Computer Science 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 INSTRUCTOR:

Potential use of proprietary company information: (Y/N) N

ANALYSIS:

1. Project topic AND description: CyberSure LLC. needs to a tool to thier existing ticket tracking system that can project the completion date of an incoming ticket.

2. Project purpose/goals: Create a tool that will provide customers with an approximate completion date for their request to bolster satisfaction and transparency.

3. Predictive/Prescriptive method: To best work with the predictions we will be using the supervised learning regressive-based method known as Random Forest Algortihm. It will use independent variables from the dataset to predict the dependent completion date variable.

DESIGN and DEVELOPMENT:

1. Computer science application type (select one):
    - Mobile (indicate Apple or Android)
    - Web
    - Stand-Alone

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

3. Operating System(s)/Platform(s) you will use:
    a. Using Mac OS for development but will be able to operate on any system with Python.

4. Database Management System you will use:
    a. N/A

5. Estimated number of hours for the following:
    i. Planning and Design: 16
    ii. Development: 30
    iii. Documentation: 10
    iv. Total: 56

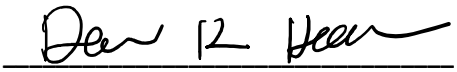
6. Projected completion date:
    a. After 6/12/2023

IMPLEMENTATION and EVALUATION:

1. Describe how you will approach the execution of your project:
    a. Meet with the stakeholders to cover the project and validate the objectives
    b. Gather, modify and divide the data to ensure completeness and create training and testing data sets
    c. Develop the code and complete cycles of training and testing until a working model is created
    d. Create the user interface to return the data and leadership to change variables to make predictions
    e. Document installations and utilization instructions for the company
    f. Perform user acceptance testing and hand over the tool to the company

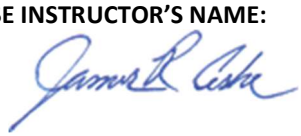
X This project does not involve human subjects research and is exempt from WGU IRB review.

STUDENT SIGNATURE



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

COURSE INSTRUCTOR'S NAME:



Jim Ashe, Ph.D. Mathematics

COURSE INSTRUCTOR APPROVAL DATE:

Saturday, May 20, 2023