CodeSync

Unified Coding Practice App Blueprint

Project Overview

A unified platform to practice coding problems from LeetCode, HackerRank, HackerEarth, and more. It centr

Core Features

- Multi-platform problem access (LeetCode, HackerRank, HackerEarth)
- Smart filters by topic, difficulty, and platform
- Built-in code editor and execution (Judge0 API)
- Personalized dashboard and progress tracking
- Daily curated challenges
- Gamified learning (XP, streaks, leaderboard)
- Interview simulation mode

Tech Stack

- Frontend: React / React Native / Flutter
- Backend: Node.js (Express) / Python (FastAPI)
- Database: MongoDB / PostgreSQL / Firebase
- Code Execution: Judge0 API
- Auth: Firebase Auth / JWT

Why Use It Over Other Platforms?

- All-in-One Access: Practice problems from multiple platforms without switching tabs
- Unified Progress Tracking: Track LeetCode, HackerRank, HackerEarth stats in one place
- Smart Recommendations: Personalized based on performance and weak areas
- One Editor, One Flow: Solve, run, and test code right in the app
- Mock Interviews: Timed, role-specific sessions
- Offline Support: Download problems to practice without internet
- Gamified Motivation: XP, streaks, and challenges

Unique Selling Points (USP)

- Centralized problem-solving from top coding platforms
- AI-based mentoring and learning paths
- Peer challenge mode and real-time coding battles
- Daily goal tracking and habit-building tools
- Company-specific playlists and role-based roadmaps

Target Users

- Students preparing for placements
- Aspiring software engineers
- Working professionals switching to tech
- Coding clubs, communities, and bootcamp participants

Future Enhancements

- Resume builder with coding stats
- Job board integration (based on skill match)
- Voice-based assistant for accessibility
- Premium prep packs and advanced analytics