Software Development Capstone Topic Approval Form

The purpose of this document is to help you clearly explain your capstone topic, project scope, and timeline. Identify each of these areas so that you will have a complete and realistic overview of your project. Your course instructor cannot sign off on your project topic without this information.

 Note: You must fill out and submit this form. Space beneath each number will expand as needed.

Any cost associated with developing the application will be the responsibility of the student.

INFORM MENTOR:

Potential use of proprietary company information: No Proprietary information will be used or at risk of being exposed.

ANALYSIS:

1. Project topic AND description:

    Task Control and Budget Management; The Task Control and Budget Management system is a project for supervisors to manage assigned tasks and their budgets. It is designed for a kids club. The Kids Club provides a safe place for kids to hang out after school. As part of their programming they provide snacks, homework help and games in a safe environment.

    Currently most task management software is subscription based software that is cost prohibitive to The Kids Club. In addition, budgeting and cost management software carries a heavy cost and can be complicated to implement. To date a suitable cost efficient option to do both has not been found to exist.

    Task Control and Budget Management aims to solve that problem by giving The Kids Club the ability to deploy a light weight easy to use web application system to their personal servers or host it in a low cost cloud environment. The system gives them the ability to assign and monitor tasks, track spending, as well as keep track of receipts and reimbursements. In addition the system gives managers the ability to track productivity and costs in reports that can be represented in online charts as well as downloadable csv files.

2. Project purpose/goals:

    The purpose of Task Control and Budget Management is to create a task and budget tracking system that provides The Kids Club a low to no cost solution to keep track of employee and volunteer assignments as well as track spending and performance against budgets. It accomplishes this by:

    - Allowing managers to create and manage people on their teams including
        - Create, edit, and deactivate users
        - Create, edit, and deactivate teams that can have assigned budgets and spending limits to assigned to shared budgets
        - Designating supervisors that function as sub-managers within a given team
        - Allow select supervisors to create users and manage teams that users are on
        - Create and edit budgets for organization
        - Do anything a supervisor can do at an organizational level
    - Allow supervisors to
        - Create sub budgets for teams they are responsible for
        - Designate tasks to users that belong to teams that they supervise
        - View status of all tasks for a given team
        - Set spending limits for tasks
        - View productivity reports for users on their teams
        - View budgetary reports for their teams
        - Do anything a user can do within the teams they supervise
    - Allow users to

- o   Update the status of assigned tasks
- o   Add status notes to an assigned task
- o   Upload resepts and fill in cost for a given task

DESIGN and DEVELOPMENT:

1. Application Type (select one):
    - Mobile (indicate Apple or Android)
    - <mark>Web</mark>
    - Stand-Alone

2. Programming/development language(s) that you will use: Javascript, Html, CSS (React); Python(flask)

3. Operating System(s)/Platform(s) that you will use: linux based docker containers

4. Database Management System you will use: PostgreSQL

5. Estimated number of hours for:
    - i.   Planning and Design: 20
    - ii. Development: 40
    - iii. Documentation: 3
    - iv. Total: 63

6. Projected completion date: July 30

IMPLEMENTATION and EVALUATION:

1. Describe how you will approach the execution of your project:

    Project execution will be accomplished by first creating a perposal and concept sketches of the application. This concept will then be presented to a non-profit organization leader to get feedback on features and interfaces that will be useful to the non-profit. After gathering user input a modified agile development method will be employed to create the application gathering user imput along the way. A testing first method will be utilized during back end development and the front end will be tested with end to end testing of a virtualized database in the testing environment. After development concludes usability testing will be conducted in a live testing environment.

    X This project does not involve human subjects research and is exempt from WGU IRB review.

STUDENT SIGNATURE

Timothy A Lusby

By signing and submitting this form, you acknowledge any cost associated with development and execution of the application will be the responsibility of the student.

COURSE INSTRUCTOR'S NAME:

Elaine Moran
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COURSE INSTRUCTOR APPROVAL DATE:

June 2, 2021