

App Functionalities:

- **User Roles:** The app will cater to two main user roles: learners and instructors. Learners can browse courses, enroll, and access learning materials. Instructors can create and upload courses, manage content, and interact with learners.
- **Course Discovery:** The app should enable users to search for courses by category, skill level, instructor, or keyword. Implement filters and sorting options to refine search results.
- **Course Content:** The app should support various course content formats like pre-recorded video lectures, downloadable PDFs, quizzes, and assignments. Consider integrating cloud storage for efficient content delivery.
- **Learning Management:** The app should track learners' progress within a course, including completed lectures, assignments, and quiz scores. Allow learners to resume courses from where they left off.
- **Monetization:** The app can implement a freemium model where basic courses are free and premium courses require a fee. In-app purchases can be facilitated for individual course purchases or subscriptions.
- **Community Features:** Consider incorporating discussion forums or chat rooms for learners to interact with instructors and other learners, fostering a sense of community and engagement.

Technical Considerations:

- **Security:** The app should prioritize user data security. Implement secure login protocols, data encryption, and user authentication measures.
- **Offline Functionality:** Allow learners to download course materials for offline access, catering to situations with limited internet connectivity.
- **Performance:** Optimize the app for smooth performance across various devices and network conditions. Ensure fast loading times for video lectures and course content.

Technical Skills:

- Mobile app development: Experience with building mobile apps by flutter
- Backend development: Knowledge of server-side technologies like Node.js or Python with frameworks like Django or Flask is required.
- Database management: Experience with databases like MySQL or PostgreSQL to store course content, user data, and progress tracking.
- APIs: Familiarity with integrating APIs for payment processing, user authentication, and potentially video streaming.

Non-Technical Skills:

- Understanding of e-learning platforms: Knowledge of how e-learning platforms like Udemy function is beneficial.
- UI/UX design: Expertise in designing user-friendly and intuitive interfaces for mobile apps.
- Project management: Ability to manage the development process effectively, meeting deadlines and budgets.