Test plan

*Thomas Or*

June 23, 2020

Table of Contents

[1 Introduction 2](#_Toc43994827)

[1.1 Objectives 2](#_Toc43994828)

[1.2 Team members 2](#_Toc43994829)

[2 Features/units to be tested 2](#_Toc43994830)

[3 Approach 2](#_Toc43994831)

[4 Test cases 2](#_Toc43994832)

[4.1 Test Case ID: 001 2](#_Toc43994833)

[4.2 Test Case ID: 002 4](#_Toc43994834)

[4.3 Test Case ID: 003 5](#_Toc43994835)

[4.4 Test Case ID: 004 6](#_Toc43994836)

[4.5 Test Case ID: 005 8](#_Toc43994837)

[5 Schedule 10](#_Toc43994838)

[5.1 Test Schedule 10](#_Toc43994839)

[5.2 Deliverables 10](#_Toc43994840)

# Introduction

This test plan outlines the testing requirements for the Android Phonebook Application. In particular, the Server-side Web API functionality.

## Objectives

Objective is to test the API functionality of app.

## Team members

|  |  |
| --- | --- |
| **Name** | **Role** |
| *Qiao Li*  *Thomas Or* | Test Manager  Developer, Tester |

# Features/units to be tested

Features to be tested:

* API can get All Contacts from the SQL server side DB
* API can Add(POST) a Contact to the SQL server side DB
* API can retrieve a Contact by ID from the SQL server side DB
* API can update a Contact by ID to the SQL server side DB
* API can delete a Contact from the SQL server side DB

# Approach

The Testing Approach will use Black-Box testing. A user will run the application and test the features by following the Test cases outlined below.

# Test cases

## Test Case ID: 001

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case ID**: 001  **Executed by**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Execution Date**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Scenario**: The Web API is functional and running and API test Tool, “Postman” is available for the Tester  **Test Case**: Get All Contacts from the SQL server side DB | | | | |
| Prerequisite | | The Web API is running  Tester has Postman Web API Test Tool | | |
| Test Data | |  | | |
| Step | Action | | Expected Result | Success? |
| 1 | Make sure the PhonebookDB\_WEB\_API solution is running | | The Web API is successfully running with no errors. | **or X** |
| 2 | Make sure the API json file is setup in the Postman Test Tool | | Postman Test tool is setup with API functions visible. |  |
| 3 | In Postman, select ‘GET /api/Contacts’ to retrieve all contacts  (make sure to have correct base URL).  Click SEND | | The get All contacts API should successfully retrieve all Contacts from the SQL DB. |  |

## Test Case ID: 002

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case ID**: 002  **Executed by**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Execution Date**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Scenario**: The Web API is functional and running and API test Tool, “Postman” is available for the Tester  **Test Case**: Add(POST) to the SQL server side DB | | | | |
| Prerequisite | | The Web API is running  Tester has Postman Web API Test Tool | | |
| Test Data | | *Add Contact:*  *ID=20*  *Name=”POSTMAN Test”*  *Phone=”test”*  *Email=”test”*  *Date=”test”* | | |
| Step | Action | | Expected Result | Success? |
| 1 | Make sure the PhonebookDB\_WEB\_API solution is running | | The Web API is successfully running with no errors. | **or X** |
| 2 | Make sure the API json file is setup in the Postman Test Tool | | Postman Test tool is setup with API functions visible. |  |
| 3 | In Postman, select  ‘POST /api/Contacts’  (make sure to have correct base URL).  Click “Body” tab and enter Contact Data.  (Make contact ID does not already exist)  Click SEND | | The API call should return Success and Add the contact to the remote DB. This can be verified is SSMS(Microsoft SQL Server Management Studio). |  |

## Test Case ID: 003

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case ID**: 003  **Executed by**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Execution Date**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Scenario**: The Web API is functional and running and API test Tool, “Postman” is available for the Tester  **Test Case**: Retrieve a Contact by ID from the SQL server side DB | | | | |
| Prerequisite | | The Web API is running  Tester has Postman Web API Test Tool | | |
| Test Data | | *ID = 4* | | |
| Step | Action | | Expected Result | Success? |
| 1 | Make sure the PhonebookDB\_WEB\_API solution is running | | The Web API is successfully running with no errors. | **or X** |
| 2 | Import the API json file into Postman Test Tool | | Postman Test tool is setup with API functions visible. |  |
| 3 | In Postman, select  ‘GET /api/Contacts/4’  (make sure to have correct base URL).  Click SEND | | The API call should retrieve Contact with ID=4 |  |

## Test Case ID: 004

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case ID**: 004  **Executed by**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Execution Date**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Scenario**: The Web API is functional and running and API test Tool, “Postman” is available for the Tester  **Test Case**: Update a Contact by ID to the SQL server side DB | | | | |
| Prerequisite | | The Web API is running  Tester has Postman Web API Test Tool | | |
| Test Data | |  | | |
| Step | Action | | Expected Result | Success? |
| 1 | Make sure the PhonebookDB\_WEB\_API solution is running | | The Web API is successfully running with no errors. | **or X** |
| 2 | Import the API json file into Postman Test Tool | | Postman Test tool is setup with API functions visible. |  |
| 3. | In Postman, select  ‘PUT /api/Contacts/20’  (make sure to have correct base URL).  In the ‘Body’ tab, update the Contact with data specified in Test Data above  Click SEND | | Contact ‘20’ should successfully be updated. |  |
| 4. | Verify the updated result with Get All contacts API Call | | Contact 20 should be updated with the data entered in Step 4. |  |

## Test Case ID: 005

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Case ID**: 005  **Executed by**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Execution Date**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Scenario**: The Web API is functional and running and API test Tool, “Postman” is available for the Tester  **Test Case**: Delete a Contact from the SQL server side DB | | | | |
| Prerequisite | | The Web API is running  Tester has Postman Web API Test Tool | | |
| Test Data | | *Contact ID=20* | | |
| Step | Action | | Expected Result | Success? |
| 1 | Make sure the PhonebookDB\_WEB\_API solution is running | | The Web API is successfully running with no errors. | **or X** |
| 2 | Import the API json file into Postman Test Tool | | Postman Test tool is setup with API functions visible. |  |
| 3. | In Postman, select  ‘DEL /api/Contacts/20’  (make sure to have correct base URL).  Click SEND | | Contact 20 should be successfully deleted. Verify the result with the Get All Contacts API Call. |  |

# Schedule

## Test Schedule

|  |  |  |
| --- | --- | --- |
| **Task** | **Start** | **Finish** |
| Perform Testing with Test Plan | 23/6/2020 | 24/6/2020 |

## Deliverables

|  |  |
| --- | --- |
| **Task** | **Date** |
| Test Plan | 23/6/2020 |
| Test Results |  |
| Test Report |  |