

# AI Powered Music Generation

## Intern Approach Document

### 1. User Customization

We will develop a system that allows users to customize music tracks based on energy levels, genre mix, and tempo. This will involve creating an intuitive interface for users to specify their preferences.

### 2. Genres

We will implement support for the specified genres: Progressive House, Psychedelic Techno, and Deep House. This will involve training our AI model on a diverse dataset that includes these genres.

### 3. Duration

We will ensure that the generated music tracks can have a duration of up to 9 minutes. This will involve optimizing our generation algorithm to produce longer tracks without compromising on quality.

### 4. Thematic Analysis

Our focus will be on genre-based music generation. We will not require any thematic analysis of input text.

### 5. User Interaction

We will enable users to generate and preview up to 5 tracks simultaneously. We will also implement download options at up to 320kbps quality.

### 6. Platform Support

Initially, we will develop the application for Android, with future plans for iOS and web versions. This will involve choosing development tools and frameworks that support cross-platform development.

### 7. Reference and Inspiration

We will use the client's 500 songs as a reference for AI-generated music. We will also follow the style approach of Loudly.com for AI-generated music.

### 8. Algorithm Improvement

We will implement an algorithm that avoids repetitive structures and introduces more variation in the start and end of songs. This will involve researching and implementing advanced music generation techniques.

### 9. User Feedback and Adjustment

We will include a "Contact Us" section with a provided email for users to provide feedback or request adjustments. This will involve setting up a system for collecting and responding to user feedback.

## 10. Development and Release Roadmap

We will create a detailed roadmap for developing and releasing the Android version of the application. This will include key milestones, targeted platforms, and specific development considerations for each platform. We will also consider future iOS and web versions in our roadmap.

## AI Text to Video

### Intern Approach Document

#### 1. Resolution and Quality

We will define the preferred resolution for the generated videos up to 4K to ensure a high-quality output. This will involve optimizing our video rendering pipeline and ensuring our algorithms are capable of producing high-resolution content.

#### 2. Motion and Dynamics

We will develop techniques for achieving fluid motion and dynamic transitions in the generated videos. This will involve researching state-of-the-art techniques in video animation and motion graphics.

#### 3. Text Input

We will implement a user-friendly system for text input. This will include options for manual input as well as file upload options, ensuring flexibility for the user.

#### 4. Customization

We will provide users with options to customize visual elements such as fonts, colors, and backgrounds. This will involve developing a robust customization interface within the application.

#### 5. Audio Integration

We will evaluate the feasibility and desirability of integrating audio into the generated videos. This could include background music or voiceovers, depending on user needs and preferences.

#### 6. Output Formats

We will determine additional output formats or file types to support alongside video. This will be based on user needs, technical feasibility, and industry standards.

#### 7. Personal Use

We will define how the application will cater to personal use, such as personal projects or social media content creation. This will involve understanding our user base and tailoring our features to meet their needs.

## 8. User Interface and Experience

We will outline design preferences for the user interface to ensure a seamless and user-friendly experience. This will involve following best practices in UI/UX design and conducting user testing to gather feedback.

## 9. Platform

We will decide on the targeted platforms for the application (e.g., Windows, Mac, web) and address any specific development considerations. This will involve choosing appropriate development tools and frameworks that support cross-platform development.

## 10. Feedback and Adjustments

We will develop strategies for handling user feedback and addressing requests for adjustments to the generated videos. This will involve setting up a feedback mechanism within the application and ensuring we have the resources to respond to and act on user feedback.