Project Proposal

Finance Titan

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Version 0.1

1. Project Description

Finance Titan is a web-based accounting application. Finance Titan is available on standard devices: computers, tablets, and smart phones. Finance Titan provides basic accounting function which include but are not limited to:

* The management of accounts with unique identities and entries.
* The ability to journalize transactions.
* The ability to post transactions to accounts.
* The ability to create trial balances
* Creation of income statements, balance sheets, and cash flow statements.

1.1 Motivation

Finance Titan was born out of the desire for clean and effective accounting software. The motivation for the Finance Titan project is to propel the analytic functionality of the software above and beyond what is necessary.

1.2 Problem Statement

The user has the need for a portable application that can be accessed anywhere where there exists a connection. The application needs to exercise multiple security measures for the protection of the user’s information. The application needs to be able to create a chart of accounts, which is a comprehensible list of accounts made available for recording transactions by a company. The employees of the company are the application users. Within the company there are administrators who have different privileges.

The primary function of accounting is the journalizing of transactions. Transactions can be multiple records of debits or credits. Journalized transactions originate from a source document. These documents need to remain be associated with the journalized transactions. Journal entries observe the standard accounting equation:

Assets = Liabilities + Equity

If an account has a balance greater than zero, a trial balance is created. When a transaction is approved it is posted to the account.

The user needs the ability to create income statements, balance sheets, and cash flow statement for an account given a selected accounting year. Ratio analysis needs to be performed on balance sheets and is necessary for the user.

1.3 Objective

Finance Titan’s primary objective is to provide the primary accounting functions to the specification of the requirements. The name of the project’s second objective will be to excel in reliability. The objective upon completion is an application that meets the requirements defined below and exceed as a tool for analysis. Finance Titan will have a highly digestible interface and will allow for the returns of custom reports. The user should be able to manipulate the functionality of the program to extract information for analysis.

1.4 Required Functionality

1.4.1 Sprint 1

1. Allow three types of users – administrator, manager, and regular accountant to login to the system.
2. The Administrator can create users and assign roles.
3. The administrator can update information about a system user.
4. The administrator can activate or deactivate other accounts.
5. All users can log in to the system once credentials have been created in the system.
6. New users can request to join the system.
7. The user should provide first and last name, address, email, and date of birth.
8. The administrator can add new users or approve new users.
9. If a user forgets their password they can answer a security question.
10. The administrator should have a report where they can view all users in the system.
11. The administrator should be about to suspend any user from a start date to end date.
12. The administrator should have a report of all expired passwords.
13. The administrator should be able to send email for any user from within the system.

1.4.1.2 Non-Functional Requirements

1. The application must be web based.
2. The application must be able to be accessed from various types of devices.
3. The application must have a secure log in process.
4. All login information must be stored in the database tables.

1.4.1.3 Proprietary Information and Confidentiality Requirements

1. Major Stakeholders

Major Stakeholders have been identified as: System Administrators, Accountants, and Account Owners. System Administrators have an interest in a system that can be well managed. A system that allows administrators to exercise the monitor and control users when necessary is desirable. accountant’s productivity can be affected by the tools they use. The accountants who would use the system have an interest in the design of the system and its ease of use. Account Owners have sensitive information that they want protected. Account owners put trust in the accountants they hire to handle their information safely.

1. Methodology

The front-end will be constructed using a combination of HTML, CSS, JavaScript, and PHP. The site will be hosted on infinityfree.net.

The prototype will be designed in Marvel.

The database will be completed using MySQL.

* 1. Communication Standards

Communication between project members will be conducted almost exclusively online. Discord will serve as the primary communication method. Discord’s messaging function will be used for informal communication. Formal group meetings will occur on Wednesdays at 8:15PM EST using Discord’s voice chat feature. Meeting minutes will be recorded and hosted on the Discord server.

Project documents will be hosted on GitHub. This include project artifacts and code. All files will be associated with their Deliverable and follow naming conventions as follows:

DocumentName\_Deliverable#\_Version01

3.2 Project Tracking

All activities in the given sprint will be numerated and tracked in Trello. Upon completion tasks will be marked as completed. The percentage of completed tasks within their section and in total to the current deliverable will be tracked by the project manager.

Smart Sheets will be used to generate Gantt Charts.

1. Personnel

|  |  |
| --- | --- |
| **Member Name** | **Position** |
| Kayla Hanks | UX, Front-end Developer |
| Elizabeth Burnside | Technical Lead, Documentation Specialist |
| Sarf Surani | Documentation Specialist |
| Jimmy Andersen | Database Developer |
| Sammy Wilson | Front-end Developer |
| Yesse Queszada | Back-end Developer |

* 1. Knowledge Area

Team members need to have a functional understanding of JavaScript and SQL. Front-end developers should have an understanding of HTML, CSS, and PHP. Back-end developers should have a background in database design and system integration.

* 1. History
  2. Required Facilities

A Kennesaw State student account is required for use of the KsuWeb server. All members of the project are Kennesaw State students. A license for Adobe Dreamweaver is required for all members.

1. Project Design
   1. Prototype

Marvel was used to create the prototype. The prototype is hosted on Marvel’s site and can be viewed at <https://marvelapp.com/prototype/511i08i> .

* 1. Class Diagram
  2. Database Diagram

A close up of text on a white background

Description automatically generated

1. Project Schedule

A screenshot of a cell phone

Description automatically generated6.1 Sprint 1

The planning phase spans from September 7th to September 13th. The planning phase will end with the completion of the SRS, Project Management Plan, and the Project Proposal.

The design phase spans from September 7th to September 10th. The design phase will produce the database design, prototype, and SDD. These artifacts are included in the project proposal so must be completed before the project proposal is completed. The development phase can begin on September 10th after the design phase has completed and must conclude by September 16th. The testing phase cannot commence until the system has been developed and the functionality for Sprint 1 has been completed. The testing phase must conclude by September 21st, so Deliverable 1 can be submitted.

1. Project Deliverables and Beneficiaries

**Deliverable 1**

*September 21st*

Completion of Deliverable 1 will see the establishment of the graphical user interface (GUI), creation of the administrator, manager, and accountant classes. Primary functionality will be the log in process and creation of user accounts.

**Deliverable 2**

*October 5th*

Completion of Deliverable 2 will include the expansion of administrator functionality to add, view, and create accounts. Account tables will be added to the database. Accounts belong to a chart of accounts. Screens for individual accounts, ledger of accounts, and event log will be added to the GUI.

**Deliverable 3**

*October 19th*

Deliverable 3 will introduce creation of journal entries. The process for manager to approve journal entries will be implemented. Additional functionality will be introduced to the ledger page.

**Deliverable 4**

*November 2nd*

Completion of Deliverable 4 will include additional functionality: adjusting journal entries and searching journal entries. Mangers shall approve or reject adjustment to journal entries and can view all adjustment submissions.

**Deliverable 5**

*November 16th*

Deliverable 5 will add financial ration functionality for all users.

1. Assumptions and Constraints

In the planning of this project the following assumptions were drawn:

We assume that the original schedule will be maintained without delays.

We assume that infinityfree.net will be able to support PHP and JavaScript through the full scope of the project.

We assume that members have a sufficient understanding of the project’s business requirements.

We assume that members will be able to dedicate 10-20 hours a week to the project.

Factors that could constrain the project or delineate the schedule are listed:

If the web hosting service need to be changed, reestablishing the site will consume time.

A change in the personal schedule of one or more members will decrease the productivity of the group.

All members are students with other classes and work obligations. These outside responsibilities may be subject to fluctuation.

1. Primary Contact

Questions regarding the project should be directed towards Elizabeth Burnside, who can be reached at eburnsid@students.kennesaw.edu.