

Project Report

Name :

Course:

Project :

Instructions: Complete each of the following sections, being as clear and detailed as possible. Your goal is to communicate your thought process and work clearly. Be sure to include discussion of the challenges you faced and how you dealt with them. Discussing these is a valuable part of learning and shows your problem-solving skills! There's no single 'right' way to complete these projects as long as they work correctly, so be creative and honest in your responses.

When preparing your Report, **DO NOT** submit a copy of this template, and **DO NOT** repeat these instructions or questions in your report. Be sure to include all four major sections in your report. You need not use the same section headings or subheadings. Just answer the questions in narrative form.

Problem Statement

Think about and write your answers to these questions in 2-3 paragraphs:

- **Goals:** What are you trying to achieve with this programming task? Think of this as the mission of your assignment. *(Example: The goal might be to create a calculator program that can perform basic arithmetic operations like addition, subtraction, multiplication, and division.)*
- **Inputs:** What information will your program need to get from the user or another source? *(Example: For a calculator program, the inputs would be the numbers to calculate and the operation to perform.)*
- **Outputs:** What will your program give back to the user? *(Example: The output for a calculator would be the result of the calculation.)*
- **Error Handling:** Think about what could go wrong in your program and how you've planned to handle such situations. *(Example: In a calculator, error handling might include dealing with division by zero or entering a non-numeric character.)*

My Design and Development Process

Reflect on these points and write your thoughts in 1-3 paragraphs:

- **Design Decisions:** Describe how you decided to structure your program and solve the task.
(Example: For a calculator, did you use functions for each operation? How did you organize your code?)
- **Efficiency and Clarity:** Do you think your solution is straightforward and efficient? Why?
- **Tools and Methods:** Mention any specific algorithms, data structures, or built-in methods you used.
(Example: Did you use any libraries or specific functions?)
- **Hindsight:** Looking back, do you think your approach was effective? Would you change anything if you were to do it again?

How I Tested My Solution

Describe your testing process and include screenshots of three different test cases in 1-2 paragraphs:

- **Testing Strategy:** How did you go about testing your program? What kinds of inputs did you use and why? (Example: For a calculator, you might test with simple numbers, very large numbers, or invalid inputs.)
- **Normal Inputs:** What regular inputs did you test? (Example: Regular numbers for a calculator.)
- **Special Cases:** Did you test any unusual or edge cases? (Example: Testing division by zero in a calculator.)
- **Results:** Did your program work as you expected in all cases?
- **Screenshots:** Please include three screenshots showing your test inputs and the corresponding outputs.

How It Turned Out

Summarize your experience and learnings in about 1 paragraph: (Think of this section as a chance to step back and look at the bigger picture of what you've accomplished and learned.)

- **Overall Results:** Reflect on how the project turned out. What did you learn from it?
- **Success Evaluation:** Do you think your project was successful? Why or why not?
- **Future Approaches:** Based on this experience, what would you do the same or differently in your next programming project?