**Computer Science Capstone Topic Approval Form**

The purpose of this form is to ensure your project meets the minimum requirements. Therefore, we only need to see a rough outline of a project that can meet the minimum rubric requirements. Changes from task 1 to task 2 are allowed and expected. Other than checking the approved topic, evaluators will not compare Task 1 to Task 2. **REMOVE ALL TEXT IN RED** before emailing this form to your assigned course instructor for approval.

*Note: Any costs associated with developing the application will be the responsibility of the student.*

PROJECT SUMMARY

1. **Project topic and purpose:**

Describe the problem (the “organizational need”) your project will solve.

1. **Data:**

Data source: This project will use a Kaggle.com free dataset named “Population of all US Cities 2024” under the [CC0: Public Domain](https://creativecommons.org/publicdomain/zero/1.0/) license.

Potential use of proprietary company information.

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

1. **Machine Learning (ML) Application:**

Describe how machine learning will be applied for *at least one* of the below:

* **Non-descriptive Method(s)**

A method that infers from the data, i.e., make predictions or prescriptions. Examples include classification models, regression, image recognition, etc. **Typically, but not necessarily, this is where ML is applied.**

* **Descriptive Method(s)**

A method that describes the data or a non-descriptive method, e.g., k-means clustering, cosine similarity, PCA, etc.

1. **Visualizations:**

Three unique images must be presented in the final app *or* supplemental code. Examples include bar plots, histograms, pie graphs, confusion matrices, etc. These images are also descriptive methods. See [visualization requirements](https://ashejim.github.io/C964/task2_c/task2_part_c.html#visualization-requirements).

DESIGN and DEVELOPMENT

1. **Development Outline:**

Provide a brief description of how you will develop your ML application.

1. **Programming/development language(s) you will use:**

1. **Operating system(s) or platform(s) you will use:**

1. **Projected completion date:**  
   You will not be held accountable to this date. It is only so your CI can better understand your personal goals.

**STUDENT SIGNATURE**



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

**COURSE FACULTY SIGNATURE**

**INSTRUCTOR’S SIGNATURE:**

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**INSTRUCTOR APPROVAL DATE:**