

CS 2410 – Spring 2017

Assignment #7 Video Player

Introduction

The purpose of this assignment is to get experience:

- Using basic GUI components
 - Slider
 - Media
 - MediaPlayer
 - MediaViewer
 - FileChooser
 - MenuBar
 - Menu
 - MenuItem
- Java Concepts
 - Multimedia
 - EventHandling
 - Observers

General requirements

In order to receive full credit your code must follow appropriate class conventions

Program overview

You will create a simple video player application. It will have basic functionality to play, pause, stop, and seek.

Requirements (150 points)

Your program should implement the following

1. Include a menu bar at the top
 - a. File
 - i. Open
 - ii. Close
 - iii. Exit (I know this really doesn't belong here)
 - b. Help
 - i. Documentation
 - ii. About
 - iii. (These don't really have to do anything, but it seemed to bare without it)
2. Open
 - a. Opens a FileChooser dialog to let a user pick a video file.
 - b. Should filter on video files with .mp4, .m4v, and .m4a extensions
3. Close
 - a. Should close the file and perform all other operations so the file cannot be viewed or played (including sound)
4. Exit
 - a. Should exit the program
5. Video Controls at the bottom of the screen
 - a. Play/Pause
 - b. Stop
 - c. Volume
 - d. Timeline

6. Play/Pause
 - a. Should toggle to show play or pause appropriately
 - b. Should not do anything (including errors) when a video is not loaded
7. Stop
 - a. Stops the video
 - b. Stop puts the play position to the start of the video automatically
8. Volume
 - a. Slider to adjust the volume
 - b. Make sure to read the documentation about the volume to use appropriate values
9. Timeline
 - a. While playing
 - i. Should move as the video plays
 - ii. Should allow a user to move to seek a new position in the video
 - b. While stopped
 - i. Should reset to start when stop is pressed
 - ii. Should allow a user to move timeline and start in that position (video does not need to change until play is hit)

Bonus

You may earn some bonus points for adding features. This will make up for lost points on previous assignments. You must do a pop-up dialog when your program starts, telling the TA which bonus features you implemented.

1. (5pts) Add graphics to menu items
2. (5pts) Use graphics for play/pause/stop buttons
3. (15pts) Resizes the window after a video is loaded so the entire window is filled with the video. The controls will appear when the mouse moves, and will disappear after 10 seconds of no movement. Also add a full-screen option.

What/How To Turn In (READ THIS)

Submit your files on Canvas according to class conventions

Due: November 17, 2017