

# Design Specification

JAVA III

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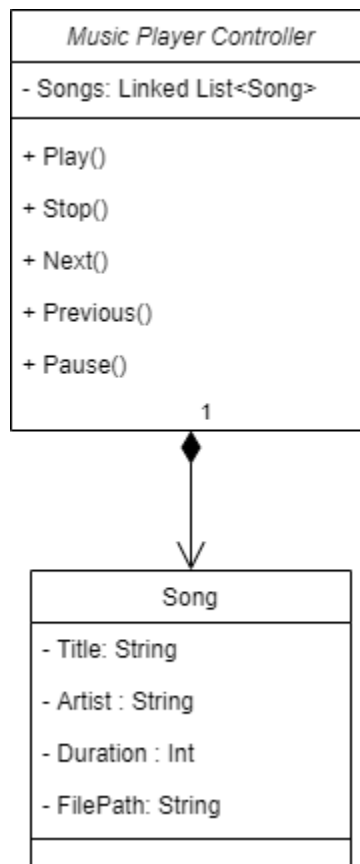
## Question 1

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### Introduction

For this demonstration project I will be making a music player in JavaFX. My music player will include many of the same features as other music players such as the standard controls for play, pause, next, and previous. When a song is added to the list it will be automatically sorted and the sorted list will be displayed. The program will automatically save the list to a csv file which will be loaded again when the program next starts.

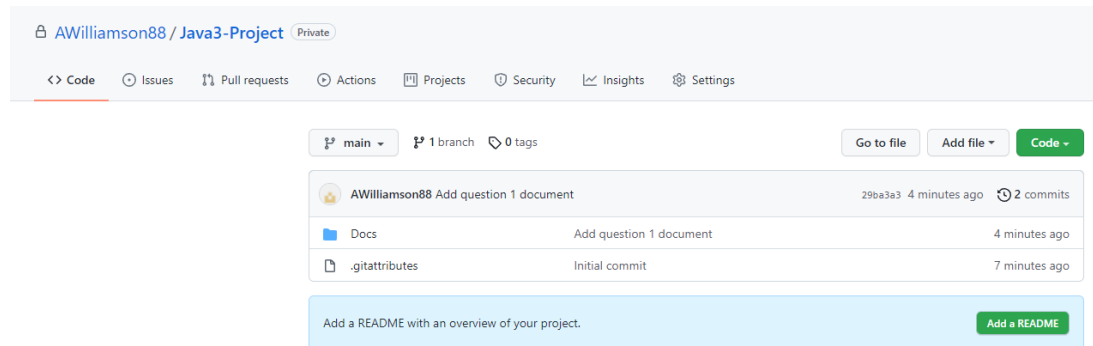
#### 1. UML Diagram



## Question 1

### 2. Source Control

I will be using GitHub as my source control. I am using GitHub because it is an industry accepted tool that I have experience with.



### 3. Test Table

Case	Data	Expected Result	Actual Result
1			
2			
3			
4			
5			
6			
7			

### 4. Sample Unit Test

@Test

```
public void test_Song_Details() {
```

```
    // Given
```

```
    MusicPlayerController controller = new MusicPlayerController();
```

```
    String songpath = "This path";
```

```
    // When
```

```
    Controller.add(songpath);
```

```
    // Then
```

```
    assertEquals(songpath, controller.firstSong().SongPath());
```

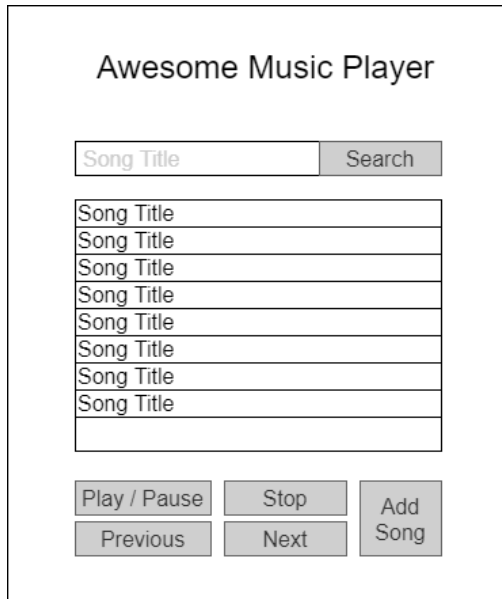
```
}
```

## Question 2

## Question 2

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### GUI Design



The GUI design for the 'Awesome Music Player' is enclosed in a rectangular frame. At the top center is the title 'Awesome Music Player'. Below the title is a search section consisting of a text input field labeled 'Song Title' and a 'Search' button. Underneath the search section is a list view containing ten rows, each with a text input field labeled 'Song Title'. At the bottom of the GUI are six buttons arranged in two rows: the top row contains 'Play / Pause', 'Stop', and 'Add Song'; the bottom row contains 'Previous' and 'Next'.

### GUI Features

- 1x Label: The title of the music player.
- 1 x Textbox: To type the title of a song you want to search for in.
- 1 x List View: To display the list of songs in.
- 6 x Buttons:
  - Search
  - Play / Pause
  - Stop
  - Previous
  - Next
  - Add Song: Loads a file dialog to select which song to add.

## Question 2

### Version Control

As above in question one.

### Debugging

### Test Table

Case	Data	Expected Result	Actual Result
1	Add the first song to the list.	The song is added to the list.	
2	Add another song to the list	The song is added and the list is sorted.	
3	Search for a song in the list	The song is found, Highlighted in the list and starts playing.	
4	Search for a song not in the list	The song is not found. Nothing is highlighted in the list.	
5	Play a song.	The song is highlighted in the list and plays.	
6	Close the program.	The track list is saved to a csv file.	
7	Start the program.	The song list is loaded from the csv file.	

### Screen Shots

1.		
2.		
3.		
4.		
5.		
6.		

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