

# Operating Systems

CMPT 424

## -Lab 2

Goals

### Manipulating the Canvas

This approximately one-hour active learning exercise will help you make progress on the practical aspects of developing your operating system.

Instructions

1. Open up index.html in your development environment.
2. Look at the following code:

```
<div id="divConsole" style="margin:4px; width:500px; height:500px; float:left;">
  <canvas id="display"
    width="500px"
    height="500px"
    tabindex="3">
  </canvas>
</div>
```

That's the canvas. You will also want to look at `canvastext.ts` to see how the characters are drawn and `deviceDriverKeyboard.ts` to understand key press processing. Read through that code before moving on.

3. Add the new features as specified in your Issues and *iProject 1*. Demonstrate programming best practices or Alan will get bitchy.
4. Test everything.
5. Test again.
6. Keep testing. Still seriously.
7. Read chapters 23.9, 23.11, 23.12, and 23.13 in the 8<sup>th</sup> edition of our text.

Questions

1. How is your console like the ancient TTY subsystem in Unix as described in <https://www.linusakesson.net/programming/tty/> ?

Resources

- [https://developer.mozilla.org/en-US/docs/Web/API/Canvas\\_API/Tutorial](https://developer.mozilla.org/en-US/docs/Web/API/Canvas_API/Tutorial)
- <https://developer.apple.com/library/safari/documentation/AudioVideo/Conceptual/HTML-canvas-guide/Introduction/Introduction.html>
- <http://unixpapa.com/js/key.html>



Grading

Your work on this lab will contribute to your grade for *iProject 1*.

Submitting

Commit your work to your **private** GitHub account in an appropriately-named folder. Make sure to tag your commit messages with the issue number they address.