

# **Project Proposal**

Topic: Bank Management System

Course: CSE427

Course Title: Software Testing and Quality Assurance

Section: 01

Submitted By-

Group:19

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## 1. Summary

By using this project, admin will be able to create new bank account, add money or deposit money, check balance of the accounts, check number of account holder, check percentage of interest and update it, search account for info, check for loan availability, give loan, withdrawing balance if account-holder wants and successful transaction of money. It will make a bank easier to perform these operations to save info rather than saving it manually.

### 2. Introduction

It is always difficult to keep record of account-holders information manually as there might be huge amount of mistake by a person. So in order to keep track of such information, we can use a system where all the information related to accounts of the account-holders of a bank will be available. These information will include the number of account holders, their deposited money, transaction amount, amount of interests applied, withdrawal money amount etc. Thus the user will be able to keep record of such important things easily by using this application. So the time will be saved, it will be easier to find necessary info regarding accounts and keep these info safe.

#### 3. Procedures

User will help the person to open a bank account by asking him/her for his details like, name, phone no etc. Then user will input the name and number .Then it will ask to input the total account holder. After that it will ask to input the number of account holders name, phone no. and balance of their account. Also it will ask to add interest percentage. Then the user will be able to search account number in order to withdraw or to deposit money in his/her account. Also it will provide the information of number of transactions done in a particular account.

# 4. Unit Testing:

We will use Mockito, Hamcrest and JUnit framework in order to test whole project. Mockito is a mocking framework that tastes really good. It lets you write beautiful tests with a clean & simple API. Hamcrest is a framework for writing matcher objects allowing 'match' rules to be defined declaratively. On other hand, JUnit is a simple framework to write repeatable tests. There are a number of situations where matchers are invaluble, such as UI validation, or data filtering, but it is in the area of writing flexible tests that matchers are most commonly used. This tutorial shows you how to use Hamcrest for unit testing.

### **5. Software requirements:**

• Language: JAVA

• IDE: Netbeans IDE 8.2

• Framework: Mockito (2.0.2), JUnit 4.12 & Hamcrest 1.3

**GitHub Link:** https://github.com/nsuspring2019cse427/Group19