**Software Engineering**

**Capstone Topic Approval Form**

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

*Note: you must fill out and submit this form. The space beneath each area requiring your response will expand as needed. Any cost associated with development of the capstone will be the responsibility of the student.*

**STUDENT NAME and ID:**

Student name: Jin Luo

Student ID: 011046707

**INFORM INSTRUCTOR:**

Potential use of proprietary company information: No

**ANALYSIS:**

1. Project topic AND description:

* Project Topic: Development of Inventory Tracking Software for a Computer Shop.
* Description: I’m building a software application to help a computer shop in managing their inventory of products and parts.

1. Project purpose AND goals:

* Purpose: The purpose of this project is to provide the computer shop with an efficient and customized inventory tracking system.
* Goals:
* Develop user-friendly inventory software.
* Enable real-time inventory tracking.
* Customize the software to track products and their associated parts.
* Generate inventory reports.

1. Descriptive method:

The descriptive method will involve studying the computer shop’s current inventory management practices to gain a detailed understanding of their processes and designing a software solution that meets their needs.

1. Predictive/prescriptive method:

The software will predict when parts may run low and suggest reorder quantities.

**DESIGN and DEVELOPMENT:**

1. Explain why the problem and software product you have proposed are worthy of study:

The problem and software product are worthy of study because efficient inventory management is crucial for business success, including computer shops. This software will enhance the computer shop’s operations and reduce errors.

1. Projected outcomes and deliverables:

* A fully developed inventory tracking software application.
* User documentation.
* Training materials.

1. Estimated number of hours for the following:
   * 1. Planning and design: 40 hours
     2. Development: 80 hours
     3. Documentation: 20 hours
     4. Total: 140 hours
2. Projected completion date: 10/23/2023

**IMPLEMENTATION and EVALUATION:**

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

* Gather requirements.
* Design and develop the software.
* Test the software.
* User training.
* Offer support and updates.

**INFORM INSTRUCTOR OF:**

Potential use of human subjects (Y/N): No

Potential use of proprietary company information (Y/N): NO

**STUDENT NAME:**

**Jin Luo \_**

**By submitting this form, you acknowledge** **all information provided is accurate and that any changes to the topic, proposal, or goals must be discussed with your assigned instructor prior to continuing.**

**INSTRUCTOR NAME: Tawnya Lee**

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**INSTRUCTOR SIGNATURE: **

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**INSTRUCTOR APPROVAL DATE: 10/9/2023**

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