Des Moines Area Community College

CIS289 Final Project

**Description:**

For your final project, you will have the choice of own project. Your project will be required to achieve a minimum viable product (MVP) that includes several of the topics we’ve covered this semester. Your grade for the project will be based on several criteria, including your proposal statement, code cleanliness, project difficulty, and video project presentation.

**Required functionality for creating your own project:**

You must include the following functionality in your project:

* A read/write functionality of some sort with substance. Something like:
  + Database read/write
  + File read/write
  + API read/write
  + I want to see some kind of data created/updated at rest outside of the core program
* Some level of user interaction
* Comments throughout your code.

You must include **four** of the following in your project (make sure you define which four you plan on using and how):

* One of maps, lambdas, regex
* Scraping
* NumPy
* Pandas with some kind of transformation (more than reading the frame)
* Visualization (at least two visuals)
* Database integration
* An API integration with some kind of parameter
* An API creation with at least a search parameter available
* Django site (or other web creation module if you prefer)
* Multi-threads that make sense
* Multi-processing that makes sense
* A generator function
* A data pipeline
* Factories

**Project Deliverables:**

For this project, you’ll have a few different deliverables

1. Project proposal – You’ll be creating a formal(ish) project proposal that includes a project description, a prioritized list project expectations (MVP) and potential functionality (post launch type functionality).
2. Project progress report – Part of the way through the project period, you’ll turn in a project progress report detailing … your progress. This includes where you originally expected to be at this point in the project as well as current status. It will also include an update on the final expected project scope
3. Project submission – You’ll submit your final project upon completion. Note that a project must run AS IS. Even if it doesn’t need to do what it should, it should at least run whether it’s run from the command line or with an executable. Include all files for it and make sure to change all working directories so that there are no issues.
4. Project presentation – You’ll create a video presentation to show your glorious project in completed form. Show what works and what doesn’t. Explain the hardest thing and how you overcame it. You’ll post your presentation in a discussion board forum. Presentation should be around 5-7 mins.