

Project Title

Personalized Recommendation Engine (Media) Web App

Problem Statement

Students and everyday users spend too much time searching for relevant videos or songs. Our project solves this by creating a web application that recommends media based on a user's YouTube history or Google account activity.

Intended Users: Students, music/video lovers, and anyone who wants quicker, smarter recommendations.

Project Goals / Objectives

- Build a web app that recommends videos and songs.
- Suggest related content to keep users engaged.
- Demonstrate teamwork using Jira (project management) and GitHub (code collaboration).

Measurable Outcomes:

- Working prototype of a recommendation engine.
- Ability to show at least 5 personalized recommendations per user.
- Successful integration with a sample Google/YouTube dataset or mock history.

Proposed Features / Scope

Main Features:

- User login (Google account simulation or mock login).
- Fetch user history (simulated from actual data or sample data).
- Generate video/song recommendations latest releases.
- Display related contents on the web interface.
- Team collaboration using Jira and GitHub.

In Scope:

- Web application with recommendation features.
- UI for displaying recommendations.
- Backend logic for recommendation generation.

Out of Scope:

- Full Google API integration (will use sample/mock data instead).

- Mobile app version.

Tools / Technologies

- Frontend: HTML, CSS, JavaScript (static pages served from Express).
- Backend: Node.js with Express.
- Database: Supa Base, SQLite (simple file-based DB, bcrypt for secure password storage).
- Project Management: Jira (task tracking), GitHub (version control).

Risks or Challenges

- **Data Access:** Real Google/YouTube history data may be restricted but we'll use sample/mock data.
- **Cold Start:** New users without history may get less accurate recommendations.
- **Team Coordination:** Managing tasks among 5 people with Jira.