Student Mentoring System

Project Management Plan

by Kaizen

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Role	Name	Signature	Date
Project Sponsor	Robert Barker		
Project Review Group	James Chrisman		
Project Manager	Rotating		

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1 Planning Basis

1.1 Executive Summary

The COBWeb is a virtual communications platform that will allows past, present, and future students a method to openly communicate and build meaningful relationships. It will have various functions, including but not limited to, a donations page, discussion board, job board, event calendar, and a message board.

This project's target market will be those students mentioned above, especially those currently enrolled within the Computer Information Systems department at the University of Louisville. This platform was created because of the decline in student retention within the program caused by a lack of CIS-specific social spaces, and in turn students don't know where to go when in need of support – which is followed by those students leaving the department or the university all together.

There are other software's that are open to purchase that would provide the same benefits of the COBWeb but come with a steep price tag and did not fulfill the clients' desires for the functions available through this platform.

This document is a collection of all documentation and deliverables created in the development of this project. It includes the follow documentation:

- Project Charter
- Statement of Work
- Work Breakdown Structure
- Project Schedule / Workstream Schedule
- Entity Relationship Diagram
- User Flow Diagram
- Requirements Management Plan and Requirements Traceability Matrix
- Stakeholder Management Plan

1.2 Scope

This project is a virtual communications platform that is being created to provide future, present, and past students at the University of Louisville Computer Information Systems department a platform to communicate, network and support one another. It came about from the need of a centralized communications location that would provide students with the support to ensure their success both, within the program and during their professional careers.

The project is developed with the clients' requirements in mind and the successful execution of these requirements will be reviewed regularly, by demonstrations and presentations, throughout the duration of this project.

The project will be completed using an Agile methodology with regular review on successful execution of these requirements. It will follow the traditional steps of the Agile development lifecycle: concept, inception, iteration, release, and maintenance, with retirement at some point in the future.

Deliverables will be produced using both software visualization tools like Microsoft Viso and code editing software like Microsoft Visual Studios. These prototypes will be usable and showcase some examples of the actual use of the system.

Below are the approved system requirements, anything not listed is outside of the scope of the project:

- Include a Landing Page
- Include a Signup and Log In capability
- Include a Search Section for Mentors
- Ability to Contact mentors
- Include Discussion Board
- Include System Announcements
- Include an Event Calendar
- Include Donations capability
- Include a Job Board
- Include a Message Board
- Include a Mailing List
- Include Alumni Surveys
- Include a FAQ

1.3 Milestones

A *milestone* is "a major event in the project" and represents the completion of a set of activities. Examples of milestones include:

- Project Sponsor presents project need
- Feasibility Study conducted
- Project Resource study conducted
- Project requirements established
- Project Prototypes created
- Project organizational diagrams created
- Major documentation files established

List and describe the key project milestones within the following table:

Milestone	Description	Delivery Date
Project Sponsor presents project need	The need for a new communication website is communicated to the team	January 2021
Feasibility Study conducted	Research is conducted to find out if the project is feasible.	January 2021
Project Resource Study Conducted	Research is conducted to find the resources needed for the project.	January 2021
Project requirements established	The requirements for the project are communicated to the team from the sponsors.	January 2021
Project Prototypes created	The prototypes for the website are created and shown to the sponsors.	May 2021
Project Organizational diagrams created	The organization diagrams are created and shown to the sponsors.	May 2021
Major documentation files established	The major files for the project are created and to be updated throughout the life of the project.	September 2021

Majority of development conducted	The major physical development of the site was undertaken, with the creation of the foundational aspects of the platform.	October 2021
Final integration and testing conducted	The integration and visual cohesivity of the website was finalized and testing was conducted to ensure successful operation.	November 2021

1.4 Phases

A *phase* is “a set of activities which will be undertaken to deliver a substantial portion of the overall project”. Examples include:

- Project Initiation
- Project Planning
- Project Analysis/Execution
- Project Design
- Project Closure

List and describe the major project phases within the following table.

Phase	Description	Sequence
Project Initiation	320: Defining the project by developing a business case, feasibility study and Project Charter as well as recruiting the project team and establishing the project office. 420: *Team assignments and roles *Introduction to Project Management, Course plan, Team formation *Overview of the project *Project Scheduling Tools and Techniques.	Phase # 1
Project Planning	320: Understand and be able to describe activities in the SDLC phases, Understand and be able to use Agile Development techniques, be able to perform net present value analysis in building a business case, Conceptualize and create a systems development plan, and be able to identify and document systems requirements. 420: *Introduction to Statement of Work, Project Charter, Project Management Plan, and other PM tools *Begin working on project proposal (SOW, PC).	Phase #2
Project Analysis/Execution	320: Ability to translate user requirements into UML use cases, Knowledge of how to transform business process into UML Use Case reports, Ability to draw UML use case diagrams, Ability to translate use cases into systems prototypes, and Ability to document use case processes into UML sequence diagrams.	Phase #3

	420: *PM topics: Team building, project execution, project monitoring and control, role of the PM	
Project Design	320: Translate use case main and alternative flows into UML class diagrams, translate class diagrams into entity relationship data diagrams, Use the entity relationship diagram to create normalized database table structure, create a UML user interface diagram, and Create UML physical website architectural design. 420: *User Experience Design and User Flow Diagram *User Interface Design *UX/UI software for design and prototype *Systems Architecture Diagramming.	Phase #4
Project Closure	*Final DEMO *Final PowerPoint presentation. Final Project Approval from Project Sponsor – Robert Barker and from Course Professor – James Chrisman	Phase #5

1.5 Activities

Phase	Activity	Description
Project Planning	Develop Project Management Plan	Develop a document used to coordinate all project planning documents and help guide a project's execution and control.
Project Planning	Develop Statement of Work	Develop a document used to describe the work required for the procurement.
Project Planning	Develop Project Charter	Develop a document that formally recognizes the existence of the project and provides direction on the project's objectives, scope, and management.
Project Planning	Develop Entity Relationship Diagram	Develop a flowchart that illustrates how entities such as people, objects or concepts relate to each other within a system
Project Planning	Develop User Flow Diagram	Develop a sequence of steps a user needs to take in order to accomplish a task inside an application or website
Project Planning	Develop Systems Architecture Diagram	Develop a diagram used to abstract the overall outline of the software system and the relationships, constraints, and boundaries between components. It provides a graphical view of the physical development of the system.
Implementation Phase	Demo 1 Presentation	Begin development of platform up to at least 50% completion. Product does not need to be functional at this level, but general shaping of platform needed.

Implementation Phase	Demo 2 Presentation	Continue development of platform up to at least 75% completion. General integration and functionality required.
Implementation Phase	Regular Progress Reports	Create and share with project lead, regular progress reports that showcase milestones, recent accomplishments, issues, and next steps.
Implementation Phase	Final Presentation	100% completion of development of platform. Site needs to be fully integrated and functional, meeting all project sponsor requirements.

1.6 Tasks

Phase	Activity	Task
Project Planning	Develop Project Management Plan	*Draft SOW & Project Charter (Team Assignment) *Draft ERD (Team Assignment) *Draft Requirements Management Plan & Traceability Matrix (Team Assignment)
Project Planning	Develop Statement of Work	*Scope of Work *Location of Work *Period of Performance *Deliverables Schedule *Applicable Standards *Acceptance Criteria *Special Requirements
Project Planning	Develop Project Charter	*Executive Summary *Project Definition *Project Organization *Project Plan *Project Considerations
Project Planning	Develop Entity Relationship Diagram	*Draft ERD *Final ERD
Project Planning	Develop User Flow Diagram	*Draft User Flow Diagram *Final User Flow Diagram
Project Planning	Develop Systems Architecture Diagram	*Draft Systems Architecture Diagram *Final Systems Architecture Diagram
Project Planning	Progress Report 1	*Scorecard *Executive Dashboard *Sponsor Progress Report with detailed updates on milestones
Implementation Phase	Progress Report 2	*Finalization of Planning Documentation *Integration of Project Requirements to Shortcut
Implementation Phase	Demo 1 Presentation	50% Development progress
Implementation Phase	Demo 2 Presentation	75% Development progress
Implementation Phase	Progress Report 3	*System Development, Testing and Bug Fixes
Implementation Phase	Progress Report 4	*System Testing and Last Bug Fixes *Addition of Filler Content *Update of Planning Documentation

Implementation Phase	Final Progress Report	*Finalization of Planning Documentation *Preparation for Final Presentation
Implementation	Final Presentation	100% Development of website completed. Presented completed and functional platform at Final Presentation on 12/6.

1.7 Effort

Task	Effort
*Draft SOW & Project Charter (Team Assignment) *Draft ERD (Team Assignment) *Draft Requirements Management Plan & Traceability Matrix (Team Assignment)	1 day
*Scope of Work *Location of Work *Period of Performance *Deliverables Schedule *Applicable Standards *Acceptance Criteria *Special Requirements	1 day
*Executive Summary *Project Definition *Project Organization *Project Plan *Project Considerations	1 day

1.8 Resources

Task	Resource
*Draft SOW & Project Charter (Team Assignment) *Draft ERD (Team Assignment) *Draft Requirements Management Plan & Traceability Matrix (Team Assignment)	*Elaboration Spec *Vision Document *Cost-Benefit Analysis
*Scope of Work *Location of Work *Period of Performance *Deliverables Schedule *Applicable Standards *Acceptance Criteria *Special Requirements	*Elaboration Spec *Vision Document
*Executive Summary *Project Definition *Project Organization *Project Plan *Project Considerations	*Elaboration Spec *Vision Document *Cost-Benefit Analysis

2 Project Plan

2.1 Schedule

Date	Deliverables

8/29	*Research PM tools and Dev Tools you want to use for your Capstone Project *Submit an analysis of your top 3 Project Management tools and your top 3 Dev tools (with scholarly reference support) *Submit the contact list of your team members *Submit Team Minutes
9/07	*Submit research on Statement of Work *(SOW), Project Charter (PC), and Project Management Plan (PMP) templates (individual assignment) *Submit Team Selection of SOW/PC/PMP formats (team assignment) *Submit Team Minutes
9/12	*Draft SOW & Project Charter (Team Assignment) *Draft ERD (Team Assignment) *Draft Requirements Management Plan & Traceability Matrix (Team Assignment) *Team Minutes
9/19	*1st Draft Systems Architecture Diagram *Final ERD *User Flow Diagram *Team Minutes
9/26	*Project Management Plan (final SOW, final Project Charter, final RMP & RTM) (Team Assignment) *Peer evaluation #1 (Individual Assignment) *Draft Scorecard, Executive Dashboard, and Sponsor Progress Report (Team Assignment) *Team Minutes (Team Assignment)
10/10	*Progress Report #1 (Team Assignment) *Team Minutes (Team Assignment)
10/17	*Screenshots of Dev progress in Word document (Team Assignment) *Team Minutes (Team Assignment)
10/24	*Team Minutes (Team Assignment)
10/31	*Begin implementing feedback from Demo I *Peer Evaluation #2 (Individual Assignment) *Team Minutes (Team Assignment)

11/07	*Project Progress Report #2 (Team Assignment) *Team Minutes (Team Assignment)
11/14	*Team Minutes (Team Assignment)
11/21	*Peer Evaluation #3 (Individual Assignment) *Begin implementing feedback from Demo II *Team Minutes (Team Assignment)
11/28	*Project progress report #3 (Team Assignment) *Team Minutes (Team Assignment)
12/05	*Peer Evaluation #4 (Individual Assignment) *Project Progress Report #4 (Team Assignment)
12/11	*Final PowerPoint presentation *Final Progress Report *Final Project Management Plan

2.2 Dependencies

'Dependencies' are logical relationships between phases, activities or tasks which influence the way that the project must be undertaken. Dependencies may be either internal to the project (e.g., between project activities) or external to the project (e.g. a dependency between a project activity and a business activity). There are four types of dependencies:

1. Finish-to-start *(the item this activity depends on must finish before this activity can start)*
2. Finish-to-finish *(the item this activity depends on must finish before this activity can finish)*
3. Start-to-start *(the item this activity depends on must start before this activity can start)*
4. Start-to-finish *(the item this activity depends on must start before this activity can finish).*

List any key project dependencies identified by completing the following table:

Activity	Depends on	Dependency Type
Building Deliverables	Planning Phase	Finish-to-start
Monitoring and control	Building Deliverables	Start-to-start
Monitoring and control	Building Deliverables	Finish-to-finish
Perform Stage-Gate	Building Deliverables & Monitoring Control	Finish-to-start
Perform Project Closure	Execution Phase	Finish-to-Start

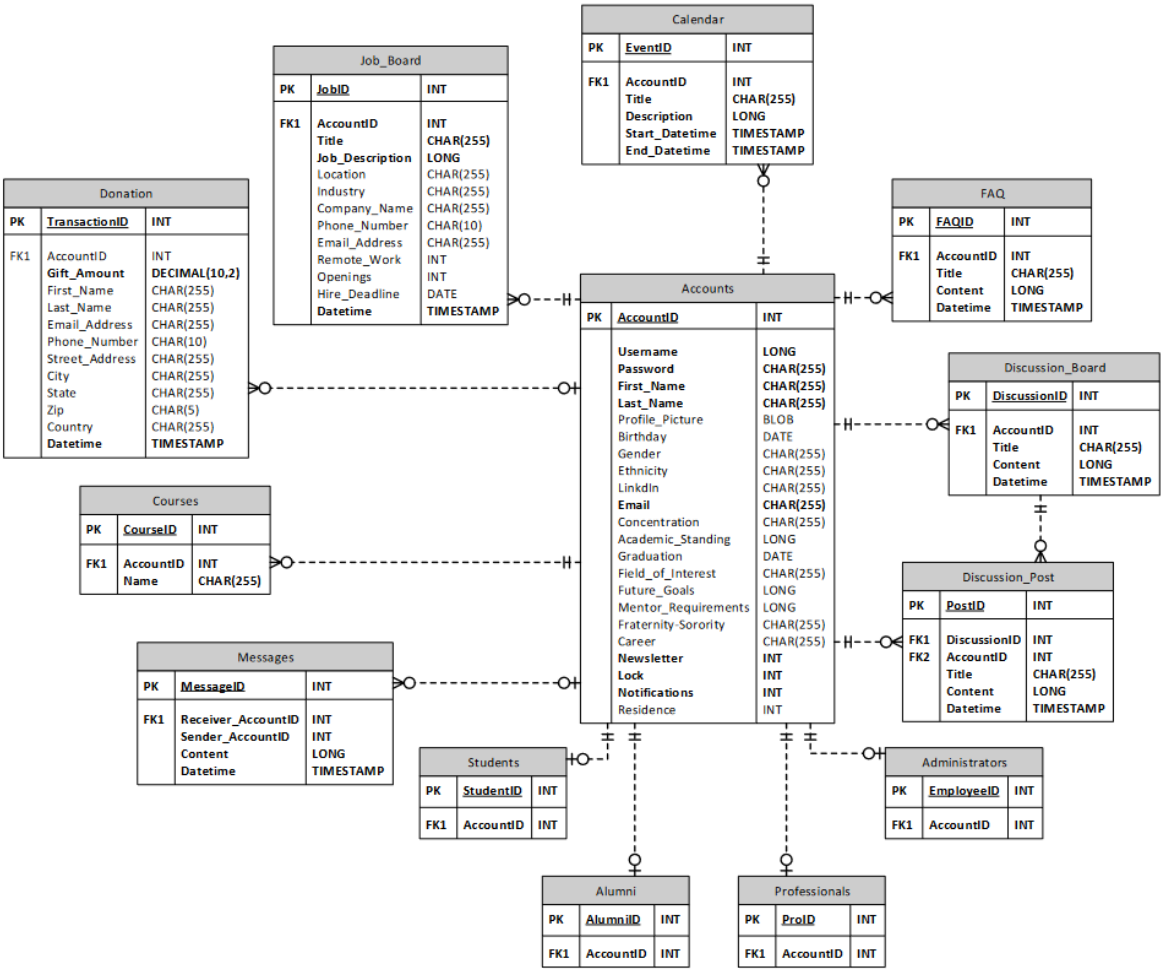
2.3 Assumptions

- The project will not change in scope
- The resources identified will be available upon request
- Students will attend all group meetings and be being an active participant.
- Students will maintain timely communication with team members regarding meeting absence, in the case of emergency.
- Students will be available and willing to assist fellow teammates in the occasion they require support.
- Students will be open and receptive to teammates' ideas and feedback regarding the project.
- Students will have all tasks assigned to me completed in a timely and thorough manner.

2.4 Constraints

- The new system must be in line with the University of Louisville's Information Security Office Policies and Standards Requirements.
- The project must be completed without the help of non-team member.

2.5 Database Layout



3 Linked Documentation

User Flow Diagrams (Linked Below)
[User Flow Diagrams]

User Flow Diagrams.docx

Statement of Work (Linked Below)
[Statement of Work v2]

Statement of Work Draft v2.docx

Requirements Traceability Matrix (Linked Below)

Trace Matrix v3

Trace Matrix v3.xlsx

Project Charter (Linked Below)
Project Charter v2

Project Charter v2.docx

Stakeholder Management Plan with Progress Reporting Mechanism (Linked Below)
Stakeholder Management Plan

Stakeholder-Management-Plan.docx

Progress Report Template (Linked Below)
Project Status Report Template.pptx

Project Status Report 5 (Final).pptx

Requirements Management Plan (Linked Below)
Requirements Management Plan

Requirements Management Plan v

4 Appendix

N/A