Project Proposal

1. Project Overview Our project aims to develop a social movie-tracking app that allows users to search for movies and TV shows, view trailers and details, create personalized watchlists, and engage with friends by sharing their movie preferences. The app will integrate an external API, utilize a remote NoSQL database, and incorporate onboard sensors to enhance user experience.

2. Key Features & Requirements

a. Local or Remote Database for Data Persistence

- **Technology:** Firebase Firestore (NoSQL, real-time sync, cloud-based)
- **Data Stored:** Movies, User profiles, watchlists, friend connections, ratings and reviews

b. External API Integration

- **Technology:** TMDB API (The Movie Database)
- **Usage:** Fetching movie details, trailer links, actor information, and poster images

c. Onboard Sensor Integration

- **Microphone:** Enables voice search for movies and TV shows
- **GPS:** Finds nearby theaters and recommends currently playing movies

d. Multi-Device Testing & Optimization

- **Devices:** Pixel 8 series phones and Pixel tablet
- **Responsive UI:** Jetpack Compose ensures adaptability for different screen sizes

e. Clean, Usable UI/UX

- **UI Framework:** Jetpack Compose (Material Design principles)
- **Features:** Dark mode support, smooth animations, intuitive navigation
- **Accessibility:** text scaling, voice input

3. Conclusion This project will deliver a fully functional and engaging social movie-tracking app. By integrating Firestore for real-time data storage, TMDB API for extensive movie details, and onboard sensors for enhanced interactivity, we aim to create an immersive and user-friendly experience. The app will undergo rigorous testing to ensure performance across different devices, making it a versatile and accessible platform for movie enthusiasts.