**Software Project Management Plan**

**Commerce Bank Web Application**

03/08/2020

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Document Control

**Change History**

|  |  |  |
| --- | --- | --- |
| **Revision** | **Change Date** | **Description of changes** |
| V1.0 | 03/03/2020 | Create project plan document |
| V 2.0 | 03/06/2020 | Revisions on section 4 and 5 |
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**Document Storage**

This document is stored in the Github at:

https://github.com/umkc-cs-451-2020-spring/semester-project-group-9/tree/master/Documentation

**Document Owner**

Toni Tan is responsible for developing and maintaining this document.**Table of Contents**

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# **Overview**

## *Purpose and Scope*

**Purpose:**

The purpose of the Commerce Bank web application is to let users quickly and easily track their transactions by login in a bank account. Users can login to their account through any device with a browser either on a computer or any mobile device. Sort and search to filter out the transaction that users want to check . Set up notifications for bank transaction alert to keep account in high security.

**Scope:**

Commerce Bank will allow users to login and check their bank account’s balance, transactions, set up notifications and personal contact information. Time permitting, the scope could be extended to include features such as getting notifications via email or text, remembering users if they close their browser and log in again. Users can switch to different accounts if they have more than one account.

## *Goals and Objectives*

**Project goals:**

1. Create web application that allows users to check balance and transaction histories.
2. Users be able to set up and change alert notifications

**Project objectives:**

1. Have a user-friendly interface design
2. Export transaction histories to a spreadsheet
3. Ability to save data to database

## *Project Deliverables*

The following items will be delivered to the customer on or before 03/16/2020:

1. non-functional prototype
2. Project plan documentation

## *Assumptions and Constraints*

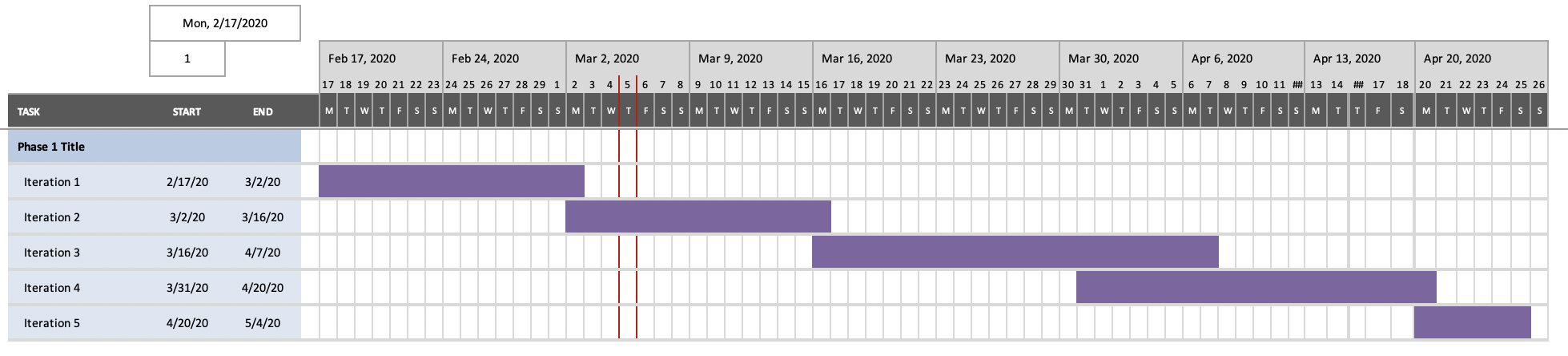
Assumptions:

1. All users should already have an account
2. One user only has one account
3. Has a working local server that stores needed data

Constraints:

1. SQL server 2010 or above should be utilized.
2. Website must be run on a net browser.
3. The website must be ready by 5/9/2020.

## *Schedule and Budget Summary*



**Budget Summary:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Salary per hour | Hours per week | weeks | total hours | Salaries |
| PM | $60 | 8 | 14 | 112 | $6,720 |
| Developer | $50 | 8 | 14 | 112 | $5,600 |
| Developer | $50 | 8 | 14 | 112 | $5,600 |
| Developer | $50 | 8 | 14 | 112 | $5,600 |
|  |  |  |  |  |  |
|  |  |  |  | Project Total Cost | $23,520 |

## *Success Criteria*

The project will be considered a success if

* The team delivers a functional web application with all required features
* 80% or more of the team members are willing to work together on another software project in the future.
* All documentation must be documented accordingly
* Project released on time

## Definitions

**Commerce Bank Web Application:** The name of the product; the software system shall be specified in this document.

**Users:** Commerce Bank users; people who will interact with the product.

**Project Manager:** Person who is responsible for the project.

**Developer:** the person developing the system.

**MySql:** A language for database management

**.Net:** A Framework is a software framework developed

**HTML:** Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser.

## *Evolution of the Project Plan*

Before the start of an iteration, the project plan will be updated to include a schedule of detailed tasks, estimated hours and tasks assigned to members for the upcoming iteration. At the end of an iteration, the project plan will be updated to include the actual effort for each member and total actual effort completed task. A close out document will summarize the previous iteration on what went right, what went wrong and how to prevent the problems.

Risk mitigation efforts will be evaluated at the start of each iteration. Severe risks will be analyzed and added to the project plan as soon as they materialize.

# **Startup Plan**

## *Team Organization*

Project Manager: The project manager is responsible for creating the Commerce Bank Web Application project. The project manager will keep track iteration, schedule meetings, update project plan, managing risks and fill up all documentation.

Programmers (3): Programmers are primarily responsible for coding and unit testing modules. Keep development stay on track and do tasks before each iteration.

Build Coordinator: The build coordinator is responsible for setting up, running and ensure the product meets requirements.

## *Project Communications*

**Research:**

Research was conducted by reading various tutorials on specific languages, frameworks, and styling used in the project, such as Bootstrap, SQL, and .NET

**Distributed Work:**

**Michael Cu:** HTML Website Design, Database Design, Server Design

**Joshua Deniels:**Proxy implementation, website implementation

**Mao Zheng:**Website design and implementation;Database implementation,documentation

**Toni Tan:** Project Manager, UX/UI design

## *Technical Process*

Planned phases: 3/16/2020 - present prototype design

Entry criteria: non-functional prototype design on Adobe XD with all web pages.

Exit criteria: Make sure prototype design meets user requirements, showing what users can do and the benefits of using the web.

## *Tools*

* Programming Language – HTML, C#, CSS, MySql
* Version Control – source code and written artifacts will be stored in a Subversion repository in Github
* Automated testing – unit tests will be implemented with the JUnit testing framework.

# **Work Plan**

## *Activities and Tasks*

Task name: Dashboard, setting page interface

Task Description: interface design for dashboard and setting page

Owner: Toni Tan

Effort estimate: 10

Actual effort: TBD

Planned start date:3/2/2020

Planned stop date: 3/16/2020

Actual Start Date: 3/2/2020

Actual Stop Date: TBD

Task name:Design HTTP&CSS format/structure

Task description: structure design for web page

Owner: Micheal Cu, Mao Zheng

Effort estimate: 5

Actual effort: 3

Planned start date:3/3/2020

Planned stop date: 3/5/2020

Actual Start Date: 3/3/2020

Actual Stop Date: 3/5/2020

Task name: Create UI design that is suitable for all screens

Task Description: UI design for all web pages such as color, icons

Owner: Toni

Effort estimate: 2

Actual effort: TBD

Planned start date:3/2/2020

Planned stop date: 3/10/2020

Actual Start Date: 3/2/2020

Actual Stop Date: TBD

Task name:Login Page-Password fields & Login button

Task description:Create Login Page-Password fields & Login button with specific requirements

Owner: Micheal, Joshua

Effort estimate:5

Actual effort:4

Planned start date:3/3/2020

Planned stop date: 3/6/2020

Actual Start Date: 3/3/2020

Actual Stop Date: 3/5/2020

Task name:Database implementation

Task description: Implement user account information into local database

Owner:Mao, Micheal

Effort estimate:5

Actual effort:3

Planned start date:2/28/2020

Planned stop date: 3/3/2020

Actual Start Date: 2/28/2020

Actual Stop Date: 3/3/2020

Task name: Database and website connection

Task description: connect local database with the website

Owner:Michael, Joshua

Effort estimate:10

Actual effort:TBD

Planned start date:3/10/2020

Planned stop date: 3/15/2020

Actual Start Date: TBD

Actual Stop Date: TBD

Task name:Export spreadsheet

Task description: Add the web features to be able to export spreadsheet

Owner:Michael, Joshua

Effort estimate:8

Actual effort:TBD

Planned start date:3/10/2020

Planned stop date: 3/13/2020

Actual Start Date: TBD

Actual Stop Date: TBD

Task name:Notification

Task description:User can add/edit/delete/hide/pull/compare notifications

Owner:Michael, Mao,Toni

Effort estimate:10

Actual effort:TBD

Planned start date:3/15/2020

Planned stop date: 3/20/2020

Actual Start Date: TBD

Actual Stop Date: TBD

Task name:Add transactions

Task description: User is able to add transactions

Owner:Mao, Joshua

Effort estimate:10

Actual effort:TBD

Planned start date:3/20/2020

Planned stop date: 3/25/2020

Actual Start Date: TBD

Actual Stop Date: TBD

Task name:Notification rule set up

Task description: User is able to set up Notification rule.

Owner:Mao, Micheal

Effort estimate:6

Actual effort:TBD

Planned start date:3/25/2020

Planned stop date: 3/28/2020

Actual Start Date: TBD

Actual Stop Date: TBD

## *Release Plan*

Project plan - 3/8/2020

Technical Prototype - 3/16/2020

Architecture document 4/3/2020

Test plan- 4/26/2020

User and system guide - 4/24/2020

## *Iteration Plans*

**Iteration 2 plans:**

* Project plan document
* Dashboard, setting page interface
* Design HTTP& CSS format/structure
* Design Http & CSS handling code
* Create UI design that is suitable for all screens
* Review Overall Implementation requirements
* Create and finish Http code for Homepage Dashboard
* Handle/Modify Http&Css data structure for retrieving balance
* Create Login Page-Password fields & Login button
* Implement UI
* Bug fix as required
* Evaluate needs for next iteration

## *Budget*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Iteration 1 | Est hour | Est Cost | Act hour | Act Cost |  |
| Project Manger | 3 | 180 | 6 | 360 | (out of budget) |
| Developer | 91 | 4550 | 49 | 2450 | (under budget) |

# **Control Plan**

## *Monitoring and Control*

Weekly – Team meeting. Project participants report status, progress and potential problems.

3/14/2020 – Non-functional prototype review inside team. All team members will go over, give comments and suggestions.

5/16/2008 – Non-functional prototype presentation. Project manager and team will present a prototype to the customer.

## *Project Measurements*

Iteration 2:

|  |  |  |
| --- | --- | --- |
| **Phase** | **Measurement** | **Source** |
| Release Planning | Record effort estimates for product features | Team |
| Iteration Planning | Plan and assign tasks on excel spreadsheet. Manage and update project cards on github. | Team |
| Iteration Closeout | Update iteration excel spreadsheet. Closeout document report of what went right, what went wrong, risks were missed and how to solve the problems. | Team |
| Project Closeout | Archive project performance data in process database. (See process database definition for a list of measures to record.) | Team |
| Ongoing | Project manager update project plan. | PM |

# **Supporting Process Plans**

## *Risk Management Plan*

**Identify technical:**

1. Learning for new tools
2. Touch with new technologies
3. Life cycle support

**Managerial risks:**

1. Poor communication
2. Time conflict
3. Project scope changing
4. Limited work time

## *Configuration Management Plan*

1. All work products will be stored in a centralized CVS repository in Github.
2. The naming convention for documents will be: NNN-VVV.suffix where NNN is a mnemonic that reflects the function of the document, VVV is a 3 digit version number, and 'suffix' is the standard/normal suffix for the document type. For example, the second version of the requirements document created as a Microsoft Word document might be labeled: REQ-002.doc.
3. All project items including documents, source code, test cases, program data, and test data will be stored in the Github.
4. The change control procedure once a product is baselined is:
   * Anyone wanting to make a change to a baselined item sends an email to the rest of the group describing the change, reason for the change, expected impact, and timeline for integrating the change.
   * if no one responds to the group within 2 days with a reason for why the change request shouldn't be permitted, it will be considered accepted and the person proposing the change may proceed with the change. If anyone does object to the change, the reason for objecting will be discussed at a meeting where everyone is invited to attend and voice their opinion. At the end of the meeting a democratic vote will be held to decide whether or not the change should be allowed.
5. Including a change history with all documents is encouraged but only required for baselined documents. The change history should be at the front of the work item and include:
   * the name of the person making the change
   * brief description of what has changed
   * reason for the change
   * the date the change was integrated.

## *Verification and Validation Plan*

* All changes must be documented
* Github pull-request must be reviewed by all team members
* Unit testing will be done to all business logic

## *Product Acceptance Plan*

**Product Functionality:**

* Login page completion by 3/15/2020
* Transaction page completion by 3/25/2020
* Dashboard page completion by 4/20/2020
* Setting page completion by 5/1/2020