Test Plan

Project Name: Commerce Bank Budgeting Application

Group: Team #6

Version	Date	Author	Change Description
1	04/7/17	Jeremy Troshynski	Document Creation
1	04/10/17	Jeremy Troshynski	Added to most sections
1	4/12/17	Emily Thomas	Made edits in some sections

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IDENTIFIER

Team 6 Software Test Plan for the Commerce Bank Budgeting Application

INTRODUCTION

This exercise essentially discovers faults and failures in the software. Faults lead to failures and testing is necessary to eliminate these errors in the software development process. The following document outlines the testing procedures for the Team 6 Commerce Bank Budgeting Application software project.

Items and Features Tested

The features tested include the pages of the Commerce Bank Budgeting Application, which are: Overview, Budget, Trends, Transactions, and Badges.

Test Specifications

Systems Tests - We will be testing the system as a whole, which includes all of the pages on the web application.

Integration Tests - We will be testing the interactions between the same data displayed on multiple different screens. An example of this is the overview page, which is simply repeated data from other pages.

Unit Tests - We will be testing models, views and viewmodels individually. The programmer of a particular class will carry out all necessary unit tests for that class and make appropriate code improvements.

Test Reports

Test reports offer feedback about the testing exercise and are informational to project stakeholders. The reports in this testing exercise track incidents, defects, and changes while testing the system.

Incident reports track descriptions of incidents, the originator, severity and priority, steps required to produce the defect, the responder, current status, cause, resolution and date the incident was addressed. The document will also track in what phase of the development process the incident was created or detected.

Defect reports reference the unique identifier in the incident report, list affected items, the owner, required changes, status, phases where the defect was introduced and detected, and general comments or notes.

Change reports summarize the total number of unit tests, integration tests, and system tests, the items and features tested, comprehensiveness of the assessment, the total number of incidents and defects, and unresolved incidents.

Project Plan

The project plan reconciles the time schedule and release of candidates with the unit, integration, and system testing.

Quality Assurance Plan

Yet to be defined.

ITEMS AND FEATURES TESTED

Web Application

User website testing takes place in the integration and system testing phases. During integration, the tester will test functions of the system and how the system behaves with additional features. During system testing, the team will test the system as a whole and cross-check the results with the requirements.

Test items:

- Verify user account
- Display of data in the overview donut chart
- Display of badges earned in the overview sidebar
- Display of current goal data in the overview (and goals) pages
- Display of account balance in overview page
- User earns a badge
- User views all badges earned
- User sets a savings goal
- User edits a savings goal
- Display of transaction data in graphical format
- Marking a transaction that makes a user go over-budget
- User edits a transaction's category
- User filters transactions by category
- User edits a budget of a particular category
- User adds a budget of a new category

APPROACH

Strategy

The testing approach includes team members role-playing by acting as users of the website and bulletin board participants. The activities they carry out will be similar to activities carried out by website users and bulletin board members. These include asking questions, posting discussions on the bulletin board, posting answers back to the website, performing administrative functions and other user activities. Team members will also create unexpected scenarios such as invalid input, to test how the system will respond to such scenarios.

System testing will be performed by the group to measure how the system fulfills the requirements. Team members will be required to provide input on the system's functionality to determine if it measures up to the client's expectations.

Techniques/Tools

Developers will perform unit tests to check code functionality and execution of the software, and perform white-box testing. They will also perform necessary NUnit and regression tests.

Testers will develop test cases and perform black-box testing. Testers and team members will also go through the code to find bugs and errors that the developers might not detect.

Test Goals

The goals of this testing exercise include finding various user situations and testing against these situations in order to discover any errors that may cause failures. The ultimate goal is to ensure that the team delivers an error-free functioning system.

TEST DELIVERABLES

- A test plan that delineates the testing phase of the development process
- A test specification document detailing steps in the testing procedures
- Test reports documenting incidents, defects and changes

TESTING TASKS

Testing tasks for integration and system testing are outlined in the test specification document.

SCHEDULE

Testing will occur at the end of the development process. Test cases are outlined in the test specification document for the iterations.

REQUIRED RESOURCES

Testers: Jeremy Troshynski
        Emily Thomas
        Daniel McNary

Material: C# using ASP.NET for development, Windows Server 2003 using IIS 8.0 for
        Deployment, Google Drive, Microsoft Word (.doc), and Adobe Acrobat (.pdf) for documentation