# AI1110 Software Project Report

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## I. Introduction

The Music Player project is a simple application that allows users to play and control the playback of audio files. This project is implemented using the Pygame library in Python, which provides functionality for graphics and audio. The application provides basic functionalities such as playing the next or previous song, pausing and resuming the playback, and displaying the currently playing song.

## II. Implementation

The project is organized into classes and functions to handle different aspects of the music player. The code is structured as follows:

- Importing necessary libraries and initializing Pygame.
- Defining color constants using Pygame's Color class.
- Creating the Pygame screen and initializing the mixer for audio playback.
- Defining a Button class to represent the control buttons in the music player.
- Setting up the initial song list and play stack.
- Creating instances of the Button class for previous, next, and play buttons.
- Setting up the main loop to handle events and update the screen.
- Handling button clicks and updating the play stack accordingly.
- Loading and playing the selected song using Pygame's mixer.

### A. Dependencies

To run the Music Player, the following dependencies are required:

- Python
- Pygame library
- NumPy library

Additionally, the following modules are used:

- sys
- os

## III. Conclusion

The Music Player project provides a basic music player application with features such as playing audio files, controlling playback, and displaying the currently playing song. It demonstrates the use of Pygame and its audio capabilities in Python programming.

## IV. Code

The code for the Music Player can be found at: **GitHub link**

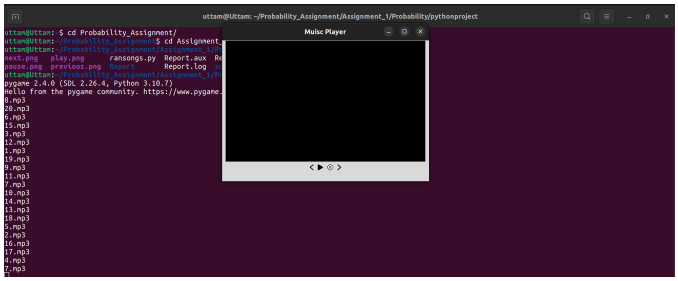


Fig. 1. Result