CSS 450 Final Project Proposal

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Introduction

Our final project will be to design and implement a simple animation system. We plan to display a stick figure with moveable parts (pivot points) defined at the joints. The user will have the option to move the character's appendages around these joints at time key frames.

The idea would be for the user to set the character at some starting position, set a new key frame (pick a point on the timeline, and change the character) then interpolate over time what the movement was using our own calculations. This would create the animation.

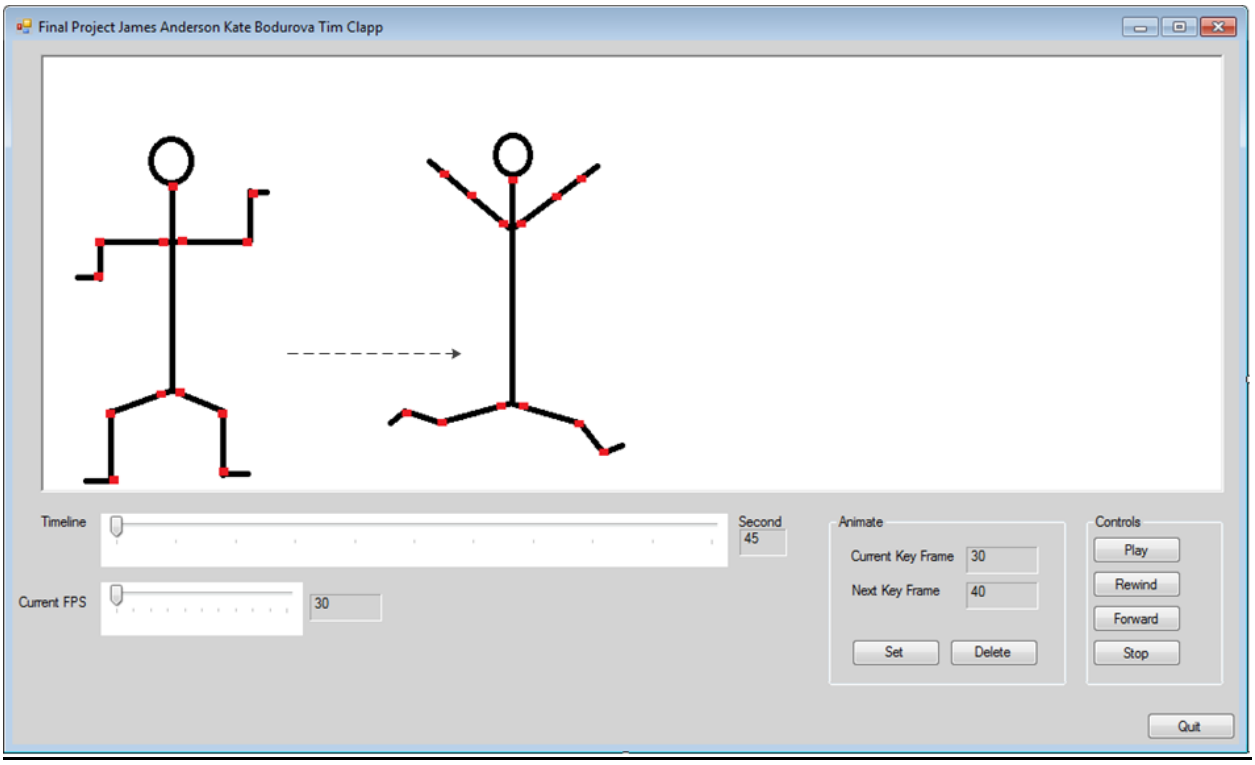
Design & Implementation

- Stick Figure / Character – this character would have a number of moving parts, where each part is moveable via hierarchical transformations. The user will have the option to click on the appendage and move it accordingly to the mouse down and subsequent mouse movement.

- Timeline – the timeline element will be a visual representation of the passage of time. It also will allow the user to create and select points in time where the character will move from one position to another. The user will also have the option to dictate the number of frames per second. This will allow the animation from key frame to key frame appear fast or slow.

- Run Controls – The user will be presented will a number of button controls that will allow the user to start and stop the animation.

GUI Screenshot


Final Project James Anderson Kate Bodurova Tim Clapp
Timeline
Second
45
Current FPS
30
Animate
Current Key Frame
30
Next Key Frame
40
Set
Delete
Controls
Play
Rewind
Forward
Stop
Quit