CSE 3105/ CSE 3137

OBJECT ORIENTED ANALYSIS AND DESIGN

FALL 2020

COURSE PROJECT: *Media Browser Application*

System Design Document

Group 30

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1 Introduction

Media Browser Application 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;

•   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
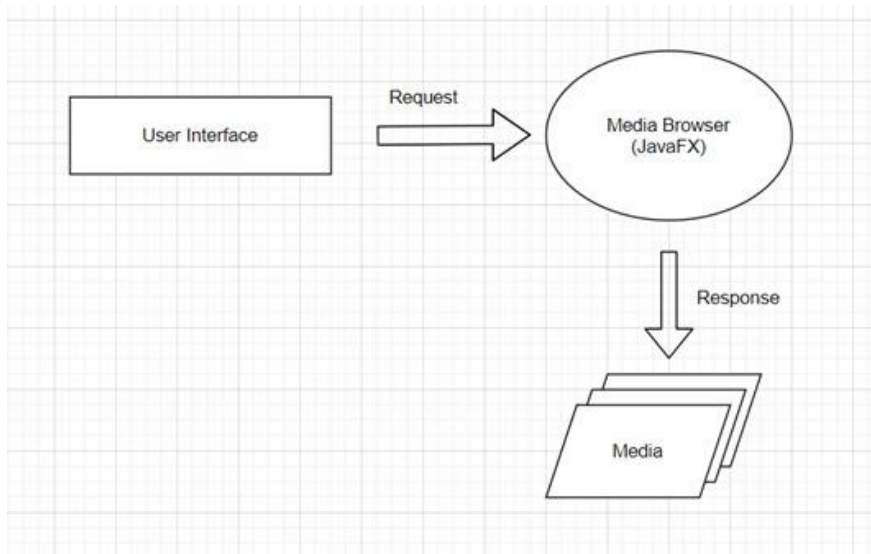
1.1 Purpose of the System

1.2 Design goals

Using Java. Media Browser Application must run on multiple operating systems and support at least Windows, Mac OS X and Linux, Java is chosen for implementing Media Player. By using Java, the same code of Media Player can run on multiple platforms that support the Java Virtual Machine. 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. Projects goals are:

- Modifiability
- Understandability
- User-friendliness
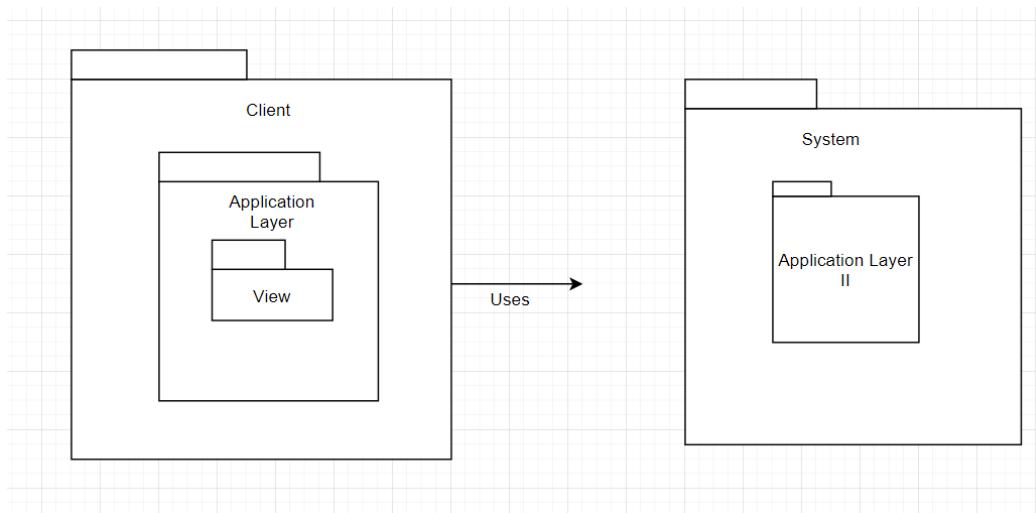- Ease of learning/use/remembering
- Portability

2 Current Software Architecture
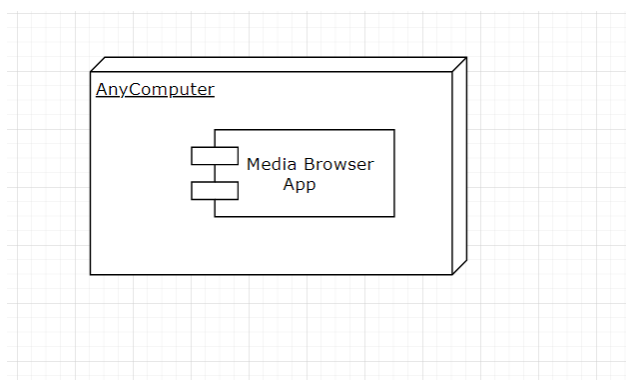
Project has no current software to replace.

3 Proposed Software Architecture

3.1 Subsystem decomposition

3.2 Hardware/software mapping

3.3 Persistent data management
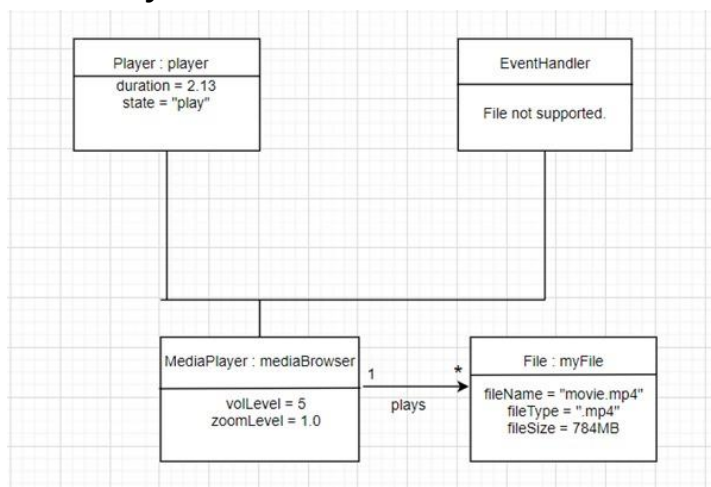
Media Browser Application supports no persistent storage.
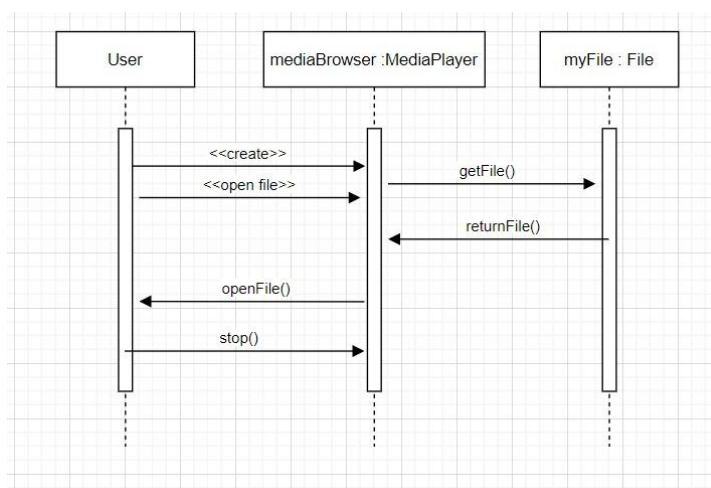
3.4 Access control and security

In this project there is no security concern. Because project don't have any login or user database system.

3.5 Boundary conditions

4 Subsystem Services

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.

5 Glossary

6 References