                                                                                                                                                                                                          Q Event Log
```

### 2) Flight



#### 3) Reservation



# 7. Java Docs

