CSE 3105/CSE 3137

OBJECT ORIENTED ANALYSIS AND DESIGN

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COURSE PROJECT: *MEDIA BROWSER APPLICATION*

Requirements Analysis Document

Group 25

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1 Introduction

In this project, we are expected to develop a “media browser application” that provides you displaying photos, playing music and video in many different file formats. Current systems have some issues like complex interface designing, low performance, consuming so much resources, unfunctional tools, etc. The purpose of this project to achieve developing a media browser application that covers all those needs. As success criteria, we accept to make implemented all defined functions of system given below.

2 Current System

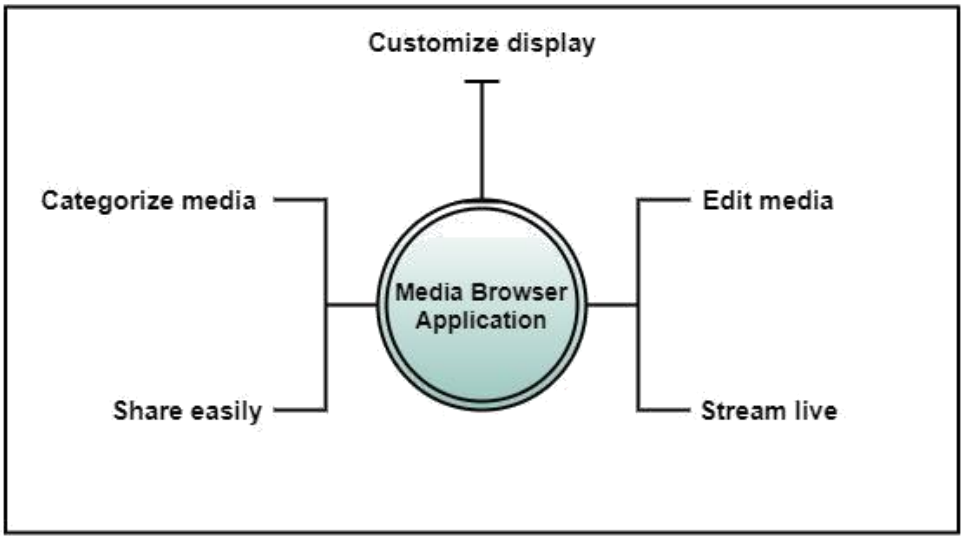
As a result of our surveys and researches, we see that almost every user is not satisfied with the media player they use today. While we were designing our application, we included the requested new functions by users and developed the problematic parts. In other words, the aim of our project is not only to realize the necessary things, but to satisfy the users in the most demanded subjects.

3 Proposed System

You will find documents and schemas of the requirement elicitation and the analysis model of our system in this section.

3.1 Overview

You can see a functional overview of the system below.



Overview of the system

3.2 Functional Requirements

- The user should be able to search for suitable files on the system they use (Windows, Linux, MacOS, etc.) or drag them to the program.
- After opening the program, the user should be able to view the files (pictures, music, videos) in the desired format.
- The user should be able to categorize files in a suitable format, view them programmatically, delete or open files categorized in the program.
- There should be a section where the user can make permanent edits on the files in the appropriate format.
- The user must have a section (brightness settings, color settings, etc.) to adjust the screen for herself.

- The user should be able to adjust the files in the appropriate format as they want. For example: If the opened file format is video, it can stop or resume the video.

3.3 Nonfunctional Requirements

- The program must be able to open 3 formats that are pictures, music and videos.
- The format of the files should be determined.
- Must be compatible with new hardware devices (current).
- Checking audio output devices for video and music type file formats.
- A help page should be created.
- Java will be used as software language. (Constraints)
- Eclipse should be used as an IDE. (Constraints)

3.4 System Models

3.4.1 Scenarios

Scenario #1

- Matt browses his social media account; he clicks on the live stream link shared by his favorite artist.
- After the live stream, he searches for his own created playlist of songs from the same artist.
- Matt selects the list he wants from the search results and plays it.
- Matt shares his playlist with his friend Kristen, who loves this artist, on his social media account.

Scenario #2

- Clara realizes that her best friend Mary's birthday is approaching. So, she decides to make a video to celebrate Mary's birthday.
- Clara finds so many videos and photos with Mary on own computer. She selects some of those and opens them in media editor.
- She creates a new video with those materials and adds a background music.
- Clara finishes her editing by adding new filters to her video.
- When the day has come, she sends her own made video to her best friend Mary from her social media account.

Scenario #3

- Lily is a wedding photographer.
- She keeps her works on her computer and uses her old works to give ideas to new couples.
- Lily categorizes her old wedding photographs by archiving them according to their concept.
- Lily starts working with a new couple and, at the couple's request, looks for examples of the concept of a country wedding.

Searches her archive for the keywords "countryside wedding".

Lily also creates a new playlist for the couple in her music library.

Lily accesses her media easily and quickly whenever she needs it.

3.4.2 Use Case Model

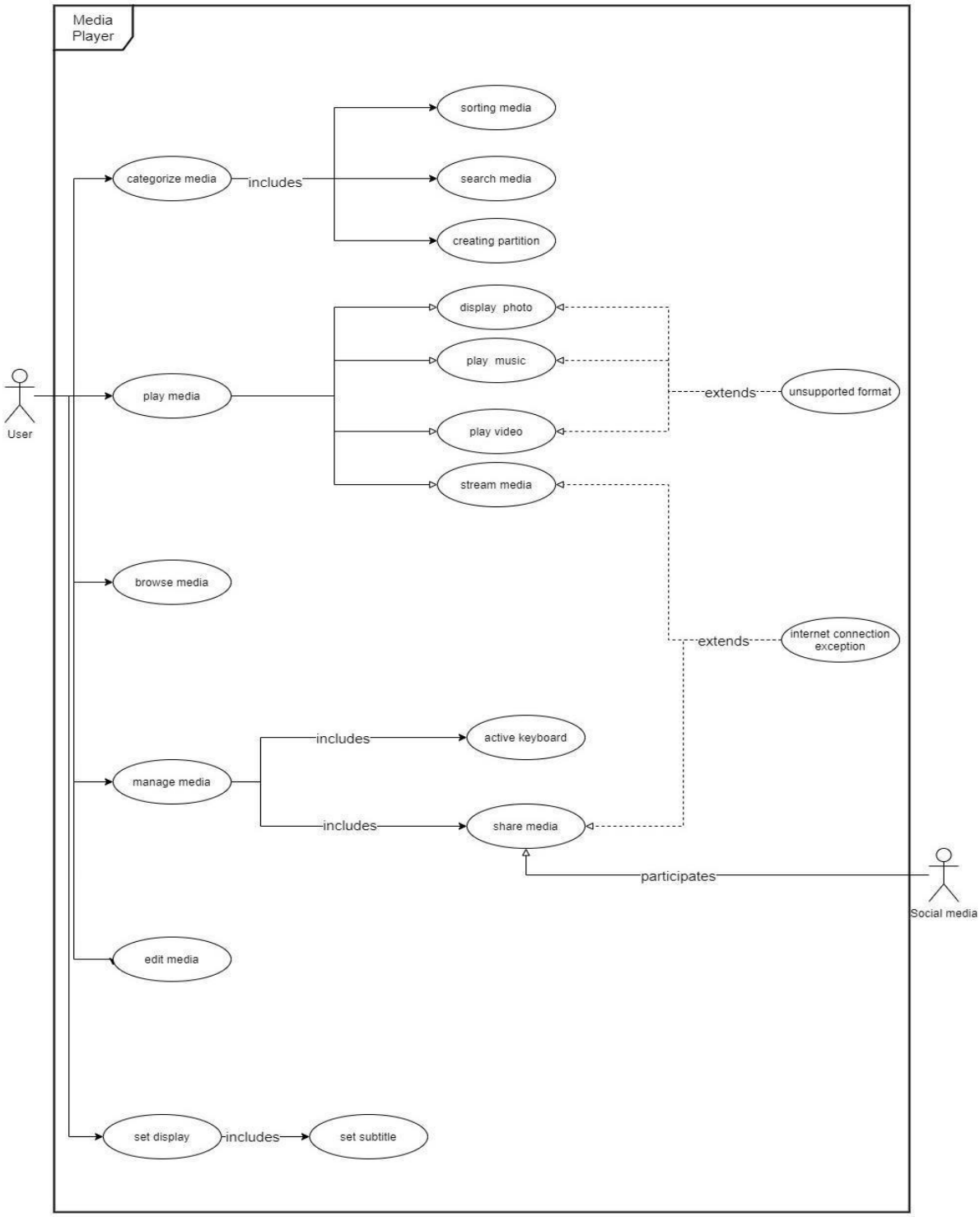
Textual Description of 3 Critical Use Cases

1. *Use case name:* ***Play media***
2. *Participating Actors:* User
3. *Entry condition:* The User is logged into the Media system.
4. *Flow of Events:*
    - User opens the Media System
    - User browse media in his/her own operating system or if there is media that it previously categorized, he/she can open media in categorized media
    - User selected media is displayed by the media system
5. *Exit Condition:* The user viewed the file, or the user has received an explanation about why transaction could not be processed
6. *Exceptions:* The user is notified if unsupported format is tried, the information screen is reflected.
7. *Quality Requirements*: None

1. Use case name: ***Manage media***
2. *Participating Actors:* User
3. *Entry condition:* The user enter the manage media system.
4. *Flow of Events:*
    - User opens the Media System
    - User browse media in his/her own operating system or if there is media that it previously categorized, he/she can open media in categorized media
    - Media System display the manage media operations
5. *Exit Condition:* Keyboard activated, or media shared.
6. *Exceptions:* The user is notified if internet connection is lost, the information screen is reflected.
7. *Quality Requirements:* None

1. *Use case name:* ***Categorize media***
2. *Participating Actors:* User
3. *Entry condition:* The user is logged into the categorize media section.
4. *Flow of Events:*
    - User opens the Media System
    - Media System display the Categorized Media operations.
    - Media system display the category if the user has already created a Category. If there is not category, media system returns the browse media
5. *Exit Condition:* The user sorting, search or create a partition the media.
6. *Exceptions:* None
7. *Quality Requirements:* None

Use Case Diagram



3.4.5 User Interface Mock-ups

Link : https://drive.google.com/file/d/1TI1hJ51tvc7wjZs2B0F95Z4kU3kH98HM/view

4 Glossary

media the term refers to photos, music and videos

file format the term refers to differently encoded photos, music and videos. (i.e. JPEG, PNG for images)

functional requirement the term refers to requirements that you need functions to fulfill them

non-functional requirements the term refers to passive requirements that the system must have

scenario the term refers to specific usage scenario of application