Sir Syed University of Engineering & Technology (SSUET) Software Engineering Department

SWE305-Software Quality Engineering

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Sections: F

SQE Project: Test Plan (Digital Bank)



Submitted By:

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Test Plan Document: Digital Bank

1. Introduction

1.1 Purpose

This test plan describes the testing approach and overall framework that will drive the testing of the **Digital Bank** – A demo website. The document introduces:

- Test Strategy: rules the test will be based on, including the givens of the project (e.g.: start / end dates, objectives, assumptions); description of the process to set up a valid test (e.g.: entry / exit criteria, creation of test cases, specific tasks to perform, scheduling, data strategy).
- Execution Strategy: describes how the test will be performed and process to identify and report defects, and to fix and implement fixes.
- Test Management: process to handle the logistics of the test and all the events that come up during execution.

1.2 Project Overview

Digital Bank is a website for public that provides the facility of digital banking. Users of the website have the ability to view relevant information such as personal information and updating personal information with an internet enabled PC, cell phone or laptop.

It have the functionalities such home page, digital credit, transfers amount, checking or savings account, amount withdraw, deposit and also visa transfer. We can also search the ATM locations through zip code.

2.0 Objectives and Tasks

2.1 Objectives

The objective of the test is to verify that the functionality of **Digital Bank** – A demo website works according to the specifications.

The test will execute and verify the test scripts, identify high and medium severity defects per the requirement, prioritize lower severity defects for fixing.

The final product of the test is twofold:

- A production-ready software.
- A set of stable test scripts that can be used for Functional test execution.

2.2 Tasks

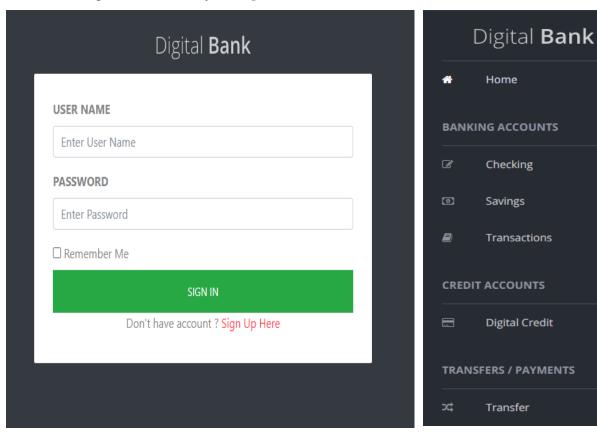
- a. Test plan document which includes:
 - Test strategy
 - Test cases
 - Define roles.

Using project management software JIRA

- b. Applying the whole testing cycle i.e. perform manual testing where necessary and develop the automation script where we can. POM for automation testing
- c. Use Jmeter to perform performance testing & load testing.

3.0 Scope

We are testing the functionality of **Digital Bank** – A demo website



The test will execute and verify the following functionalities:

- View relevant information such as personal information and updating personal information
- Sign In
- Sign Up
- Logout
- Notification
- Search ATM
- Mails
- Dashboard
- Home page
- Digital credit
- Transfers amount

- Checking accounts
- Savings account
- Amount withdraw
- Amount deposit
- Visa transfer.
- Search the ATM locations through zip code.

With an internet enabled PC, cell phone or laptop.

The roles and responsibilities are assigned to all the members of the group for this we have used JIRA as well as a test case is also attached in this document.

4.0 Testing Strategy

4.1 Unit Testing

Definition:

Here we will be writing piece of code that executes a specific functionality in the website to be tested and asserts a certain behavior or state.

Participants:

All group members

Methodology:

POM for automation testing

The sign up script will be used with every page in automation testing.

4.3 Performance Testing

Definition:

Here we will be doing performance testing to determining the speed, responsiveness and stability of Digital Bank website under a workload.

Participants:

All group members

Methodology:

Describe how Performance testing will be conducted with the help of Jmeter.

5.0 Hardware Requirements

Computers/Laptops

6.0 Environment Requirements

The software requirement are pycharm, selenium for POM

7.0 Test Schedule

| Test Schedule ID: | 001 |
|-------------------|-----------------------|
| Product Name: | http://dbankdemo.com/ |
| Version: | 1.0.1. local |
| Created on: | 26-Oct-2020 |
| Review on: | 30-Oct-2020 |
| Review by: | Ma'am Nida Khalil |
| Document version: | 1.0.0.0 |
| Status: | In progress |

• View relevant information such as personal information and updating personal information

- 1. The MY PROFILE is clicked through the drop down menu on top right corner
- 2. Update profile if required

• Sign In

- 1. Tap on the username field, and enter username
- 2. Tap on the password field, and enter password
- 3. Click on the login button.
- 4. Checkmark the remember me box if not shared device

• Sign Up

- 1. Sign up button is pressed
- 2. title, first name, last name, date of birth, gender, social security number, email, password, confirm password all these fields are entered.
- 3. Passwords can be autosuggested or we can make our own
- 4. Locality, address, region, postal code, locality, country, home phone, work phone and mobile phone all these fields are to be filled
- 5. Agree to the terms check box is marked checked
- 6. The register button is clicked

Logout

1. The logout option is clicked through the drop down menu on top right corner

• Notification

- 1. Notification button is clicked
- 2. Notifications are viewed

• Search ATM

1. Search button is clicked

2. Enter zip code

• Mails

Mail option is clicked to view mails

Dashboard

1. Dashboard button is clicked to maximize and minimize it

Home page

- 1. Click on home button
- 2. Redirected to home page

• Digital credit

- 1. Click drop down menu of digital credit field from CREDIT ACCOUNTS section on side bar
- 2. Click on new application field
- 3. Credit Card Summary, Personal Information, Contact Information fields are displayed
- 4. Financial Information section is filled
- 5. Apply button is clicked
- 6. Credit Application Status page is opened

• Transfers amount

- 1. Click drop down menu of transfer field from TRANSFERS / PAYMENTS section on side bar
- 2. Click on between account field and we are directed to Transfer between Accounts page
- 3. From account, to account and transfer amount filed is filled
- 4. Submit or reset button is clicked

• Checking accounts

- 1. Click drop down menu of checking field from BANKING ACCOUNTS section on side bar
- 2. Click on between account field and we are directed to Transfer between Accounts page
- Savings account
 - 1. Click drop down menu of savings field from BANKING ACCOUNTS section on side bar
 - 2. Click on between account field and we are directed to Transfer between Accounts page

• Amount withdraw

- 1. From Transactions drop down menu, click withdraw
- 2. Withdraw from Account page is opened
- 3. Select Account for withdraw and enter amount
- 4. Click submit or reset

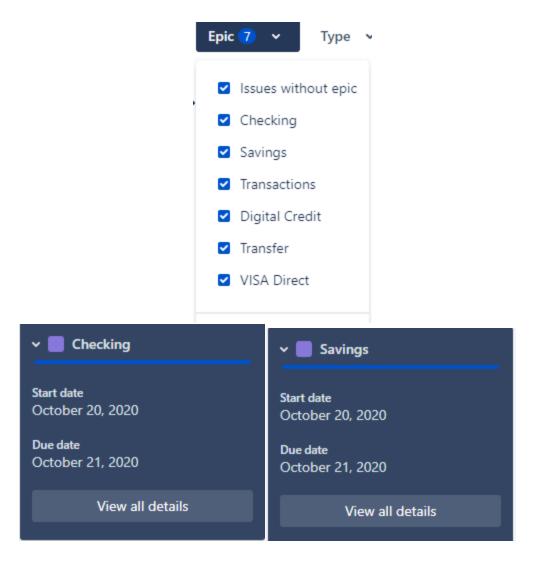
• Amount deposit

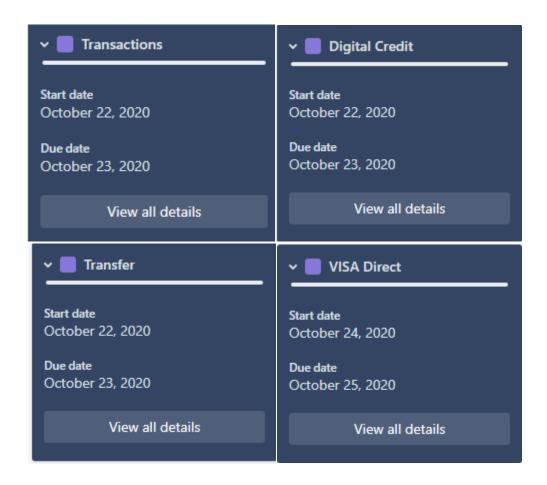
1. From Transactions drop down menu, click deposit

- 2. Deposit into Account page is opened
- 3. Select Account for Deposit and enter amount
- 4. Click submit or reset

• Visa transfer.

- 1. Click drop down menu of visa direct field from 3RD PARTY TRANSFERS section on side bar
- 2. Click on visa transfer field and we are directed to Direct Payment to visa page
- 3. VISA Account Number field is filled through drop down options
- 4. Transfer Amount fields is filled
- 5. Click submit button





7. Features to be tested

The features we have to test are listed below:

- Sign Up
- Sign In
- Home
- Checking
- View Checking
- New Checking
- Savings
- New Savings
- View Savings
- Transactions
- Deposit
- Withdraw
- Digital Credit
- Transfer/Payments
- "Visa Direct"
- Notification

- Mails
- Help
- My ProfileChange Password
- Logout

8. Roles and responsibilities

| Names | Roles and Responsibilities | | |
|-------------------|---|---------------------|--|
| Arjumand Syed | ➤ Backlog | 0 0 0 Create sprint | |
| J | ■ DIG-13 Home | AS | |
| | ■ DIG-17 New Savings SAVINGS | AS | |
| | □ DIG-27 Mail | AS | |
| | ■ DIG-28 Help | AS | |
| | □ DIG-31 Logout TRANSFER | AS | |
| Syeda Rabia Jamil | ∨ Backlog | 0 0 Create sprint | |
| | ■ DIG-5 Sign Up | 5 | |
| | ■ DIG-12 Sign In | 6 | |
| | ■ DIG-25 VISA Transfer VISA DIRECT | 5 | |
| | ■ DIG-26 Notification | 5 | |
| | DIG-27 Mail | 5 | |
| | ■ DIG-28 Help | 3 | |
| Ali Khan | ∨ Backlog | 0 0 Create sprint | |
| | ■ DIG-10 New Checking CHECKING | AK | |
| | ■ DIG-11 View Checking CHECKING | AK | |
| | ■ DIG-21 New Application DIGITAL CREDIT | AK | |
| | ■ DIG-23 Between Accounts TRANSFER | AK | |
| | ■ DIG-30 Change Password | ⊗ | |
| Shayan ul Haq | ▼ Backlog | 0 0 Create sprint | |
| | ■ DIG-18 Deposit TRANSACTIONS | SH | |
| | ■ DIG-19 Withdraw TRANSACTIONS | SH | |
| | □ DIG-29 My profile | SH | |

9. Schedules

Major Deliverables

- Test Plan
- Test Cases
- Test Incident Reports
- Test Summary Reports

10.Significantly Impacted Departments (SIDs)

- Development department
- Testing department

11.Risks /assumptions

| Risk | Prob. | Impact | Contingency Plan |
|--|--------|------------|--|
| SCHEDULE Testing schedule is tight. If the start of the testing is delayed due to design tasks, the test cannot be extended beyond the UAT scheduled start date. | High | High | The testing team can control the preparation tasks (in advance) and the early communication with involved parties. Some buffer has been added to the schedule for contingencies, although not as much as best practices advise. |
| RESOURCES Not enough resources, resources on boarding too late (process takes around 15 days. | Medium | High | Holidays and vacation have been estimated and built into the schedule; deviations from the estimation could derive in delays in the testing. |
| DEFECTS Defects are found at a late stage of the cycle or at a late cycle; defects discovered late are most likely be due to unclear specifications and are time consuming to resolve. | Medium | High | Defect management plan is in place to ensure prompt communication and fixing of issues. |
| SCOPE Scope completely defined | Medium | Mediu m | Scope is well defined, but the changes are in the functionality are not yet finalized or keep on changing. |
| Natural disasters | Low | Mediu m | Teams and responsibilities have been spread to two different geographic areas. In a catastrophic event in one of the areas, there will |

| Risk | Prob. | Impact | Contingency Plan |
|--|--------|--------|--|
| | | | resources in the other areas needed to continue (although at a slower pace) the testing activities. |
| Non-availability of Independent Test environment and accessibility | Medium | High | Due to non-availability of the environment, the schedule gets impacted and will lead to delayed start of Test execution. |
| Delayed Testing Due To new Issues | Medium | High | During testing, there is a good chance that some "new" defects may be identified and may become an issue that will take time to resolve. There are defects that can be raised during testing because of unclear document specification. These defects can yield to an issue that will need time to be resolved. If these issues become showstoppers, it will greatly impact on the overall project schedule. If new defects are discovered, the defect management and issue management procedures are in place to immediately provide a resolution. |

12.Tools

Jira For trackingSelenium through pycharm For unit testing

➤ Jmeter For performance testing and load testing

13.Approvals

| Signature: | |
|------------|-------------------|
| Name: | Ma'am Nida Khalil |
| Role: | Course Teacher |
| Date: | 30-Oct-2020 |