MANİSA
CELAL BAYAR
UNIVERSITY

# CSE 3105/CSE 3137

# OBJECT ORIENTED ANALYSIS AND DESIGN

## FALL 2020

## COURSE PROJECT: *Media Browser Application*

## *Requirements Analysis Document*

**_Group 30_**

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# 1 Introduction

Media Browser is freeware used for playing video files, playing audio files and displaying images in a number of formats. Media Browser based on JavaFX and Media Browser uses JavaFX 2.2 Media library. Media Browser supports all operating systems which can run Java VM. Media Browser can create/manage playlist for audio and video files.

The formats currently supported are the following (docs.oracle.com) :

- Audio: MP3; AIFF containing uncompressed PCM; WAV containing uncompressed PCM; MPEG-4 multimedia container with Advanced Audio Coding (AAC) audio

- Video: FLV containing VP6 video and MP3 audio; MPEG-4 multimedia container with H.264/AVC (Advanced Video Coding) video compression

- Image: BMP, GIF, JPEG, PNG

# 2 Current System

The current system of is that it is a media browser with an infrastructure that can play music and display images. We will determine the functionality and additional features of system ourselves and arrange this according to the expectations of the users. Our addictional features include creating playlists, music genre categorization etc. it will be.

# 3 Proposed System

## 3.1 Overview

## 3.2 Functional Requirements

- The system must allow the user to play music.
- When the user hit the stop button, it should be stopped.
- The system must allow the user to display images.
- The system must allow the user to create a playlist.
- When a user creates an account, the server shall send a welcome message.
- The system must allow the user to play video files.

## 3.3 Nonfunctional Requirements

- The program must be compatible with Windows 10 operating system.
- The program must be written in Java Programmin Language.
- The program must have a White theme.

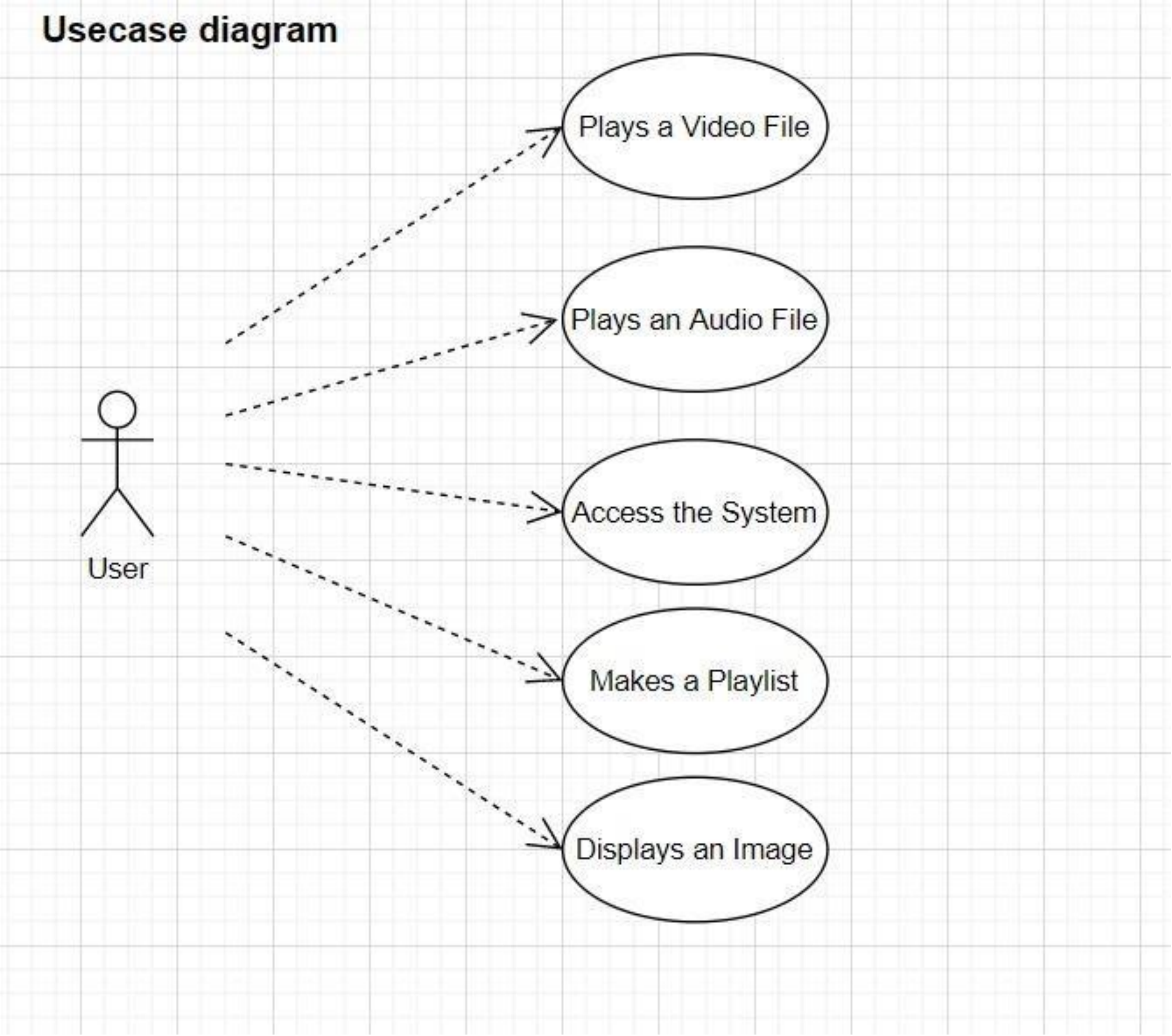
- The visibility must be improved.

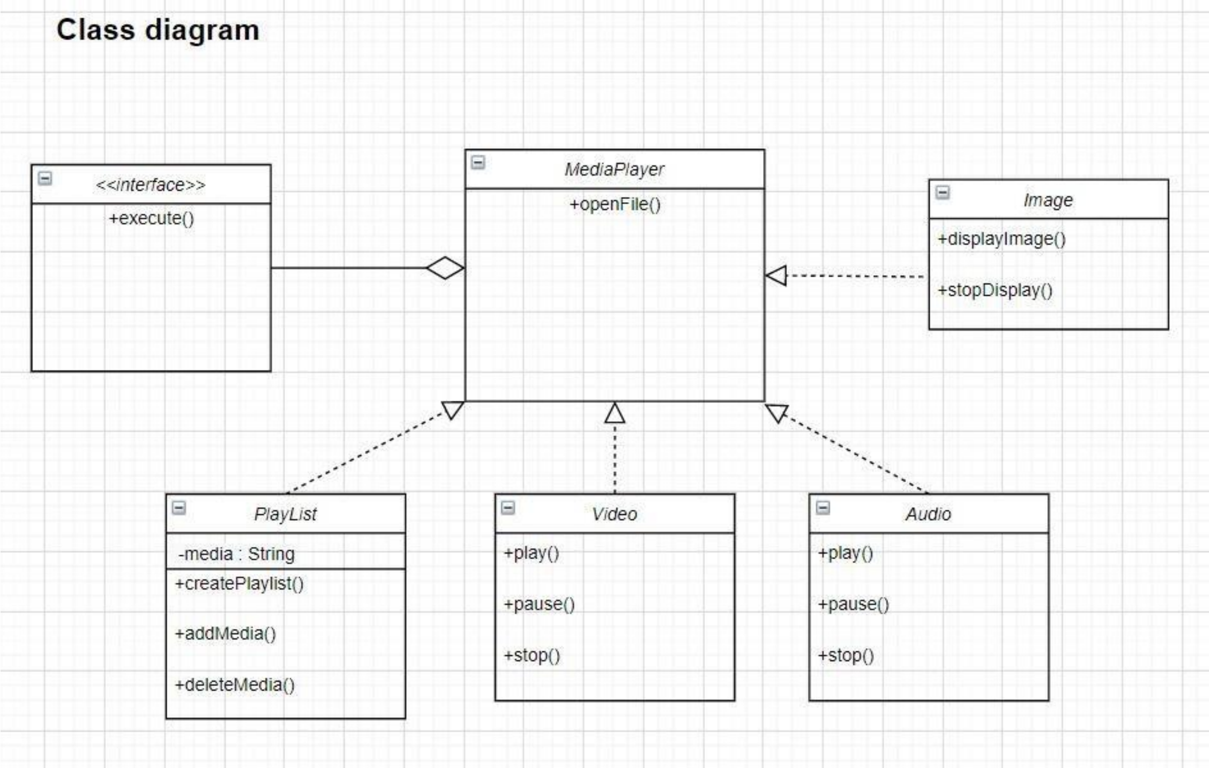
## 3.4 System Models

### 3.4.1 Scenarios

User open the computer and run the application then play the song after a while user does not like that song and user changes the song after that user decides to create a playlist that has user's favorite songs. After that user plays a video file and display images and when user is done with this application, user close the application.

### 3.4.2 Use Case Model





### 3.4.3 Object Model

<Object model section documents in detail all the objects we identified, their attributes, and, operations. As each object is described with textual definitions, relationships among objects are illustrated with class diagrams.>

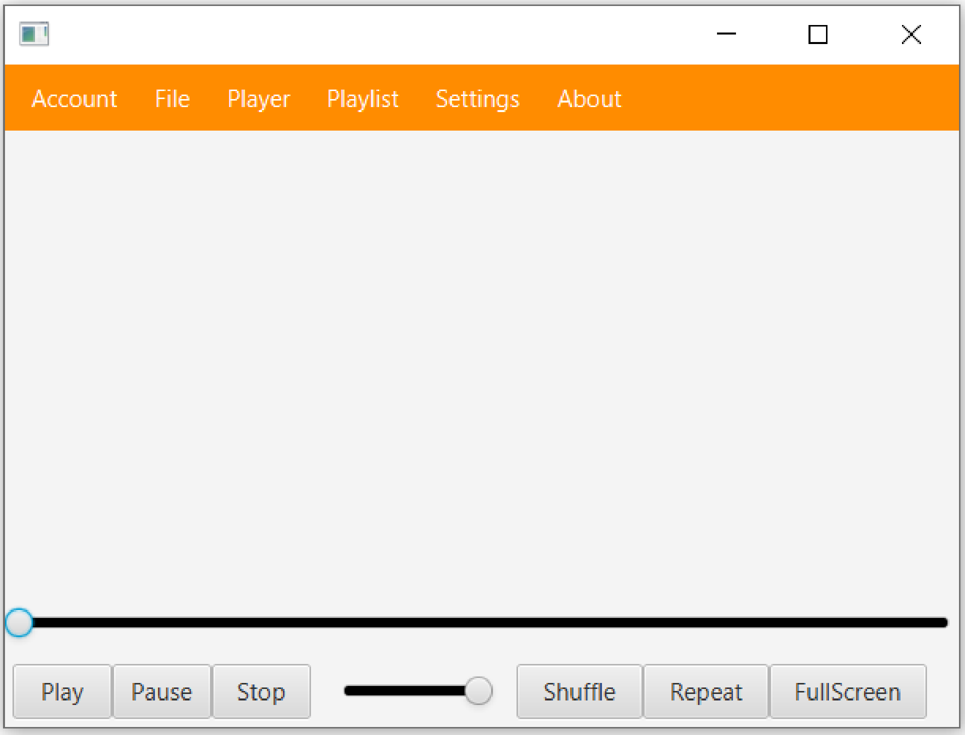
Step 5 activity

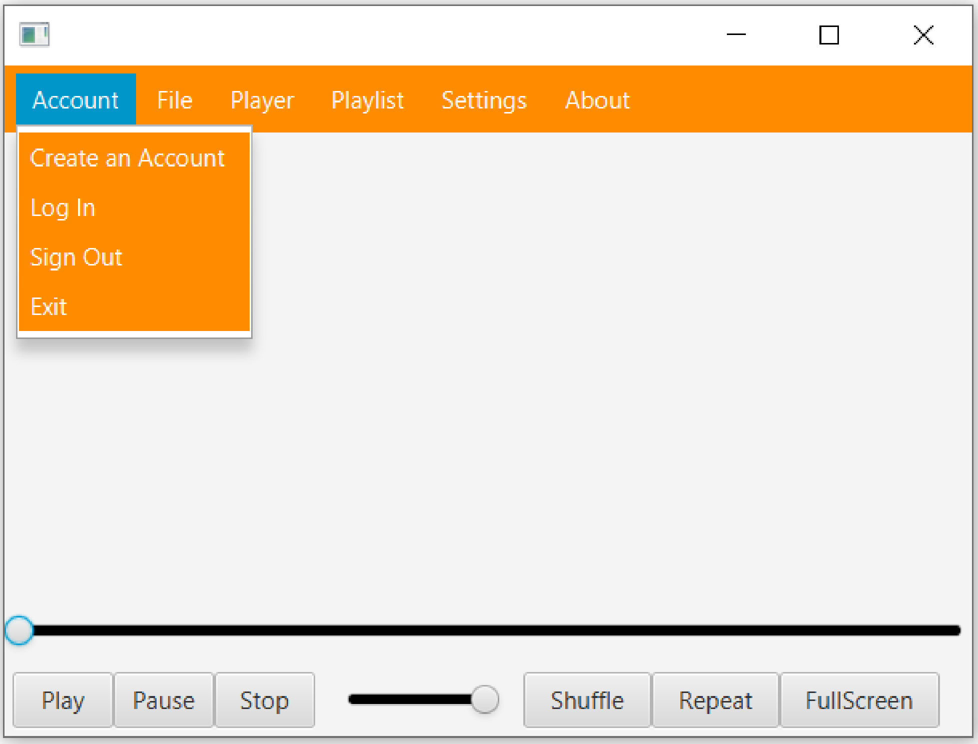
### 3.4.4 Dynamic Models

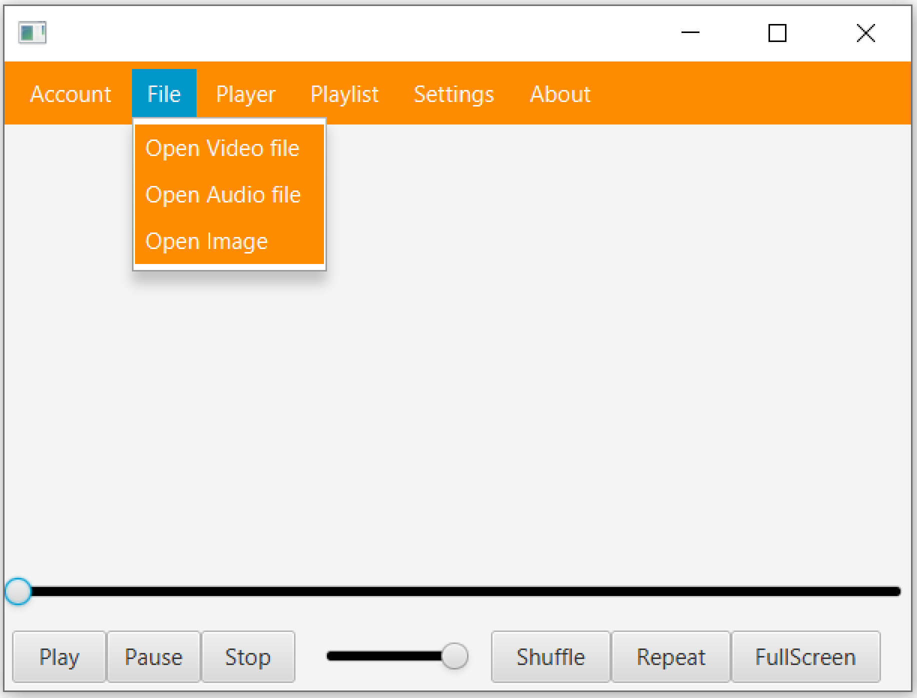
<Dynamic models section documents the behavior of the object model in terms of state machine diagrams and sequence diagrams. Although this information is redundant with the use case model, dynamic models enable us to represent more precisely complex behaviors, including use cases involving many actors.>

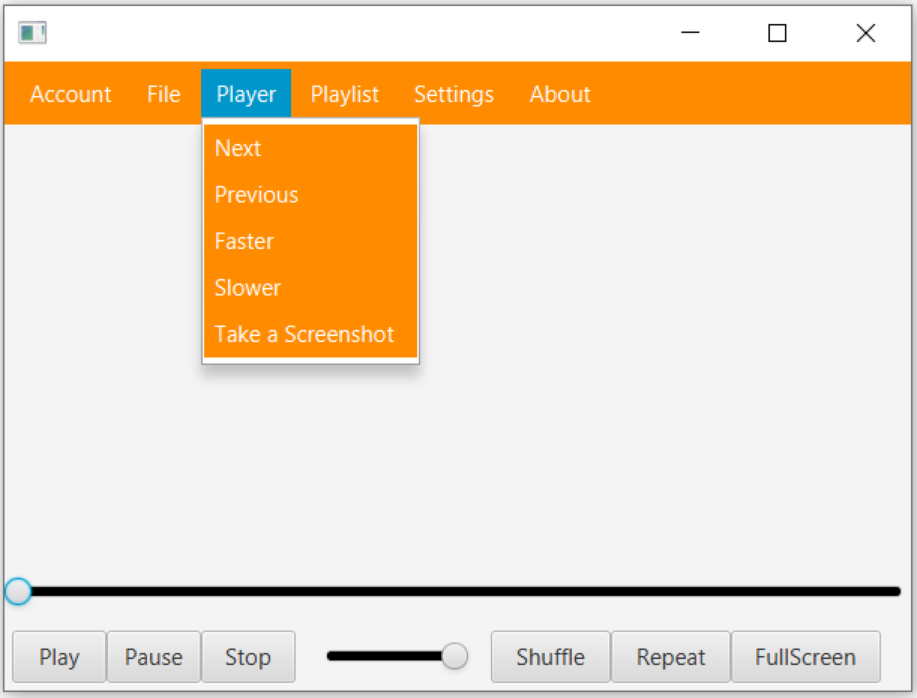
Step 5 activity

### 3.4.5 User Interface Mock-ups






Account
File
Player
Playlist
Settings
About
Open Video file
Open Audio file
Open Image
Play
Pause
Stop
Shuffle
Repeat
FullScreen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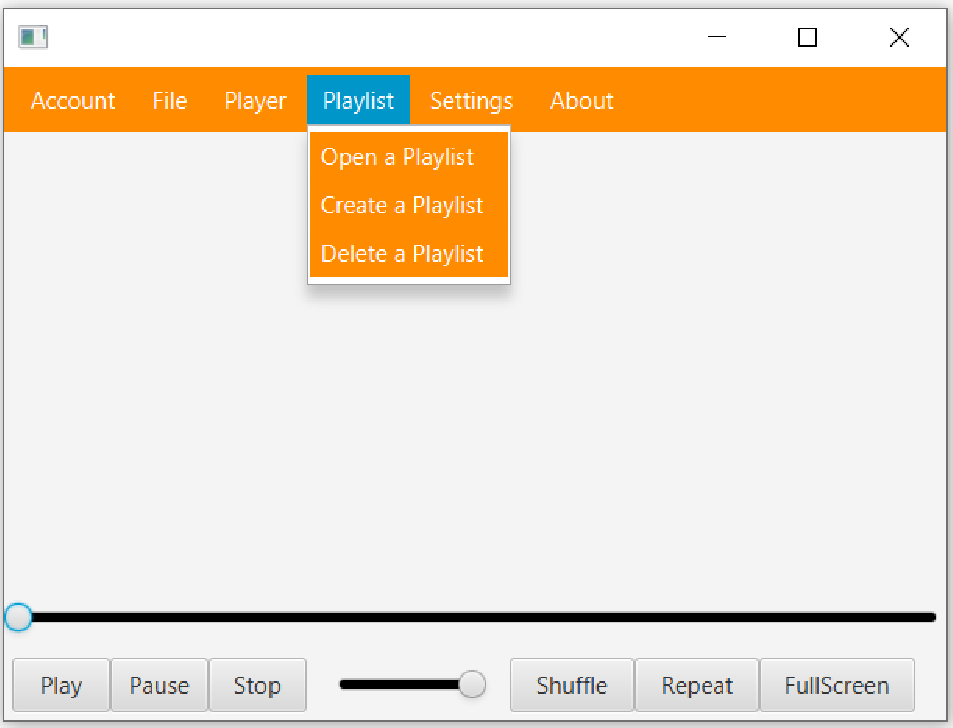
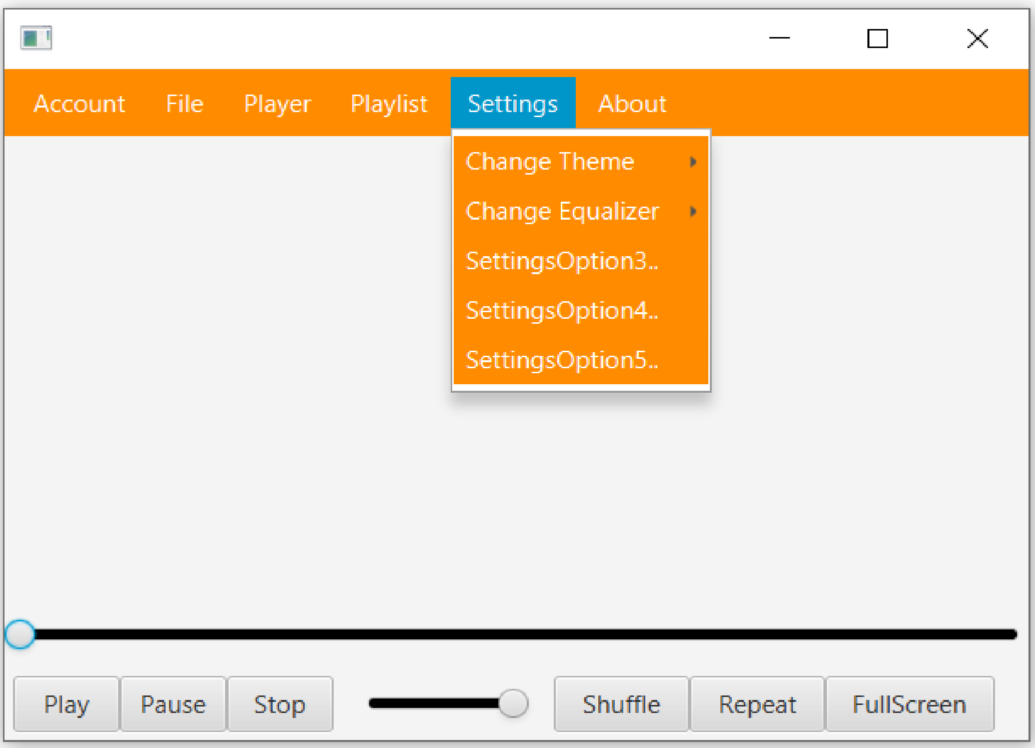
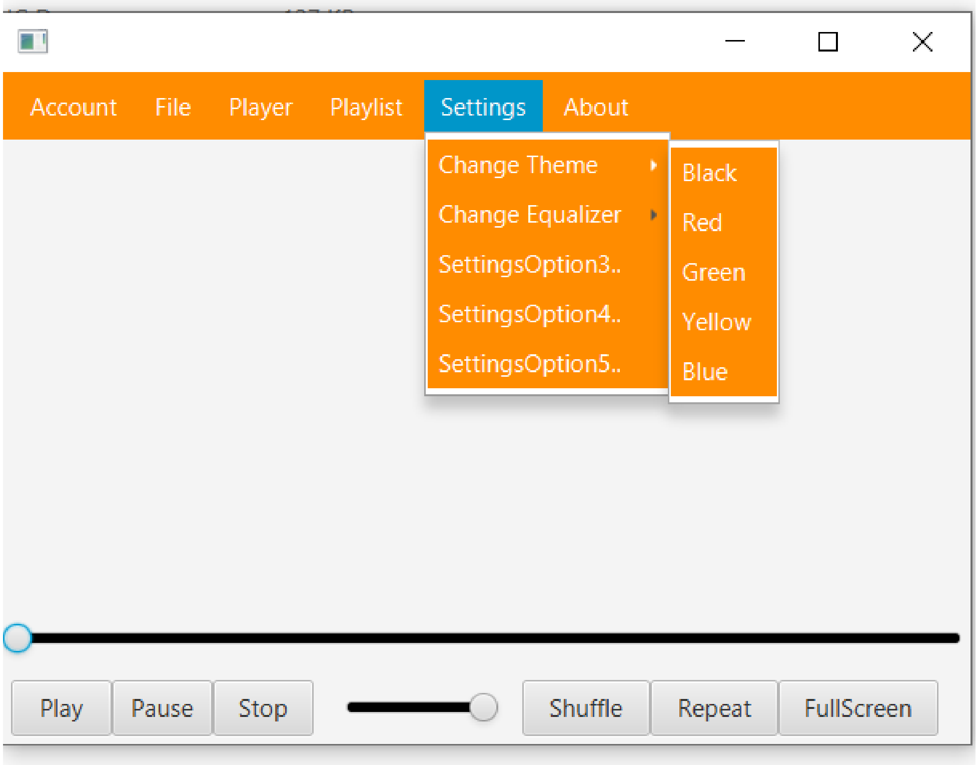
Playlist
Settings
About
Next
Previous
Faster
Slower
Take a Screenshot
Play
Pause
Stop
Shuffle
Repeat
FullScreen


Account
File
Player
Playlist
Settings
About
Open a Playlist
Create a Playlist
Delete a Playlist
Play
Pause
Stop
Shuffle
Repeat
FullScreen


Account
File
Player
Playlist
Settings
About
Change Theme
Change Equalizer
SettingsOption3..
SettingsOption4..
SettingsOption5..
Play
Pause
Stop
Shuffle
Repeat
FullScreen


Account
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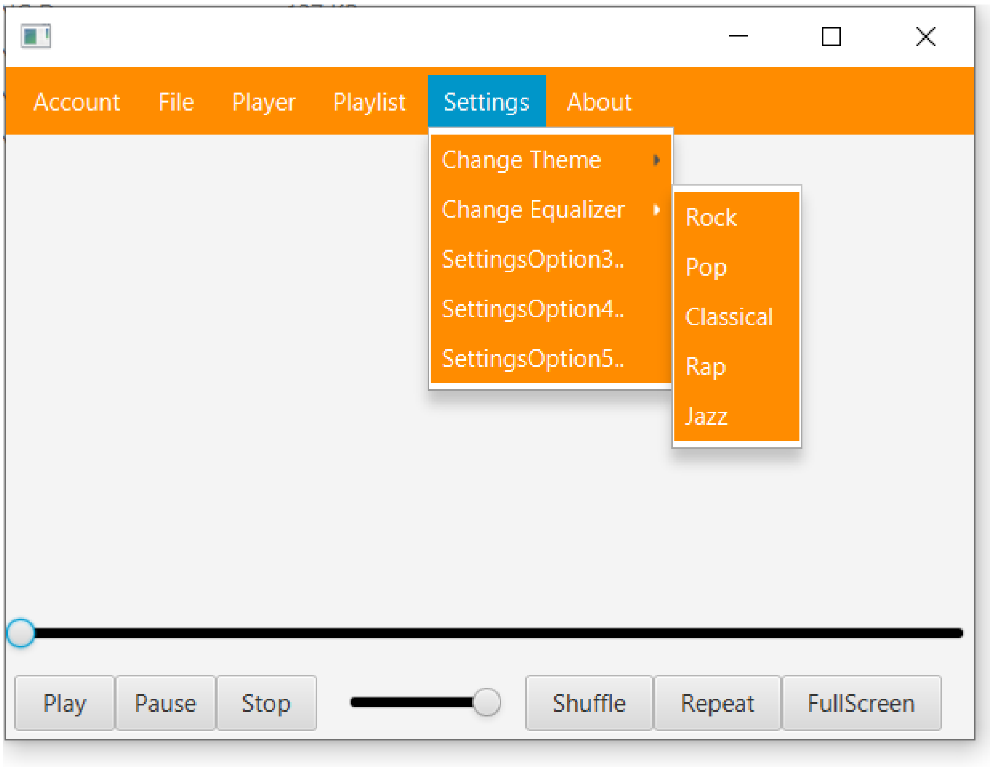
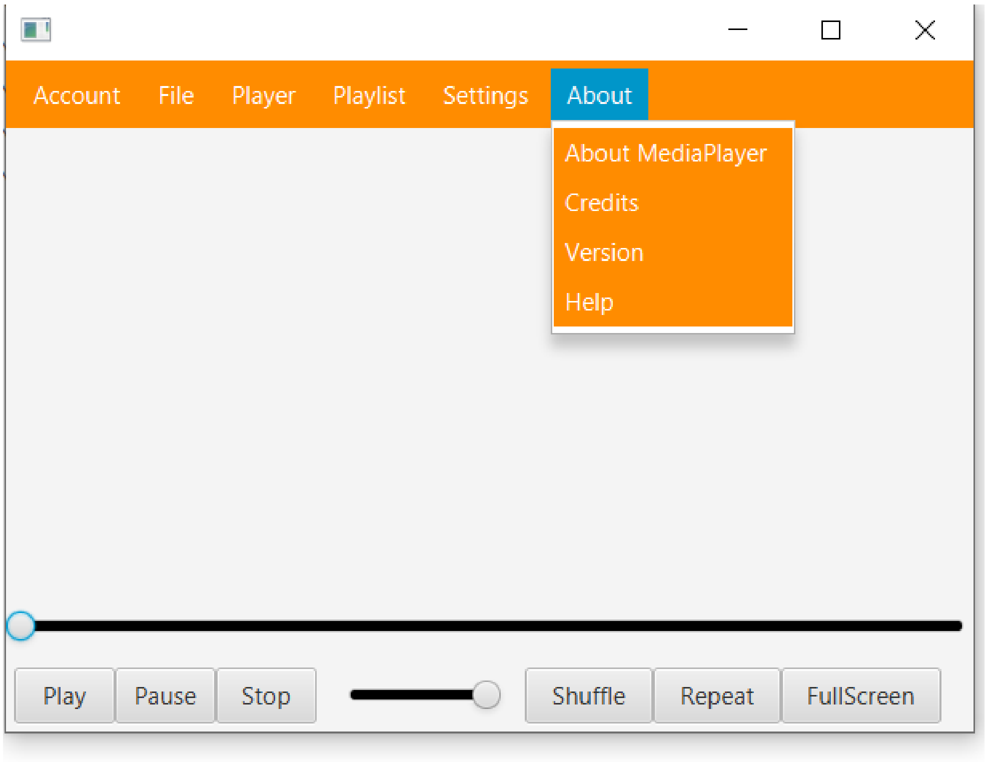
Playlist
Settings
About
Change Theme
Change Equalizer
SettingsOption3..
SettingsOption4..
SettingsOption5..
Black
Red
Green
Yellow
Blue
Play
Pause
Stop
Shuffle
Repeat
FullScreen


Account
File
Player
Playlist
Settings
About
Change Theme
Change Equalizer
SettingsOption3..
SettingsOption4..
SettingsOption5..
Rock
Pop
Classical
Rap
Jazz
Play
Pause
Stop
Shuffle
Repeat
FullScreen



# 4 Glossary

<We also maintain a glossary of important terms, to ensure consistency in the specification and to ensure that we use the client's terms. We explain the application domain concepts that need to be defined precisely, as these terms could have a different interpretation in other contexts.>

Step 3, 4 and 5 activity

1 Introduction

Media Browser is freeware used for playing video files, playing audio files and displaying images in a number of formats. Media Browser based on JavaFX and Media Browser uses JavaFX 2.2 Media library. Media Browser supports all operating systems which can run Java VM. Media Browser can create/manage playlist for audio and video files. The formats currently supported are the following (docs.oracle.com) :

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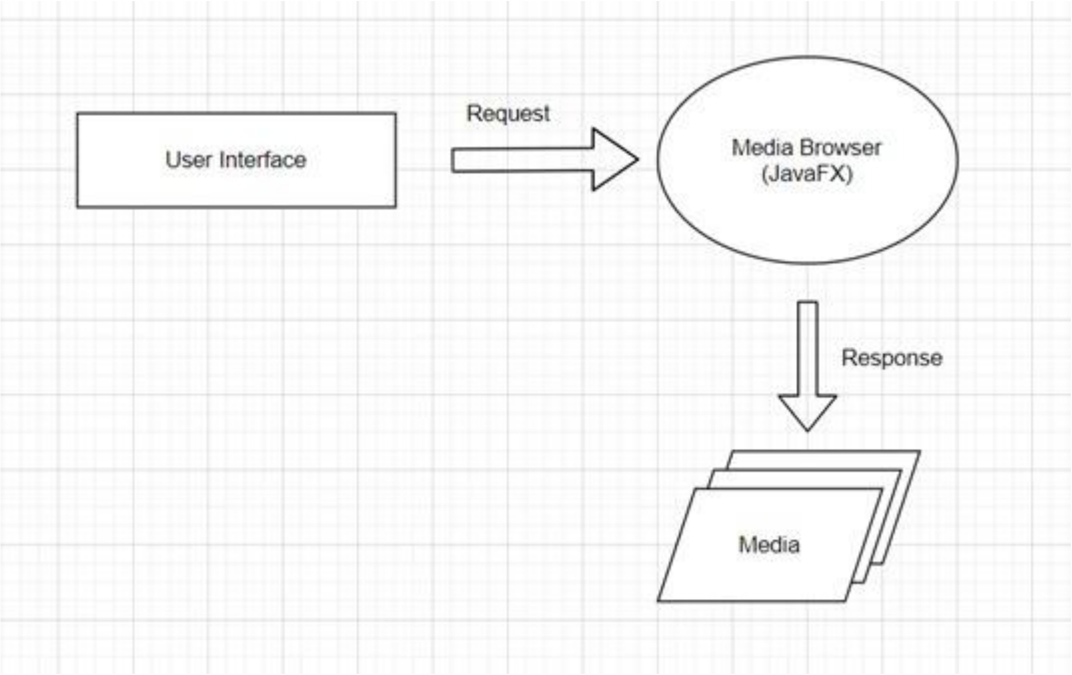
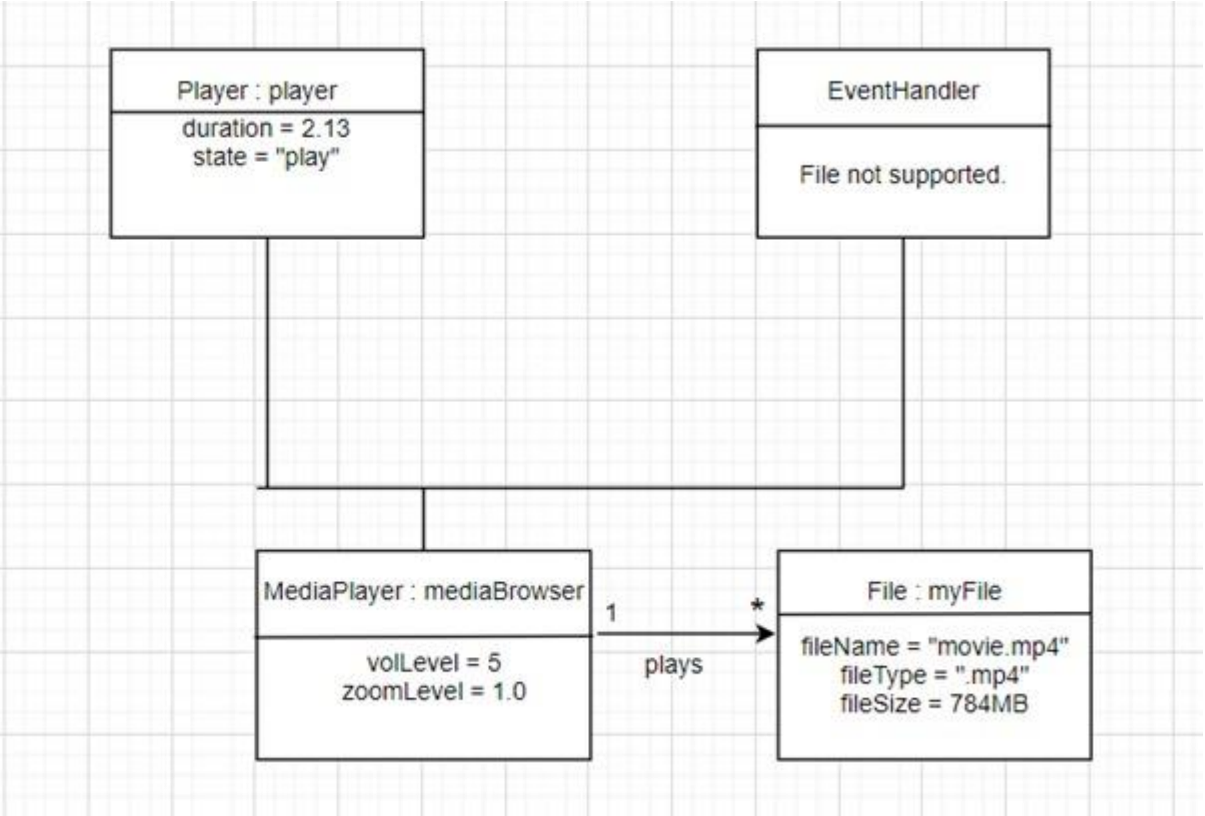
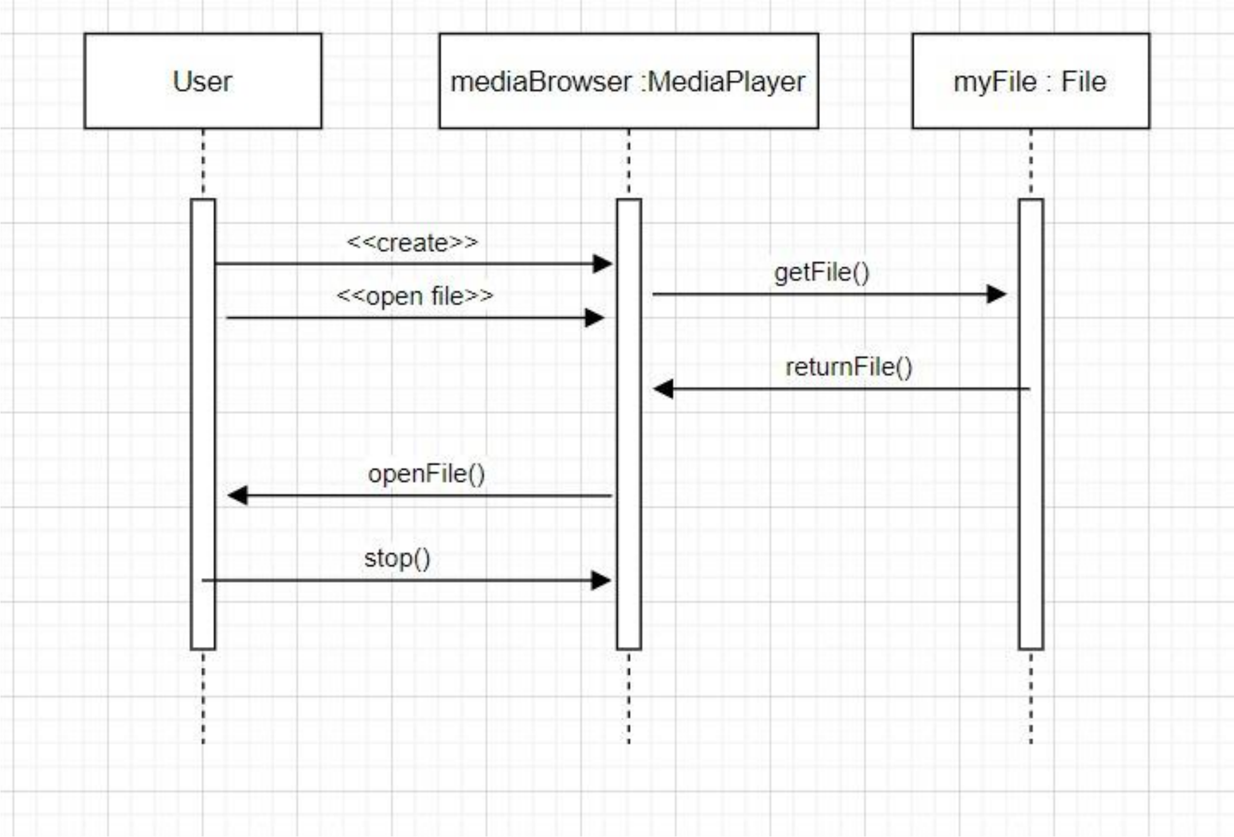
1.2 Design goals

Objective of this project is to design and implement user friendly, platform independent media player which can play most of the audio files, video files, display images and create playlists.





Play module: The main function is to display the information of title, lyrics and time about the media, and some of the media player's functional keys, such as play, pause, stop, last, next, backward and forward.


User
mediaBrowser :MediaPlayer
myFile : File
<<create>>
getFile()
<<open file>>
returnFile()
openFile()
stop()