**Software Project Management Plan**

**Commerce Bank**

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**Team Members**

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Document Control

**Change History**

| **Revision** | **Change Date** | **Description of changes** |
| --- | --- | --- |
| V1.0 | 01/22/2024 | Project Release and team assembly |
| V1.1 | 1/26/2024 | Initial project design |
| V2.1 | 2/26/24 | Created first front end page |
| V3.1 | 3/1/2024 | Created 3 front end pages |

**Document Storage**

This document is stored in the project’s SVN repository at: https://github.com/BraydenSingleton/Fantastic4-451R-.git

**Document Owner**

Brayden Singleton is responsible for developing and maintaining this document.

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6. **Overview**
7. *Purpose and Scope*

The purpose of the project is to provide a working website that provides easy access and correctly stores information for customers of Commerce Bank

The Scope of this project is a simple login page with the ability to register new users and obtain forgotten passwords along with correctly obtaining customer information and correctly displaying balance and personal information, along with 2 decided team pages

1. *Goals and Objectives*

Project goals:

1. Create a login/register page
2. Be able to connect and obtain correct user information to a database
3. Be able to display correct user information
4. Be able to update database with updated user information

Project objectives:

1. Create a database on given customer information
2. Create client software that allows access to the database from a web browser.

*C. Project Deliverables*

This section lists the outputs of the project that are delivered to the customer.

The following items will be delivered to the customer on or before 5/8/2024:

1. Source code for both the client and server portions of the system.
2. User’s Guide
3. Test Plan
4. System test Cases
5. *Assumptions and Constraints*

*D.* Assumptions:

1. The location API works on the test hardware.
2. A commerce bank employee will be available to reach in case of questions
3. First presentation will be given within the next few weeks to Commerce bank.
4. Members of the group will be able to meet at least once a week

Constraints:

1. The software must correctly display and store information.
2. The database must be open source.
3. The software must be ready by 5/8/2024

*E. Schedule and Budget Summary*

1/22/24- Commerce bank presentation and team assembly

1/26/24- Initial project design

2/26/24- 1 front end page1 completed

3/1/24- 3 front end pages completed along with start of backend

Currently no budgets but possible grant from UMKC according to professor

*F. Success Criteria*

* Deliverable contains CSS, HTML , UNIT testing and Java integration
* Deliverable must have login/register page, homepage, user settings page, and 2 group agreed upon pages
* All high-priority use cases in the requirements specification are delivered before May 8.

*G. Definitions*

CSS-Cascading Style Sheets is a style sheet language used for specifying the presentation and styling of a document written in a markup language

Java- high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible

HTML-HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser

*H. Evolution of the Project Plan*

Before the start of an iteration, the project plan will be updated to include a schedule of detailed tasks for the upcoming iteration. At the conclusion of an iteration, the project plan will be updated to include the actual effort for each completed task.

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.

**2. Startup Plan**

1. *Team Organization*

Project Manager: The project manager is responsible for creating the project plan (with input from those doing the work), managing risks, running the weekly team meeting

Programmers (3): Programmers are primary responsible for coding and unit testing modules. They are also expected to take part in architecture planning

1. *Project Communications*

The group members meet in person once a week to discuss plans and completions for the project. Group members also communicate through local text chat to discuss when to meet

1. *Technical Process*

To start off, we created a general design we wanted to go by. Then we created 3 front end pages including our login/register page. Once the majority of those pages are completed, we will start developing our backend and integrating with the front end. We planned on using one API tool since it can handle CSS, SQL and Java so there will not be a need to try and use 3 different API tools. We hope to be able to deliver a small example to Commerce bank when they check in.

1. *Tools*

* Programming Language – Java
* Database management- SQL
* Web API- Visual Studios Code
* Build tools – local and main builds will be done using Adobe XD.
* Automated testing – unit tests will be implemented with the JUnit testing framework.

**3. Work Plan**

1. *Activities and Tasks*

Since this a semester long project, all of the tasks that will be listed will be based on a 16 week range

Task: Front end design (Tasked to Aidan and Joseph, with Brayden available for assistance, started week 2 after group assembly)

Task: Back end design (Tasked to Hunter with assistance from Brayden and Aidan, started week 6 after team assembly)

Task: Project deliverables (Tasked to Brayden, started week of assembly)

1. *Release Plan*

For day-to-day project management the release and iteration plans (described in the next section) are probably the two most important project management artifacts.

The release plan lists expected completion dates for major milestones and delivery dates of key work products. The project’s technical development process to a certain extent will dictate the choice and timing of milestones and deliverables. For example, projects following the Rational Unified Process will have four major milestones: life-cycle objectives, life-cycle architecture, initial operation capability, and product release.

1. *Iteration Plans*

Week 1- Create general design on how we want the project to work

Week 2- 3: Create login/register/forgot password pages

Week4-5: Create the rest of the web pages

Week 6-8: Start the backend design, and start integrating it into the front end

Week 9-10: Maybe sometime give Commerce Bank a check in presentation

Week 11-16: Finish up integrations, provide final touches and submit a deliverable

1. *Budget*

No budget, this is entirely free

**4. Control Plan**

1. *Monitoring and Control*

Include in this section plans and procedures for tracking progress and controlling performance. Included here will be the approximate dates of technical as well as managerial reviews. Typically each major milestone or project phase will end in a review.

For projects that don’t have a separate communication plan, this section may also include information on the timing and content of status reports and other project review documentation.

*Partial Example*

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

3/1/2008 – Critical Design Review. Formal inspection of product architecture.

5/15/2008 – Executive Review. The project manager presents current project status to project sponsor and senior executives.

1. *Project Measurements*

| **Phase** | **Measurement** | **Source** |
| --- | --- | --- |
| Release Planning | Record effort estimates for product features | Mgr |
| Iteration Planning | Record effort estimates for scheduled tasks  Update effort estimates for product features  Update estimated dates in release plan | Mgr |
| Iteration Closeout | Record actual effort for scheduled tasks  Record actual effort for product features  Record LOC count for modules written | Mgr/Pgr |
| System Test | Record the rate at which errors are found. | QA |
| Project Closeout | Archive project performance data in process database. (See process database definition for a list of measures to record.) | Mgr |
| Ongoing | Record defects found from integration testing throughout the entirety of the project | Mgr/Pgr/QA |

**5. Supporting Process Plans**

1. *Risk Management Plan*

I feel like we have strong risk management, since this project is online, we are able to easily share object and deliverables among team members who missed or will miss team gathering. We also have an overall well rounded team, so if one person is falling behind on work, we have a good enough group to provide support and get the deliverable submitted on time.

1. *Configuration Management Plan*
2. All work products will be stored in a centralized GitHub repository
3. The naming convention for documents will be based on what deliverable are required to be turned in in the format XXX-Fantastic4: where XXX is the assignment and Fantastic4 is the team name
4. All project (work products) items (documents, source code, test cases, program data, test data, etc) will be stored in the GitHub repository but not all will be under change control (subject to formal change control procedures.) Only the system requirements, project plan and source code will be baselined and under configuration control.
5. Items that are subject to change control will be considered baselined after a group review at the end of the life cycle phase during which they are created. Baselined here means that the product has undergone a formal review and can only be changed through the prescribed change control procedures.
6. The change control procedure once a product is baselined is: (1) 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. (2) 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.

C. *Verification and Validation Plan*

The Verification and Validation plan is specified as a separate documented located in the version control system at: https://github.com/BraydenSingleton/Fantastic4-451R-.git

*D. Product Acceptance Plan*

The Verification and Validation of a customer of commerce bank

The correct user information once verified and validated

The ability to register or make a new password for users

The ability to update user information