

Project Rubrics and Other Details

Maximum Marks: 25

Submission deadline: 25 November 2024, 5:00pm Pacific Time

Submit all necessary materials including code and data (if needed). Code can be submitted either inside a jupyter notebook or as a python script.

1. Code Quality (7 marks)

- Correctness and functionality (3 marks)
 - Does the code solve the problem and handle edge cases?
 - Does it meet the project requirements?
- Efficiency (2 marks)
 - Is the code optimized in terms of time and space complexity?
 - Are unnecessary computations avoided?
- Structure and readability (2 marks)
 - Is the code well-organized and easy to read?
 - Are proper naming conventions followed?

2. Creativity and Problem Solving (4 marks)

- Originality (2 marks)
 - Has the student taken an innovative approach?
 - Does the project demonstrate an understanding of Python's features and libraries?
- Complexity (2 marks)
 - Does the project go beyond basic syntax, using advanced features?
 - Is there a thoughtful balance between simplicity and complexity?

3. Documentation and Comments (3 marks)

- Clarity and completeness (1.5 marks)
 - Are functions and sections adequately explained with comments?
- Docstrings and documentation (1.5 marks)
 - Are docstrings used appropriately, and is there an overview of the code's purpose?

4. Smooth Running and User Experience (3 marks)

- Error handling and robustness (1.5 marks)
 - Does the program handle exceptions and errors gracefully?
 - Is the code resilient to incorrect inputs?
- User experience (1.5 marks)
 - Is the program easy to run and interact with?
 - Are clear instructions provided for running the code?

5. Presentation (4 marks)

- Write-up on the project (2 marks)

A brief written description of the project should follow this rough format:

1. Introduction: What problem does the project solve?
2. Approach: How was the problem tackled (key libraries, algorithms, design choices)?
3. Results: What were the outcomes, and how successful was the solution?

4. Challenges: What difficulties were encountered, and how were they addressed?
 5. Conclusion and Future Work: Summary and potential improvements or next steps.
- In person presentation (2 marks)
 - Is the write-up well-organized, clear, and free from grammatical errors?
6. Responding to Questions (4 marks)
- Meaningful responses (4 marks)
 - Does the student demonstrate understanding of their project by answering questions clearly?
 - Can they explain their approach, challenges, and decisions?