**Data Analytics Capstone Topic Approval Form**

*The capstone challenges students to integrate skills and knowledge from several program domains into one project. The guidelines for this capstone course require you to demonstrate the application of academic and professional abilities developed as an undergraduate student in the BSDA program. It is highly recommended that the topic of your capstone be about resolving a current or perceived business problem. Your research topic should exemplify scholarship and research at the highest level and should be significant enough that it would help potential employers identify your abilities. It is also recommended that you use publicly available datasets for transparency and external validity.*

*This document is designed to help you clearly state the research question you will be exploring in your capstone project, the scope of your project, and your timeline in order to ensure that all of these align with your degree emphasis. Without clearly defining each of these areas, you will not have a complete and realistic overview of your project, and it cannot be accurately assessed whether your project will be acceptable for this capstone course.*

*If your project is one you have already completed at work or elsewhere, this document should be easy to complete. Many students do use a project they have already completed in the past. In that case, you will write the proposal as if the project has not been completed yet, and when you report on your project, you will use your complete after-implementation report. If you have not yet completed your project, this document can help ensure the scope is within the acceptable range for this capstone. An instructor must approve this form before you submit this task for evaluation. The task will not be evaluated without an instructor’s signature. The instructor may ask for additional information before approving this form.*

*Before submitting this form for approval, please remove all italicized directions in the form.*

***Please only submit a Topic Approval Form that has been signed by a course instructor for evaluation.***

**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 the following areas so you will have a complete and realistic overview of your project. Your course instructor cannot approve your project topic without this information*.*

**Student Name:** Shawn Watts

**Student ID:** 00126321

**Capstone Project Name:** Click here to enter text.

**Project Topic:** Click here to enter text.

**Research Question:** *Summarize one question or decision you will answer by collecting and analyzing a set of data.*Click here to enter text.

**Hypothesis:** Click here to enter text.

**Context:** *Explain in 500 words or less why the situation or question would benefit from data analysis.*Click here to enter text.

**Data:**

All data sets are located here: <https://www.kaggle.com/datasets/antonkozyriev/game-recommendations-on-steam/data>

* Games.csv is a tabular file that contains the title of the games, date released, which platforms they support, rating category, number of user reviews and pricing information.
* Games\_meta.json is a JSON file containing the app\_id, game description, and genres within a tags list.
* Users.csv is a tabular file that has a deidentified user id along with how many products they have purchased, and how many reviews they published.
* Recommendations.csv is a tabular file that has the most records which identify whether or not the user recommends the game, how many people found the recommendation helpful or funny, the review date, and number of hours user played the game.

Anton Kozyriev a Ukraining Data scientist student collected the data from Steams web site via web scraping and has made the dataset publicly available in Kaggle under the CCO Public Domain license agreement.

**Data Gathering:**

Data required will be downloaded from Kaggle. Datasets pertinent to this study are provided by Valve Corporation for their Steam game distribution platform. Four datasets will be downloaded and combined with appropriate features relevant to the study.

**Data Analytics Tools and Techniques:** *Identify the appropriate data-analysis technique you will use to analyze the data.* Text here

**Justification of Tools/Techniques:** *Explain why the data-analysis technique you chose is an appropriate technique to analyze the data collected*. Click here to enter text.

**Application Type, if applicable (select one):**

mobile

web

stand-alone



**Programming/Development Language(s), if applicable:** SQL, Python

**Operating System(s)/Platform(s), if applicable:** Windows, Linux (WSL)

**Database Management System, if applicable:** SQLite

**Project Outcomes:** *List the key anticipated project outcomes and deliverables in fewer than 500 words*. Click here to enter text.

**Projected Project End Date:** Click here to enter a date.

**Sources:**

Anton Kozyriev. (2023). Game Recommendations on Steam [Data set]. Kaggle. <https://doi.org/10.34740/KAGGLE/DS/2871694>

Glackin, C. E. W., & Adivar, M. (2023). Using the power of machine learning in sales research: process and potential. *Journal of Personal Selling & Sales Management*, *43*(3), 178–194.

Elbaghazaoui, B. E., Amnai, M., & Fakhri, Y. (2022). Data Profiling and Machine Learning to Identify Influencers from Social Media Platforms. Journal of ICT Standardization, 10(2), 201–218.

**Human Subjects or Proprietary Information**

Does your project involve the potential use of human subjects? (Y/N): **N**

Does your project involve the potential use of proprietary company information? (Y/N): **N**

**STUDENT SIGNATURE**

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

**TO BE COMPLETED BY AN INSTRUCTOR**

**The capstone topic is approved by an instructor.**

**INSTRUCTOR’S NAME AND SIGNATURE:**

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**INSTRUCTOR APPROVAL DATE:**

**Project Compliance with IRB (Y/N):**