

# 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:

The organizational need required by Vstreams is that they have closed a deal with Netflix, and need to organize the data they received into movies and shows.

### 2. Data:

Data source:

The planned data source that Vstreams plans to use is from Kaggle.com. This data set: <https://www.kaggle.com/datasets/shivamb/netflix-shows> from [Kaggle.com](https://www.kaggle.com/) lists Netflix Movies and Tv Shows.

☐ Potential use of proprietary company information.

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

### 3. Machine Learning (ML) Application:

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

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

The developers at Vstreams will use supervised learning to go through the data and make predictions using a logistic regression to determine if the data from the Netflix dataset is a movie or tv show based off duration and rating.

- **Descriptive Method(s)**



**4. Visualizations:**

- A bar chart will show the comparison of movies to tv shows.
- A pie graph will show the difference between each tv rating
- A scatter plot will show the years a movie or show was produced.

**DESIGN and DEVELOPMENT****1. Development Outline:**

I will be using Jupyter Notebook to write and run the code to develop my ML application. I will download my dataset, and use logistic regression to determine if the data is a movie or tv show in Jupyter Notebook.

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

Python

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

Windows 11

**4. Projected completion date:**

07/10/2025

**STUDENT SIGNATURE**

**Vikas Lohana**\_\_\_\_\_

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****COURSE INSTRUCTOR'S NAME:**

**Jim Ashe, Ph.D. Mathematics**

**COURSE INSTRUCTOR APPROVAL DATE:**

**Saturday, June 21, 2025**



