

Final Project Specifications

Description:

For your final project, you will have the choice between coming up with your own project idea or working through an assigned 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, unit test coverage, project difficulty, and project presentation.

Required functionality for creating your own project:

You must include the following functionality in your project:

- A GUI component
- Multiple functions (or methods)
- Unit testing
- Exception Handling (Try/Except)
- Some sort of user input, including input validation
- Some sort of output
- A class

You must include **nine** of the following in your project:

- Decision Structure: If, if-else, if-elif
- Looping Structure: For/while loop
- File I/O
- Inner function
- Function with arbitrary arguments: *args/**kwargs
- Collection: List/tuple
- Collection: Set/dictionary
- Collection: Array
- Case-switch statement
- Datetime
- Python Module or Package
- Data Scraper
- Object Oriented Functionality including constructors/methods/objects
- Object Oriented Program inheritance/polymorphism including base-derived class
- Database connectivity

Project Deliverables:

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

1. Project proposal – You will create 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 file expected project scope
3. Project submission – You will submit your final project upon completion
4. Project presentation – You will create a presentation to show your project in completed form