

TED UNIVERSITY

CMPE 491 / SENG 491 Senior Project Local Generative AI Services Super App Project Proposal Fall 2024

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Project Name	Local Generative AI Services Super App
Project's URL	https://betululkuyurt.github.io/DBU/

Project Idea Description

The purpose of this project is to create a mobile application that integrates popular Al-powered services, such as text-to-video, speech-to-speech translation, text-to-image, and image-to-image, into a single platform. Unlike traditional cloud-based Al solutions, which raise privacy concerns and rely on internet connectivity, this project aims to run all services on the user's device or a local server. This approach ensures maximum user privacy, data security, and independence from external networks, making Al tools more accessible and secure for everyday use. Also since this is a project that combines many generative Al applications inside, there may be more similar services not mentioned above.

The project will help solve several problems in AI technology:

- 1. Privacy Concerns: Many cloud-based AI services store user data on external servers, where it can be accessed by third parties, raising significant privacy issues. This project eliminates such risks by storing data locally, ensuring that sensitive user information remains secure and private.
- 2. Connectivity Issues: Cloud-based services are often inaccessible without a reliable internet connection. This project solves this problem by allowing users to access AI services directly from their device, eliminating the need for constant connectivity.

Solutions and Advantages:

- Privacy and Security: User data remains on the device or local server, preventing third-party access.
- Cost-Effectiveness: A one-time investment replaces ongoing cloud-based fees.
- Speed and Performance: Services function without the need for an internet connection, providing much faster results.

Target Audience: The project targets tech enthusiasts, privacy advocates, budget-conscious users, students, content creators, companies, and young professionals. These users share a common interest in affordable, secure, and accessible technology solutions. The application will appeal to those interested in generative AI, open-source software, and do-it-yourself projects while providing a robust platform for users concerned about data privacy and high costs.