

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 human subjects: **No**

Potential use of proprietary company information: **No**

ANALYSIS:

1. Project topic AND description:

A mobile application for an online University that allows students to enter terms, courses associated with those terms, and notes and assessments associated with those courses. The application will also allow the student to enter start and end dates for each term and course, the scheduled time for Performance Assessments, and the due date for Objective Assessments. The student will be able to share course notes, and toggle on/off notifications for course start and end dates and assessment due or scheduled dates, if applicable. Courses should have status indicator set by the student to indicate if the course is: Unstarted, In Progress, Finished, or Overdue.

2. Project purpose/goals:

An online university wants to create a mobile application for students to track their terms, courses, and assessments. Currently, the university has no mobile application; all tracking is done through their website. The university wants to empower students to track their progress and upcoming due dates on their mobile devices, as well as take notes for their courses and share those notes with other students.

The university requires that each term contain a max of six courses, and each course can have two assessments, one "Performance Assessment" type and one "Objective Assessment" type. While the "Performance Assessment" has a due date, the "Objective Assessment" should be scheduled for a date and time. The University wants to reduce the number of students who miss scheduled examinations or assessment and course due dates by allowing students to toggle notifications for course due dates, objective assessment due dates, and performance assessment appointments that are scheduled within a week.

To allow students to avoid conflicting appointments, they should be able to view "upcoming appointments" reports for Objective Assessments within chosen time span which include: assessment title, course name, scheduled date, and pre-assessment score.

The student should also be able to search the courses by title.

DESIGN and DEVELOPMENT:

1. Application Type (select one):

- Mobile (indicate Apple or Android)
- Web

- Stand-Alone

2. Programming/development language(s) that you will use:

C#, XML

3. Operating System(s)/Platform(s) that you will use:

Android 9.0 Pie- API 28

Development environment: Visual Studio 2019 with NETStandard Library

4. Database Management System you will use:

SQLite-net-pcl v. 1.7.335

5. Estimated number of hours for:

- i. Planning and Design: 15 hours
- ii. Development: 55 hours
- iii. Documentation: 40 hours
- iv. Total: 110

6. Projected completion date: June 15, 2022

IMPLEMENTATION and EVALUATION:

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

- Complete requirements-gathering and document client expectations and needs.
 - Using this information, document project's deliverables
- Based on client needs, create a wireframe application and gain client's approval of design.
- Create UML to guide programmers during project creation
- Based on this UML, create a development plan to implement previously identified deliverables
- Create a test plan and design tests (the project will be developed using Agile methodology, which dictates that testing happen early and often)
- Code unit and test that unit, repeat.
- Documentation: user guide for setting up and running the application for maintenance purposes
- Documentation: user guide for running the application from a user perspective
- Final end user acceptance testing
- Submit

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

STUDENT SIGNATURE



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:

COURSE INSTRUCTOR APPROVAL DATE: May 24, 2022

A handwritten signature in black ink, reading "Joe Baumhart". The signature is written in a cursive style with a large, sweeping initial "J".