

AI-Powered Learning Platform Blueprint

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Phase 1: Foundation Setup (Essential Starting Point)

1. Theme Design (Current Step):

- Purpose: Establish the visual identity for the platform, including cyberpunk aesthetics, consistent design patterns, and reusable components.
- Output: Design documentation, including colors, fonts, logo usage, and templates.

2. Login/Authentication Module:

- Purpose: Secure access to the platform with "Remember Me" functionality and social login (Google, GitHub).
- Output: Fully tested authentication system with documentation for setup and integration.

Phase 2: User Interface and Experience

3. Dashboard Module:

- Purpose: The user's central hub for managing learning paths, tracking progress, and viewing badges and achievements.
- Output: A fully documented and functional dashboard.

4. Daily Log System:

- Purpose: Enable users to document daily progress, struggles, and references, with AI summarizing logs and adjusting learning paths.
- Output: Tested log system with detailed documentation.

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Phase 3: Core Functionality

5. Learning Path Engine:

- Purpose: Provide structured learning paths with dynamic curation based on user input and performance.
- Output: A scalable engine with support for both default and custom learning paths.

6. Developer AI System:

- Purpose: Deliver live coaching, interactive feedback, and automated code validation with a 75 percent passing threshold.
- Output: An interactive AI-powered learning assistant.

Phase 4: Advanced Features

7. Project Hub:

- Purpose: Guide users through the project lifecycle, from planning to completion, with task tracking and feedback integration.
- Output: Comprehensive project management tool tailored for developers.

8. Social and Backup Features:

- Purpose: Allow users to share achievements, compare progress globally, and back up their data.
- Output: Social and backup features fully implemented and documented.

Implementation Plan

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- **Strict Modularity:** Each module works independently but integrates seamlessly into the platform.
- **Documentation for Every Module:**
 - Purpose and overview.
 - Implementation steps and dependencies.
 - Testing and validation criteria.
 - Integration notes and examples.
- **Testing Threshold:** Each module must pass all tests with a 75 percent or higher score before progressing.

Priority Order

- 1. Theme Design (In Progress).**
- 2. Login/Authentication Module.**
- 3. Dashboard Module.**
- 4. Daily Log System.**
- 5. Learning Path Engine.**
- 6. Developer AI System.**
- 7. Project Hub.**
- 8. Social and Backup Features.**