

ATM Project Test Report

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1)Introduction

1.1 Purpose

Through writing this test report, it is expected to verify and validate that each unit in the software works as intended/designed by the developer. This test report is a document that records data obtained from the test, describes the environmental or operating conditions, and shows the comparison of test results with test objectives.

1.2 Background

This document is the software test report of banking software development project designed by Alisher Marviev. It contains the results of tests, which were executed during the testing.

1.3 Definition

PIN: Personal Identification Number.

Accounts list: Records all registered customer's accounts, not including the clerk's account.

1.4 Reference

From internet

And E-book

2)Test Overview

2.1 Test Object

The test object for the unit testing is a simple banking application. Made and designed using NetBeans IDE 8.2 software in Java language and it uses Java DB as the databases.

2.2 Test Methods

The method used in this test is called the white box testing (also known as Clear Box Testing, Open Box Testing, Glass Box Testing, Transparent Box Testing, Code-Based Testing or Structural Testing). This method is named so because in the eyes of the tester, the software program is like a white/transparent box, where one can see clearly what's inside.

White box testing is a software testing method in which the internal structure/design/implementation of the item being tested is known to the tester [2]. The tester, usually a developer as well, chooses inputs to traverse the paths of the code and determines the appropriate outputs. Knowledge of programming and implementation is essential. White box testing is testing beyond the user interface and into the nitty-gritty of a system.

One of the advantage of using white box testing is the test is more comprehensive and can cover most paths. But because the testing can be very complex, it requires highly skilled resources and sufficient programming and implementation knowledge.

Definition by ISTQB (International Software Testing Qualifications Board):

- White-box testing: Testing based on an analysis of the internal structure of the component or system.
- White-box test design technique: Procedure to derive and/or select test cases based on an analysis of the internal structure of a component or system.

2.3 Test Constraint

The overall test constraints for this test are listed below:

1. The test report is based on the tested software version.
2. All tests are based on the same test environment as the development environment (including the operating system, database, and etc.);

2.4 Testers

The tester is also the author of this document and the developer of this project.

3)Test Environment

3.1 Test Hardware Environment

Test Environment	Device	Processor	System Type	Memory	External Storage
Host development environment	Laptop computer	Intel Core i3	64-bit Operating System, x64-based processor	4GB	None

Table 1 Test hardware environment

3.2 Test Software Environment

Software	Product Name
Operating System	Windows
Programming Language	Java
Software Development Environment	Java version "1.8.0_251" Java(TM) SE Runtime Environment (build 1.8.0_241-b07)
Database	Java DB

Test software environment

Login with password test

Personal Account System

Account ID

Password

☐ Customer ☒ Clerk

Personal Account System


Account ID

Password

☐ **Customer**

Login **Reset**

Message

 Wrong Information

OK

Clerk Menu test

Personal Account System

Re-login

Create Account **Deposit**

Statistical Analysis **Withdraw**

Account Query **Transfer**

Customer menu test



Create Account test

Personal Account System

Account ID:

Password:

Name:

Account Type:

Interest rate(%):

Statistics Update Test

Personal Account System

Account Number

All Balance

Avg Balance

Saving Account

Checking Account

Credit Account

All Deposit

All Credit

Avg Deposit

Avg Credit

Query Data-table test

Personal Account System

Name

min Id max Id

After Before

Query

Return

AccountID	Password	AccountType	Name	Balance
100000	111111	Clerk Account	Rubayet	500
100001	111111	Saving Account	Jack	300
100002	111111	Credit Account	Alice	300
100003	111111	Checking Account	Bob	300
100004	111111	Saving Account	Jerry	300

Deposit test

Balance

Money

Deposit

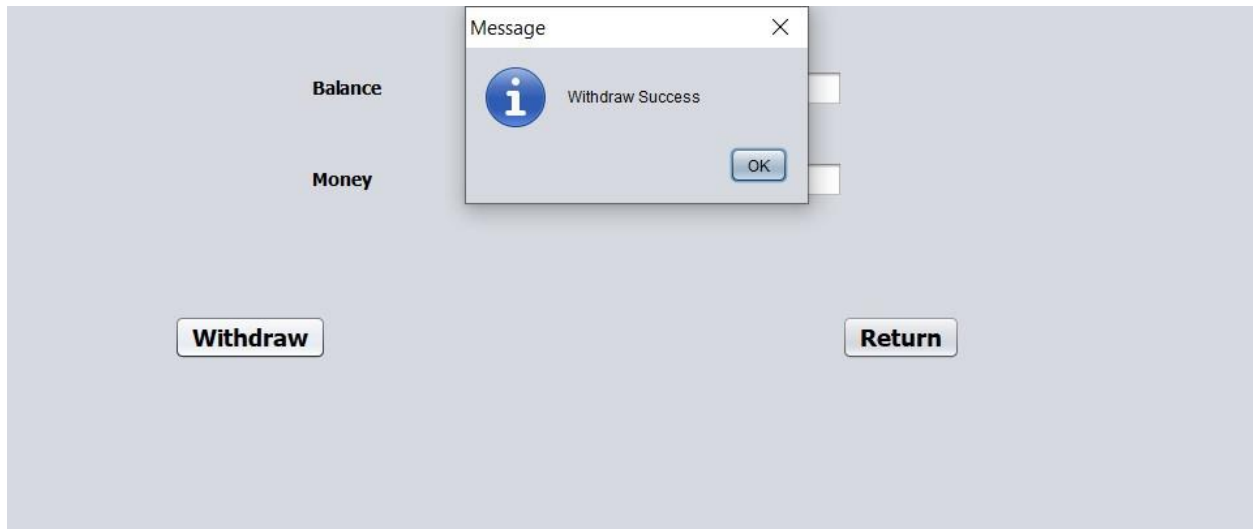
Return

Message

i Deposit Success

OK

Withdraw test




Transfer test

Account Id	<input type="text" value="100001"/>
Name	<input type="text" value="Jack"/>
Account Type	<input type="text" value="Saving Account"/>
Balance	<input type="text" value="30"/>
Money	<input type="text" value="10"/>
Target Account Id	<input type="text" value="100003"/>

Transfer

Return

Message

 Transfer Success

OK

END