▾ College of Computing and Informatics, Drexel University

INFO 212: Data Science Programming I

Project Proposal

Project Title:

Student(s):

Date:

Purpose

This project proposal should list your team members, describe the problem, the data sets, and the goal(s) of the project. Use the Project Requirements at the end of this notebook for choosing and scoping your project. A good place to find datasets to work on is the Kaggle Website: https://www.kaggle.com/datasets

This proposal must be submitted by Sunday, Nov. 19th, 2023.

▾ 0. Team Member List:

List the names and user accounts in Blackboard of all team members. Failure to list all members may cause missing gsrades for the non-listed students.

Team members: 1. 2. 3.

▾ 1. Introduction

(Introduce the project and describe the objectives. This section will provide an overview of the entire project including the description of the data sets and the specific data analytics methods and techniques the team will use for analyzing the data to address the problem.)

Double-click (or enter) to edit

▾ 2. Problem Definition

(Define the problem that will be solved in this data analytics project. Where does the problem come from? Who would be benefited from the solutions presented in this project? Use formal languages and notations to define the problem as much as possible.)

▾ 3. Data Sources

(Describe the origin of the data sources. What is the format of the original data? How to access the data?)

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▾ 4. Other Things you Would Like to Describe

(Is there anything you would like to describe as well? For example, preliminary analyses and results...)

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▾ 5. References

(list the references you will use in the project.)

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(Use the following requirements for writing your reports. DO NOT DELETE THE CELLS BELLOW)

▾ Project Requirements

This final project examines the level of knowledge the students have learned from the course. The following course outcomes will be checked against the content of the report:

Upon successful completion of this course, a student will be able to:

- Describe the main steps and key issues in the process of acquiring and preparing data for data analytics.
- Set up data analysis environment by integrating commonly used practical tools and programming packages.
- Explain different types of data storages and formats and apply appropriate tools for extracting and transforming data.
- Create interactive and programming code for cleansing, wrangling, reshaping, visualizing and analyzing various data sets.
- Explain the concepts of aggregation and grouping, and apply tools and write programs to aggregate and group data.

** Marking will be foucsed on both presentation and content.**

Written Presentation Requirements

The report will be judged on the basis of visual appearance, grammatical correctness, and quality of writing, as well as its contents. Please make sure that the text of your report is well-structured, using paragraphs, full sentences, and other features of well-written presentation.

Technical Content of the Entire Project (Not All the Points Applicable to the proposal):

- Is the problem well defined and described thoroughly?
- Is the size and complexity of the data set used in this project comparable to that of the example data sets used in the lectures and assignments?
- Did the report describe the charactriatics of the data?
- Did the report describe the goals of the data analysis?
- Did the analysis use plotting methods for visualization? Does the visualization convey meaningful messages?
- Did the analysis use wrangling, cleaning, and preparation methods? Does the work on wrangling, cleaning, and preparation demonstrate the student's knowlegde about these topics covered in this course?
- Did the analysis conduct aggretation and create descriptive statistics? Does the work on aggregation and descriptive statistics demonstrate the student's knowlegde about these topics covered in this course?
- Only those projects that exceed the sophistication of the final data analysis examples and assignments can be marked as the highest level of grade.
- Overall, what is the rating of this project?