

## Generated Notes

### ### **\*\*Building Projects in the AI Era: A Simple Guide\*\***

#### **\*\*1. Learning Phase (Think of it like learning to ride a bike):\*\***

##### **\* \*\*How to Learn:\*\***

- \* **\*\*Documentation/Crash Courses\*\***: Start with the instructions (like the bike's manual) or a quick tutorial.
- \* **\*\*Basic Project\*\***: Build a super simple project using what you've learned. Imagine building a small wooden cart.
- \* **\*\*Stack Overflow\*\***: When you get stuck, see how other people solved similar problems. It's like asking a friend for help.
- \* **\*\*AI Tools (ChatGPT)\*\***: If all else fails, ask an AI for help. Think of it as asking a super smart friend.

#### **\*\*2. Building Projects Phase (Think of it like building a treehouse):\*\***

- \* **\*\*Design First (Low-Level Design)\*\***: Plan your project before writing code. It's like drawing a blueprint for a treehouse.
- \* **\*\*Choosing the Right Tools (Stack)\*\***: Pick the best tools for the job (database, language). Consider the weather and terrain.
- \* **\*\*Database Design\*\***: Plan how your data will be stored. Like organizing your toys in different boxes.
- \* **\*\*Test-Driven Development (TDD) with AI\*\***
  - \* **\*\*Traditional TDD\*\***: Write a test, then write code to pass the test. Like checking if a plank is strong enough.
  - \* **\*\*AI-Enhanced TDD\*\***:
    - \* Use AI to generate code *and* test cases.
    - \* Check if the tests are thorough and cover all parts of the code.
    - \* Refactor the code if needed.

#### **\*\*Key Points for Project Building:\*\***

- \* **\*\*Clean Code\*\***: Focus on writing easy-to-understand code. Think of it as labeling your toolbox.
- \* **\*\*Refactor\*\***: Improve the code generated by AI. Like sanding down rough edges on your treehouse.
- \* **\*\*Debugging\*\***: Be able to find and fix problems in your code. If a plank is wobbly, you need to fix it.
- \* **\*\*0 to 1 vs. 1 to 100 Projects\*\***:
  - \* **\*\*0 to 1\*\***: Building a project from scratch.
  - \* **\*\*1 to 100\*\***: Adding features to an existing project. It's like adding a new room to your treehouse.

#### **\*\*Building Context for AI (Memory Bank):\*\***

- \* **\*\*Create a "Memory Bank"\*\*\***: A folder with markdown files explaining your project to the AI.
  - \* **\*\*Functional Requirements\*\***: What your project needs to do.
  - \* **\*\*Low-Level Design (LLD)\*\***: How the project is structured.
  - \* **\*\*Flows\*\***: How data moves through your project.