# Capstone Project: Telecom Domain Project Requirements

GITHUB LINK: <a href="https://github.com/B-Geervani/MiniProject">https://github.com/B-Geervani/MiniProject</a>

### **Project Overview:**

Project Name: API Testing for Contact List Application

Domain: Telecom

**Project Description:** This project aims to perform comprehensive testing of the APIs provided by the https://thinking-tester-contact-list.herokuapp.com/application. The testing will cover various endpoints to ensure the functionality and reliability of the APIs.

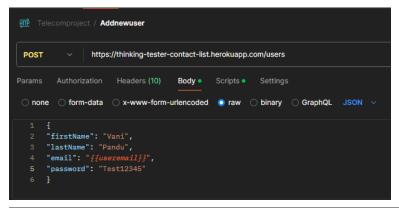
**Testing Flow:** Add User →Get user profile →Update user →Login user →Add Contact →Get contact list →Get contact →Update full contact →Update partial contact →Logout User.

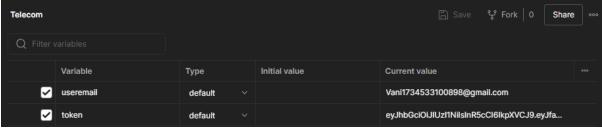
Here Adding test cases and evidence in Postman apply the chai library assertion and adding newman report & Restassured evidence.

Test Case 1: Add New User

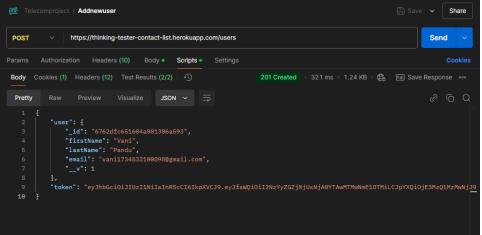
Request Type: POST

Endpoint: <a href="https://thinking-tester-contact-list.herokuapp.com/users">https://thinking-tester-contact-list.herokuapp.com/users</a>





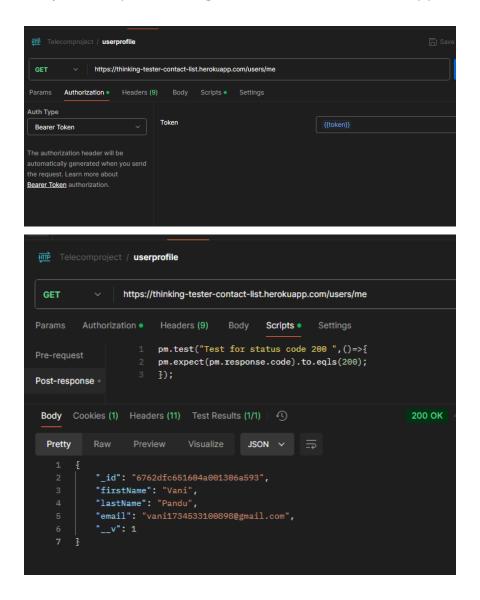
```
Telecomproject / Addnewuser
 POST
             https://thinking-tester-contact-list.herokuapp.com/users
Params Authorization Headers (10) Body • Scripts • Settings
                      pm.test("Test for status code 201",()=>{
Pre-request •
                          pm.expect(pm.response.code).to.eql(201);
Post-response •
                      pm.test("Test for status message Created",()=>{
                          pm.expect(pm.response.status).to.eql("Created");
                      var res=pm.response.json();
                      console.log(res.token);
                      pm.environment.set("token",res.token);
Telecomproject / Addnewuser
 POST
           https://thinking-tester-contact-list.herokuapp.com/users
Params Authorization Headers (10) Body • Scripts • Settings
                        var time =new Date().getTime();
Pre-request •
                        var newemail="Vani"+time+"@gmail.com";
Post-response •
                    4 console.log(newemail);
                    6 pm.environment.set("useremail", newemail);
```



Test Case 2: Get user Profile

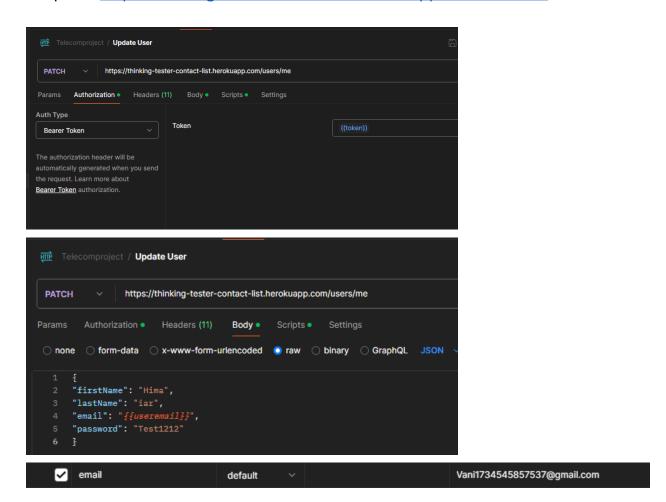
Request Type: GET

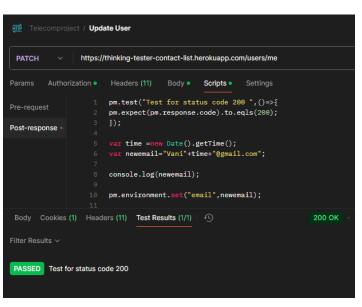
Endpoint: <a href="https://thinking-tester-contact-list.herokuapp.com/users/me">https://thinking-tester-contact-list.herokuapp.com/users/me</a>



# Test Case 3: Update User Request Type: PATCH

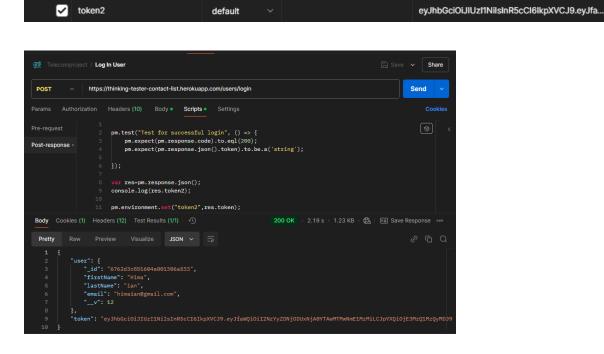
Endpoint: <a href="https://thinking-tester-contact-list.herokuapp.com/users/me">https://thinking-tester-contact-list.herokuapp.com/users/me</a>





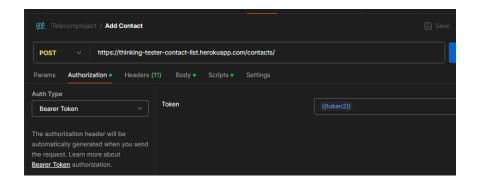
Test Case 4: LogIn User Request Type: POST

Endpoint: <a href="https://thinking-tester-contact-list.herokuapp.com/users/login">https://thinking-tester-contact-list.herokuapp.com/users/login</a>



Test Case 5: Add Contact Request Type: POST

Endpoint: https://thinking-tester-contact-list.herokuapp.com/contacts

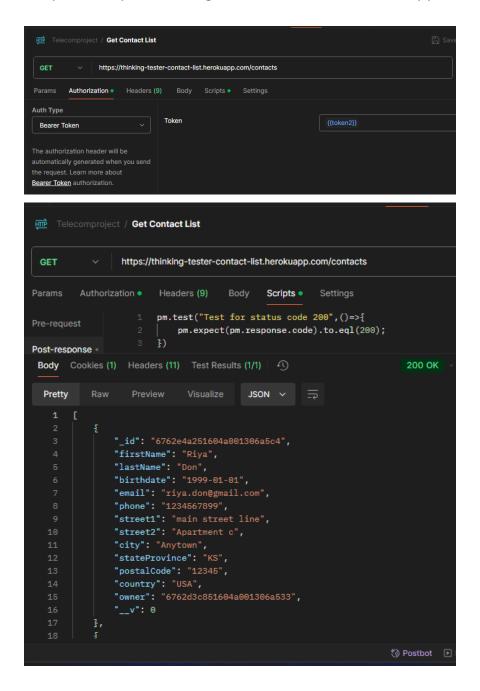


✓ contactId default 6762e4a251604a001306a5c4 Telecomproject / Add Contact POST https://thinking-tester-contact-list.herokuapp.com/contacts/ Params Authorization • Headers (11) Body • Scripts • Settings Body Cookies (1) Headers (11) Test Results (1/1) 201 Created Pretty Raw Preview Visualize JSON ∨ = "\_id": "6762e4a251604a001306a5c4", "firstName": "Riya", "lastName": "Don", "birthdate": "1999-01-01", "email": "riya.don@gmail.com", "phone": "1234567899", "street1": "main street line", "city": "Anytown",
"stateProvince": "KS", "postalCode": "12345", "country": "USA",
"owner": "6762d3c851604a001306a533",

Test Case 6: Get Contact List

Request Type: GET

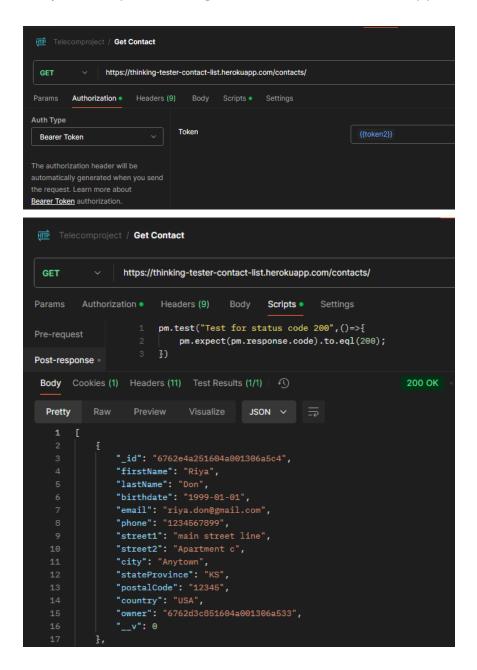
Endpoint: https://thinking-tester-contact-list.herokuapp.com/contacts



#### Test Case 7: Get Contact

Request Type: GET

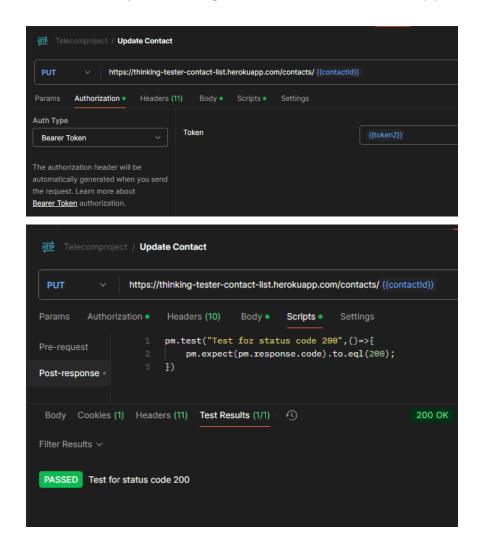
Endpoint: https://thinking-tester-contact-list.herokuapp.com/contacts/



Test Case 8: Update Contact

Request Type: PUT

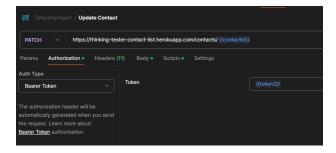
End Point: <a href="https://thinking-tester-contact-list.herokuapp.com/contacts/">https://thinking-tester-contact-list.herokuapp.com/contacts/</a>

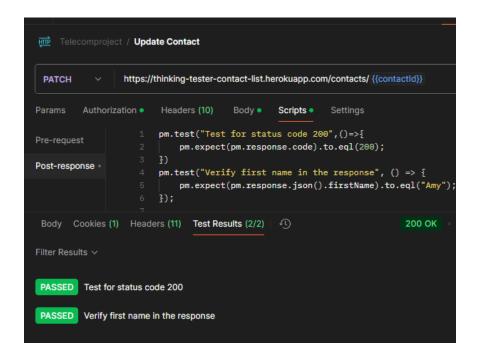


Test Case 9: Update Contact

Request Type: PATCH

Endpoint: https://thinking-tester-contact-list.herokuapp.com/contacts/

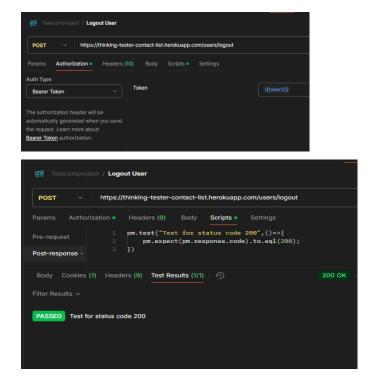




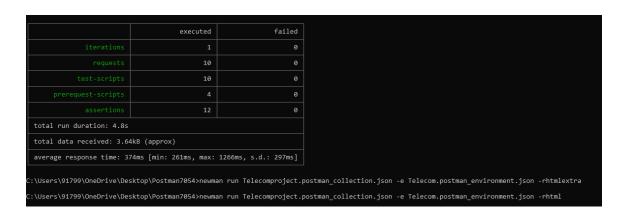
Test Case 10: Logout User

Request Type: POST

Endpoint: https://thinking-tester-contact-list.herokuapp.com/users/logout



## Newman:





Newman Report		
Collection	Telecomproject	
Time		5 GMT+0530 (India Standard Time)
Exported with	Newman v6.2.1	
	Total	Failed
Iterations	1	0
Requests	10	0
Prerequest Scripts	4	0
Test Scripts	10	0
Assertions	12	0
Total run duration		4.7s
Total data received		4.79KB (approx)
Average response time		377ms
Total Failures	0	

## **RestAssured TestCases:**

```
package com.RestApi;
import static io.restassured.RestAssured.given;
import java.util.HashMap;
import org.testng.Assert;
mport org.testng.annotations.Test;
mport io.restassured.response.Response;
public class Contactlist {
     String tokenvalue;
     String dynamicEmail;
     String contactld;
     String Logintoken;
@Test(priority = 1)
public void AddUser() {
HashMap<String,Object>HashMap<String,Object>details = new
HashMap<String,Object>();
      details.put("firstName","James");
      details.put("lastName","kira");
      dynamicEmail = "Jamekira" + System.currentTimeMillis() +
'@gmail.com";
      details.put("email", dynamicEmail);
      details.put("password","test@123");
      Response res=given()
                  .header("Content-Type","application/json")
                  .header("Accept","application/json")
                  .body(details)
 .when().post("https://thinking-tester-contact-list.herokuapp.com/users");
             res.then().log().body();
        tokenvalue=res.jsonPath().getString("token");
int code=res.getStatusCode();
Assert.assertEquals(code,201);
System.out.println("Generated token is: "+tokenvalue);
```

```
System.out.println("AddUser Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
System.out.println( ); //to avoid confusion added this line
@Test(priority = 2,dependsOnMethods = "AddUser")
public void UserProfile() {
      Response res= given()
                  .header("Authorization", "Bearer " + tokenvalue)
                  .header("Content-Type","application/json")
                  .header("Accept", "application/json")
.when().get("https://thinking-tester-contact-list.herokuapp.com/users/me"
      int code=res.getStatusCode();
     Assert.assertEquals(code,200);
     System.out.println("UserProfile Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
        res.then().log().body();
        System.out.println( );
}
@Test(priority = 3)
public void UpdateUser() {
      HashMap<String,Object>Details = new HashMap<String,Object>();
      Details.put("firstName","James");
      Details.put("lastName","kira");
  dynamicEmail="jameskira"+System.currentTimeMillis()+"@gmail.com";
      Details.put("email",dynamicEmail);
      Details.put("password","test@123");
       Response res= given()
                  .header("Authorization", "Bearer " + tokenvalue)
                  .header("Content-Type","application/json")
                  .header("Accept","application/json")
                  .body(Details)
.when().patch("https://thinking-tester-contact-list.herokuapp.com/users/
me");
```

```
int code=res.getStatusCode();
     Assert.assertEquals(code,200);
    System.out.println("UpdateUser Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
           res.then().log().body();
           System.out.println();
      }
@Test(priority = 4)
public void LogInUser() {
      HashMap<String, Object> loginDetails = new HashMap<>();
       loginDetails.put("email", dynamicEmail);
       loginDetails.put("password", "test@123");
       Response res= given()
       .header("Content-Type","application/json")
                  .header("Accept","application/json")
                  .body(loginDetails)
.when().post("https://thinking-tester-contact-list.herokuapp.com/users/lo
<u>gin</u>");
                res.then().log().body();
                Logintoken = res.jsonPath().getString("token");
              int code=res.getStatusCode();
             Assert.assertEquals(code,200);
     System.out.println("Logintoken: " + Logintoken);
     System.out.println("LogInUser Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
    System.out.println();
}
@Test(priority = 5,dependsOnMethods = "LogInUser")
public void AddContact() {
      Response res= given()
                  .header("Authorization", "Bearer " + Logintoken)
                  .header("Content-Type","application/json")
                  .header("Accept","application/json")
                  .body("{\n"
```

```
+ "\"firstName\": \"Limar\",\n"
                             + "\"lastName\": \"Max\",\n"
                             + "\"birthdate\": \"1998-01-01\".\n"
                             + "\"email\": \"limar@gmail.com\",\n"
                             + "\"phone\": \"8001435555\",\n"
                             + "\"street1\": \"1 Main St.\",\n"
                             + "\"street2\": \"Apartment A\",\n"
                             + "\"city\": \"Anytown\",\n"
                             + "\"stateProvince\": \"KS\",\n"
                             + "\"postalCode\": \"12345\",\n"
                             + "\"country\": \"USA\"\n"
                             + "}")
.when().post("https://thinking-tester-contact-list.herokuapp.com/contacts
");
       int code=res.getStatusCode();
      contactId = res.jsonPath().getString("_id");
      Assert.assertEquals(code,201);
  System.out.println("AddContact Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
       res.then().log().body();
      System.out.println( );
@Test(priority = 6)
public void GetContactList() {
       Response res= given()
                  .header("Authorization", "Bearer " +Logintoken)
                  .header("Content-Type","application/json")
                  .header("Accept","application/json")
.when().get("https://thinking-tester-contact-list.herokuapp.com/contacts")
      int code=res.getStatusCode();
      Assert.assertEquals(code,200);
System.out.println("GetContactList Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
        res.then().log().body();
        System.out.println( );
```

```
@Test(priority = 7)
public void GetContact() {
       Response res= given()
                  .header("Authorization", "Bearer " + Logintoken)
                  .header("Content-Type", "application/json")
                  .header("Accept", "application/json")
.when().get("https://thinking-tester-contact-list.herokuapp.com/contacts/
");
      int code=res.getStatusCode();
      Assert.assertEquals(code,200);
   System.out.println("GetContact Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
  res.then().log().body();
  System.out.println(
@Test(priority = 8)
public void UpdateContact() {
       Response res= given()
                  .header("Authorization", "Bearer " + Logintoken)
                  .header("Content-Type","application/json")
                  .header("Accept","application/json")
                   .body("{\n"
                              + "\"firstName\": \"levi\",\n"
                              + "\"lastName\": \"Leo\",\n"
                             + "\"birthdate\": \"1999-02-02\",\n"
                             + "\"email\": \"levi@gmail.com\",\n"
                              + "\"phone\": \"8005554242\".\n"
                              + "\"street1\": \"13 School St.\".\n"
                              + "\"street2\": \"Apt. 5\".\n"
                             + "\"city\": \"Washington\",\n"
                              + "\"stateProvince\": \"QC\",\n"
                             + "\"postalCode\": \"A1A1A1\",\n"
                             + "\"country\": \"Canada\"\n"
                              + "}")
```

```
.when().put("https://thinking-tester-contact-list.herokuapp.com/contacts/
"+contactId);
      int code=res.getStatusCode();
      Assert.assertEquals(code,200);
      System.out.println("UpdateContact Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
      res.then().log().body();
      System.out.println( );
@Test(priority = 9)
public void Updatecontactpartial() {
      Response res= given()
                  .header("Authorization", "Bearer " + Logintoken)
                  .header("Content-Type", "application/json")
                  .header("Accept", "application/json")
                  .body("{\n"
                             + "\"firstName\": \"levi\"\n"
                             + "}")
.when().patch("https://thinking-tester-contact-list.herokuapp.com/contact
s/"+contactId);
      int code=res.getStatusCode();
     Assert.assertEquals(code,200);
    System.out.println("Updatecontactpar Status code
is:"+res.getStatusLine().substring(res.getStatusLine().indexOf(" ")+1));
    String firstName = res.jsonPath().getString("firstName");
    Assert.assertEquals(firstName, "levi");
    System.out.println("firstName: " + firstName);
         res.then().log().body();
         System.out.println( );
       }
```

## **RestAssured Result:**

```
🖳 Console 🗶 🦹 Problems 🏿 🎵 Debug Shell 🌃 Results of running class ContactList
                                                                                              <terminated> ContactList [TestNG] C:\Program Files\Java\jdk-22\bin\javaw.exe (Dec 18, 2024, 11:24:48 PM – 11:25:53 PM) [pid: 25168]
UpdateUser Status code is:200 OK
     "_id": "67630c4c2e7a950013df3e89",
    "firstName": "James",
"lastName": "kira",
     "email": "jameskira1734544502723@gmail.com",
    "firstName": "James",
"lastName": "kira",
         "email": "jameskira1734544502723@gmail.com",
    },
"token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2NzYzMGM0YzJlN2E5NTAwMTNkZjNlODkiLCJpYXQiOjE3MzQ1NDQ0N
Logintoken: eyJhbGci0iJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQi0iI2NzYzMGM0YzJlN2E5NTAwMTNkZjNl0DkiLCJpYXQi0jE3MzQ1NDQ0NzB
LogInUser Status code is:200 OK
📮 Console 🗶 🥌 Problems 🎚 Debug Shell 🜃 Results of running class ContactList
<terminated> ContactList [TestNG] C:\Program Files\Java\jdk-22\bin\javaw.exe (Dec 18, 2024, 11:24:48 PM – 11:25:53 PM) [pid: 25168]
AddContact Status code is:201 Created
     "_id": "67630c652e7a950013df3e8b",
     "firstName": "Limar",
"lastName": "Max",
     "birthdate": "1998-01-01",
"email": "limar@gmail.com",
"phone": "8001435555",
     "street1": "1 Main St.",
"street2": "Apartment A",
     "city": "Anytown",
"stateProvince": "KS"
      "postalCode": "12345",
     "country": "USA",
"owner": "67630c4c2e7a950013df3e89",
     "__v": 0
 📃 Console 🗶 🦹 Problems 🏿 Debug Shell 🧗 Results of running class ContactList
        ted> ContactList [TestNG] C:\Program Files\Java\jdk-22\bin\javaw.exe (Dec 18, 2024, 11:24:48 PM – 11:25:53 PM) [pid: 25168]
GetContactList Status code is:200 OK
           "_id": "67630c652e7a950013df3e8b",
           "firstName": "Limar",
           "lastName": "Max",
           "birthdate": "1998-01-01",
           "email": "limar@gmail.com<sup>*</sup>,
           email: limar@gmail.com
"phone": "8001435555",
"street1": "1 Main St.",
"street2": "Apartment A",
"city": "Anytown",
"stateProvince": "KS",
            "postalCode": "12345",
           "country": "USA",
"owner": "67630c4c2e7a950013df3e89",
           "__v": 0
```

```
💻 Console 🗶 🤱 Problems 🕠 Debug Shell 🌃 Results of running class ContactList
<terminated> ContactList [TestNG] C:\Program Files\Java\jdk-22\bin\javaw.exe (Dec 18, 2024, 11:24:48 PM – 11:25:53 PM) [pid: 25168]
GetContact Status code is:200 OK
             "_id": "67630c652e7a950013df3e8b",
"firstName": "Limar",
"lastName": "Max",
"birthdate": "1998-01-01",
             "birthdate": "1998-01-01",
"email": "limar@gmail.com",
"phone": "8001435555",
"street1": "1 Main St.",
"street2": "Apartment A",
"city": "Anytown",
"stateProvince": "KS",
              "postalCode": "12345",
             "country": "USA",
"owner": "67630c4c2e7a950013df3e89",
"__v": 0
 📃 Console 🗶 🔝 Problems 🔟 Debug Shell 🌃 Results of running class ContactList
 <terminated> ContactList [TestNG] C:\Program Files\Java\jdk-22\bin\javaw.exe (Dec 18, 2024, 11:24:48 PM – 11:25:53 PM) [pid: 25168]
Email from response: levi@gmail.com
UpdateContact Status code is:200 OK
       "_id": "67630c652e7a950013df3e8b",
       "firstName": "levi",
       "lastName": "Leo",
"birthdate": "1999-02-02",
       "email": "levi@gmail.com",
"phone": "8005554242",
       "street1": "13 School St.",
"street2": "Apt. 5",
"city": "Washington",
       "stateProvince": "QC"
       "stateProvince": "QC",
"postalCode": "A1A1A1",
       "country": "Canada",
"owner": "67630c4c2e7a950013df3e89",
"__v": 0
```

```
📃 Console 🗙 🥈 Problems 🏿 🎵 Debug Shell 🌃 Results of running class ContactList
terminated> ContactList [TestNG] C:\Program Files\Java\jdk-22\bin\javaw.exe (Dec 18, 2024, 11:24:48 PM – 11:25:53 PM) [pid: 25168]
Updatecontactpar Status code is:200 OK
firstName: levi
    "_id": "67630c652e7a950013df3e8b",
    "firstName": "levi",
    "lastName": "Leo",
    "birthdate": "1999-02-02",
    "email": "levi@gmail.com", "phone": "8005554242",
    "street1": "13 School St.",
"street2": "Apt. 5",
"city": "Washington",
"stateProvince": "QC",
    "postalCode": "A1A1A1",
    "country": "Canada",
"owner": "67630c4c2e7a950013df3e89",
LogoutUser Status code is:200 OK
📃 Console 🗶 💦 Problems 🏿 🎵 Debug Shell 🧣 Results of running class ContactList
<terminated> ContactList [TestNG] C:\Program Files\Java\jdk-22\bin\javaw.exe (Dec 18, 2024, 11:24:48 PM – 11:25:53 PM) [pid: 25168]
LogoutUser Status code is:200 OK
PASSED: com.RestAPI.ContactList.LogInUser
PASSED: com.RestAPI.ContactList.UserProfile
PASSED: com.RestAPI.ContactList.Updatecontactpartial
PASSED: com.RestAPI.ContactList.LogoutUser
PASSED: com.RestAPI.ContactList.GetContact
PASSED: com.RestAPI.ContactList.GetContactList
PASSED: com.RestAPI.ContactList.UpdateContact
PASSED: com.RestAPI.ContactList.AddUser
PASSED: com.RestAPI.ContactList.AddContact
PASSED: com.RestAPI.ContactList.UpdateUser
    Default test
    Tests run: 10, Failures: 0, Skips: 0
Default suite
Total tests run: 10, Passes: 10, Failures: 0, Skips: 0
```

## **ExtentReport:**

