

Project Charter

A. General Information

Project Title:	<i>Music Alchemy</i>
Team Leader:	<i>Barış Hancili</i>
Team Members:	Backend group: <i>Maviş Buse Balcı, Ayça Elif Aktaş, Ahmet Poyraz Güler</i> Web app group: <i>Emre Şimşek, Mert Kuleci</i> Mobile app group: <i>Can İnanır, Onuralp Devres, Bartu Kaçar</i>
Date:	<i>18.10.2023</i>

B. Technology Stack:

Project-Configuration Management:

- *Jira – Issue Tracker*
- *Github – Codebase Tracker*
- *GitKraken Client – Graphical Interface for Git Commits*

Backend stack:

- *Visual Studio Code/Webstorm – Development Environment*
- *NodeJS – Server Environment*
- *ExpressJS – Backend Application Framework*
- *Firebase and/or MongoDB – Database*
- *Postman – API Platform*

Web stack:

- *Visual Studio Code – Development Environment*
- *JavaScript – Programming Language*
- *CSS – Programming Language*
- *React – JavaScript UI Library*
- *Tailwind CSS/Chakra UI – CSS Framework*
- *Router – JavaScript Framework*
- *Axios – JavaScript Library*
- *Zustand – State Manager*

Mobile stack:

- *Android Studio – Development Environment*
- *Kotlin – Programming Language*
- *Jetpack Compose – UI Framework*

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C. Project Scope

Designated features in addition to MVP:

- *Third party authentication such as Google or Apple ID (SSO)*
- *Third party app and library integration such as Spotify, Apple Music or YouTube Music*
- *Friends and Friendship features as well as Friend Group Analysis*
- *Geo-location, genre, and user-activity based recommendations*
- *Recommendation source explanations*
- *Result sharing in multiple social media platforms*
- *Voice Search*
- *Song Recognition App integration such as Shazam*
- *Google Assistant Integration*
- *Generate dynamic third-party application (Spotify etc.) playlist based on user data*
- *Music review*
- *Collaborative playlist*
- *Lyrics Integration*

Very rough effort estimation:

Based on the outlined features and their complexities, the project is expected to result in around **30 man.months**

D. Project Milestones

Milestones/Deliverables	Date
Project Setup and Data Collection	30.10.2023
Implementation of the MVP Features	27.11.2023
Testing and Refinement of the MVP Features	01.12.2023
Project Interim Demonstration	04.12.2023
Software Design Documentation	18.12.2023
Implementation of Additional Features	30.12.2023
Testing and Refinement of the Additional Features	04.01.2024
Project Final Demonstration	06.01.2024