

Introduction to Programming II

Project Log

Project title:	Snappy Art Pad
Topic:	Week 14
What progress have you made this topic?	
Submitted midterm this week. Next plan is to catch up on Algorithms & Data Structures I lessons since a-bit behind.	
What problems have you faced and were you able to solve them?	
None	
What are you planning to do over the next few weeks?	
<ul style="list-style-type: none">• <input type="checkbox"/> Question came up to add Undo functionality in the app. Going to investigate, if possible, to add Undo feature.• <input type="checkbox"/> Get "Mickey Mouse" sample images.	
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?	
Still on target.	

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Project Log

Project title:	Snappy Art Pad
Topic:	Week 15
What progress have you made this topic?	
Catch up on Algorithms & Data Structures I lessons since a-bit behind. Found Minnie Mouse sample images for the Animation GIF tool. Read documentation on the P5js.createLoop package I plan on using to generate the GIF for the Animation GIF tool.	
What problems have you faced and were you able to solve them?	
None	
What are you planning to do over the next few weeks?	
<ul style="list-style-type: none">Complete the Shape tool to draw basic shapes by 10 February 2022.	
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?	
Still on target.	

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Project Log

Project title:	Snappy Art Pad
Topic:	Week 16
What progress have you made this topic?	
<p>Draw shapes when double click.</p> <p>Draw basic shapes: Circle, Rectangle, Triangle together with setting line width, stroke colour, fill colour.</p> <p>Next to look at more complex shapes.</p> <p>ITP2 Week 16 and week 17. Plan to start this coming week on Test cases.</p> <p>System Testing and Acceptance Testing.</p> <p>Need to look at "Editable shapes" video to see how I can make my current shapes editable.</p> <p>Put "Undo" feature on Hold to focus on shapes.</p>	
What problems have you faced and were you able to solve them?	
None	
What are you planning to do over the next few weeks?	
<ul style="list-style-type: none"> Complete the Shape tool to draw basic shapes by 10 February 2022. 	
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?	
Still on target.	

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Project title:	Snappy Art Pad
Topic:	Week 17
What progress have you made this topic?	
<p>Draw shapes when with single click (previous week was double click) but make sure mouse is within the canvas area by adding mousePressedOnCanvas function to HelperFunctions.</p> <p>Add Undo feature to Shape and Stamp tool extensions as per sample found: https://editor.p5js.org/stalgiag/sketches/ynaav4Msl.</p> <p>Start with System Testing and Acceptance Testing test cases with the goal to have complete test cases for the entire application.</p> <p>Maybe to still add an editable shape as per video, am busy playing and thinking about different ideas to make shapes editable.</p>	
What problems have you faced and were you able to solve them?	
None	
What are you planning to do over the next few weeks?	
<ul style="list-style-type: none"> Start with animation tool on 10 February 2022. 	
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?	
Still on target.	

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Project Log

Project title:	Snappy Art Pad
Topic:	Week 18
What progress have you made this topic?	
<p>Fix some bugs found and make some suggested changes from feedback received from Friends.</p> <p>1) on Safari and Chrome, the slider hide and can't see the background. Update the slider CSS as per https://nikitahl.com/style-range-input-css</p> <p>2) Rename "Stroke Weight" to "Stroke Width".</p> <p>3) Indicate eraser width.</p> <p>4) Indicate stroke width on Mirror Tool.</p> <p>5) Fix bug in p5.dom.js where if you call show() on an element then it set display: block which cause my Undo button that I show / hide to be placed underneath the toolbar. Fixed by setting display to nothing.</p> <p>6) Remember stroke and fill colour between the extensions</p> <p>7) Stamp tool - Display an error message if the user doesn't select an image</p> <p>8) Visually show the current line width selected by the slider</p>	
What problems have you faced and were you able to solve them?	
None	
What are you planning to do over the next few weeks?	
Start with animation tool on 10 February 2022.	
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?	
Still on target.	

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Project title:	Snappy Art Pad
Topic:	Week 19
What progress have you made this topic?	
<p>Start work on the GIF animation tool: My plan is to add the dependency and get a basic animation with GIF export by using hard coded array of the Mini Mouse images. That proof the core functionality.</p> <p>Add the p5.createLoop dependency and implement the example app with the spinning animation ellipses as per the GitHub page but find that it doesn't work since it can't reference the canvas that gets created in sketch.js.</p> <p>Since the p5.createLoop library is open-source I can fix this problem:</p> <p>Pull down the latest source code from GitHub repo: https://github.com/piratesjustar/p5.createLoop</p> <p>Put this under the lib folder and point my index.html to reference it. Update package.json to build on a Mac OSX since the original build target only works on a MS Windows machine.</p> <p>Make changes to the p5.createLoop library by being able to pass in the canvas into the createLoop function.</p> <p>Second problem i found is that the default frame rate and frame per second rate is too high so by default a GIF image is 60 frames long and takes almost a minute to create.</p> <p>In p5js.createLoop the duration is hard coded to 3 and the frame per second is calculated as:</p> <pre>const framesPerLoop = Math.floor(loopOptions.duration * loopOptions.framesPerSecond)</pre> <p>The total frames to create in the GIF is calculated as:</p> <pre>const gifTotalFrameCount = loop.framesPerLoop * (endLoop - startLoop)</pre> <p>I found this by looking at the Browser console, saw "creating GIF with 6 frames"</p>	

<p>then track the code down by searching for the string and figuring out how the code works inside gif.js that generate the GIF.</p> <p>Update the library to take the options "framesPerSecond" and "duration" pass in as parameters.</p> <p>I successfully create a GIF image of Mini Mouse that repeat / don't repeat (based upon "repeat" parameter sent to gif parameter options) at a frame per second rate of 2, duration of 3 seconds at total of 6 generated frames.</p> <p>Drawing app now use the modified version of p5js.createLoop that is under /lib folder.</p> <p>Documentation for reference of p5js.createLoop:</p> <p>https://github.com/mrchantey/p5.createLoop</p> <p>Documentation of gif.js library used by p5js.createLoop:</p> <p>https://github.com/jnordberg/gif.js#user-content-options</p>	
What problems have you faced and were you able to solve them?	
Had to modified p5js.createLoop library to meet my requirements.	
What are you planning to do over the next few weeks?	
<ul style="list-style-type: none"> Find some friends that can be my users to test the application and provide feedback in form of a survey. Look at the UI and functionality to allow a user to provide and edit the images to animate. 	
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?	
Still on target.	

Introduction to Programming II

Project Log

Project title:	Snappy Art Pad
Topic:	Week 20
What progress have you made this topic?	
<ul style="list-style-type: none">• Find some friends that can be my users for the test and provide feedback.• Look at different UI options and functionality to allow a user to provide and edit images for the animation tool. <p>Idea is to have 12x boxes that allow a user to drop images into the boxes. Press a Play button to show the animation at work.</p>	
What problems have you faced and were you able to solve them?	
None this week	
What are you planning to do over the next few weeks?	
Complete the animation tool extension.	
Are you on target to successfully complete your project? you aren't on target, how will you address the issue?	
Still on target.	

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Project Log

Project title:	Snappy Art Pad
Topic:	Week 21
What progress have you made this topic?	
<ul style="list-style-type: none"> • Animation tool: • Write a proof of concept (POC) that is under the “poc” folder in the codebase to • Test the upload of images in a frame set for animation. • Had to upgrade to latest version of p5.js to let drag and drop function works. • I also updated the main app codebase. <p>Complete 60% of the animation tool.</p>	
What problems have you faced and were you able to solve them?	
None this week	
What are you planning to do over the next few weeks?	
Complete the animation tool extension.	
Are you on target to successfully complete your project? you aren't on target, how will you address the issue?	
Still on target.	

Introduction to Programming II

Project Log

Project title:	Snappy Art Pad
Topic:	Week 22
What progress have you made this topic?	
<ul style="list-style-type: none">• Final week to submit the assignment.• Complete the animation GIF tool.• Send application release to some friends to do Usability Testing and provide their feedback.• Bug fixes and final tweaks.	
What problems have you faced and were you able to solve them?	
None this week	
What are you planning to do over the next few weeks?	
Are you on target to successfully complete your project? you aren't on target, how will you address the issue?	
Still on target.	

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Project Log

Project title:	Snappy Art Pad
Topic:	Extra time until new deadline of 28 March 2022
What progress have you made this topic?	
<ul style="list-style-type: none">• Final tweaks and bug fixes from feedback received by friends.	
What problems have you faced and were you able to solve them?	
None this week	
What are you planning to do over the next few weeks?	
Are you on target to successfully complete your project? If you aren't on target, how will you address the issue?	
Still on target.	