For my final project I developed a media player with WPF. It can handle videos, music, and pictures and has different behaviors and layout depending on which type of media is opened.

Some of the features and behaviors include:

* The media control bar (play, pause, volume, etc.) disappears after 5 seconds of no activity and I hide the cursor. They will reappear whenever the mouse is moved.
* It has a load button that opens a file chooser so you can choose which media file to open within the program.
* Outside of my program entirely, if you right click on a media file, choose “open with” and then browse to my exe, you can play that media file through my program. This was a very challenging feature, but I think it was worth the time because it behaviors like a built-in media player.
* It has a full screen option.
* Variable speed control for media with a timespan (videos & music).
* Different view options (normal, fill, and stretched).
* It keeps track of the current time into the media and displays the total time as well.
* The slider that keeps track of the current time into the media is both draggable and clickable. Once dragged or clicked to a spot it will adjust the media to that timeline.
* It has a mute/unmute button.
* It has volume control with the same abilities as the progress slider.
* Pressing the spacebar will pause/play the media depending on the current state.
* It has different behavior and layout depending on the type of media loaded in.
  + For an audio file, it will play it and keeps the same controls as a video file. However, it will also play a video of musical notes on loop until the song is over. If the song is paused, the video will pause as well.
  + For an image file, the layout will change to a control bar with only a left, right, and rotate button. When an image file is loaded, I look through the rest of the directory it was loaded from and store all other .jpg’s into a list. Then by clicking the left button, it goes to the previous picture in that directory and by clicking the right button, it goes to the next picture in that directory. Also, the rotate button rotates the image.

In addition to the features my program offers, I also spent a lot of time making the UI look good and act appropriately. For instance, I used images with transparent backgrounds for all the buttons and styled them to have the correct behavior I wanted. Also, I styled the sliders to match the theme of the application and added an icon to my application to make it look more professional.

Instructions:

* Open and run the program, then click on the load button in the upper left corner. Choose a media file and play around with all the options.
* If you have access to media files of all three types, (audio, video, image) please try them all out.
* Also, please try the “open with” approach to open a media file with my application. Note: When opening a file in this manner, if it is an image, it will not find all the other images in the directory like my load button does.