

Project Blueprint: CodeSync

App Overview

CodeSync is a unified coding practice platform that integrates problems from LeetCode, HackerRank, HackerEarth, and more. It provides smart recommendations, built-in code execution, and personalized progress tracking to help users prepare efficiently for technical interviews.

Key Features

- Multi-Platform Integration: Fetch problems from multiple platforms.
- Difficulty & Topic Filters: Easy/Medium/Hard + tags.
- Built-in Code Editor: Execute code with Judge0 API.
- Unified Progress Tracker: Track your activity across platforms.
- Smart Recommendations: Adaptive practice suggestions.
- Daily Challenges: Curated multi-platform problems.
- Gamification: XP, badges, streaks.
- Interview Simulation Mode: Role-specific mock tests.
- Offline Mode: Save problems for offline use.

Tech Stack

Frontend: React Native / Flutter (Mobile), React.js (Web)

Backend: Node.js (Express), Python (optional)

Database: Firebase / MongoDB / PostgreSQL

APIs: Judge0 (Code execution), LeetCode (Unofficial), HackerRank/HackerEarth

Authentication: Firebase Auth / OAuth / JWT

Modules

- Authentication: Sign Up, Log In, OAuth
- Dashboard: Daily tasks, suggestions, progress
- Problem Browser: Filter, search, save
- Problem View: Editor + Judge0 runner
- Progress Tracker: Analytics & insights

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- Preferences: Themes, settings

Monetization Ideas (Optional)

- Freemium model
- Ad-supported free tier
- Paid interview paths or premium features

Target Audience

- Students preparing for placements
- Job seekers
- Developers improving DSA skills

Future Add-ons

- AI mentor for hints and solutions
- User-generated playlists
- Resume & interview feedback