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)

ANALYSIS:

1. Project topic AND description:
   Using Epsilon values to measure data security and user anonymity. Epsilon-Differential Privacy (EP) is the process of adding noise to a dataset to increase anonymity. The balance between anonymity and useful data is measured with a single parameter named "Epsilon".

2. Project purpose/goals:
   Assist our client(s) in securing their data in the event of a dataleak. The goal is to add enough noise to the data in order to makes it unreliable to an unauthorized user and reduce the financial and ethical liability that comes with handling personal information.

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: Python
3. Operating System(s)/Platform(s) you will use: Windows 10/PyCharm Community Edition IDE
4. Database Management System you will use: HashMap
5. Estimated number of hours for the following:
   i. Planning and Design: 10 hours
   ii. Development: 80 hours
   iii. Documentation: 30 hours
   iv. Total: 120 hours

6. Projected completion date: 4/01/2021

IMPLEMENTATION and EVALUATION:

1. Describe how you will approach the execution of your project:
   The execution will consist of a two phase implementation followed by an evaluation period focusing on how well the program operates from a user/usability standpoint. In the first implementation phase we will roll out a prototype that ensure compatibility with the new host system. Phase two will roll out v1.0 of the final application. Once the evaluation period begins we will survery users on their use of the application and then focus efforts on discovering any remaing deficiencies/bugs.

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

STUDENT SIGNATURE

_____JoshuaJaweda_____

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:

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COURSE INSTRUCTOR APPROVAL DATE: