# PROJECT DEVELOPMENT PHASE EXCEPTIONAL HANDLING

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Project Name	Project –Building A Website Using Canva

## **EXCEPTIONAL HANDLING:**

## 1. Identify Exceptions:

- Recognize potential exceptional situations in your project, such as input errors, resource unavailability, or unexpected data.

# 2. Use Try-Catch Blocks:

- Encapsulate the code that might raise exceptions within try-catch blocks. This allows you to catch and handle exceptions gracefully.

## 3. Choose Appropriate Exception Types:

- Select or create specific exception types that accurately describe the nature of the problem. Custom exceptions can be used to represent project-specific issues.

## 4. Logging and Messaging:

- Implement logging mechanisms to record exception details, including error messages, timestamps, and stack traces. This information is invaluable for debugging and tracing the source of issues.

## 5. Graceful Error Handling:

- Handle exceptions gracefully by providing user-friendly error messages or fallback mechanisms to minimize disruptions to the user experience.

#### 6. Cleanup Resources:

- Use the `finally` block to ensure that resources, such as database connections or file handles, are properly released regardless of whether an exception is thrown.

## 7. Rethrow or Propagate:

- Depending on the situation, you can choose to rethrow exceptions or propagate them up the call stack for higher-level error handling.

# 8. Define Clear Error Handling Policies:

- Establish and document clear error handling policies that specify how different types of exceptions should be handled within your project.

# 9. Unit Testing for Exception Scenarios:

- Create unit tests that specifically target exceptional scenarios to verify that your exception handling mechanisms work as expected.

# 10. Preventing Unhandled Exceptions:

- Implement proactive measures to minimize the occurrence of exceptions, such as input validation and checking for resource availability before use.

# 11. Use Checked Exceptions (if applicable):

- In languages that support checked exceptions, leverage them to enforce exception handling, ensuring that exceptions are acknowledged and addressed in the code.