

The background of the slide is a grayscale image of a circuit board. It features a complex network of black lines representing traces and several solid black circles representing vias or components. The circuitry is arranged in a somewhat symmetrical, horizontal pattern. A solid black horizontal band runs across the middle of the image, partially obscuring the circuit board design. In the center of this dark band, the text 'CMSC 131' is written in a large, white, sans-serif font. Below it, the text 'Summer 2018' is written in a smaller, green, sans-serif font.

CMSC 131

Summer 2018

Reminder: Please put away your laptops



- Sorry... no electronic devices in lecture
- Please DO bring a laptop to discussion sessions (labs)

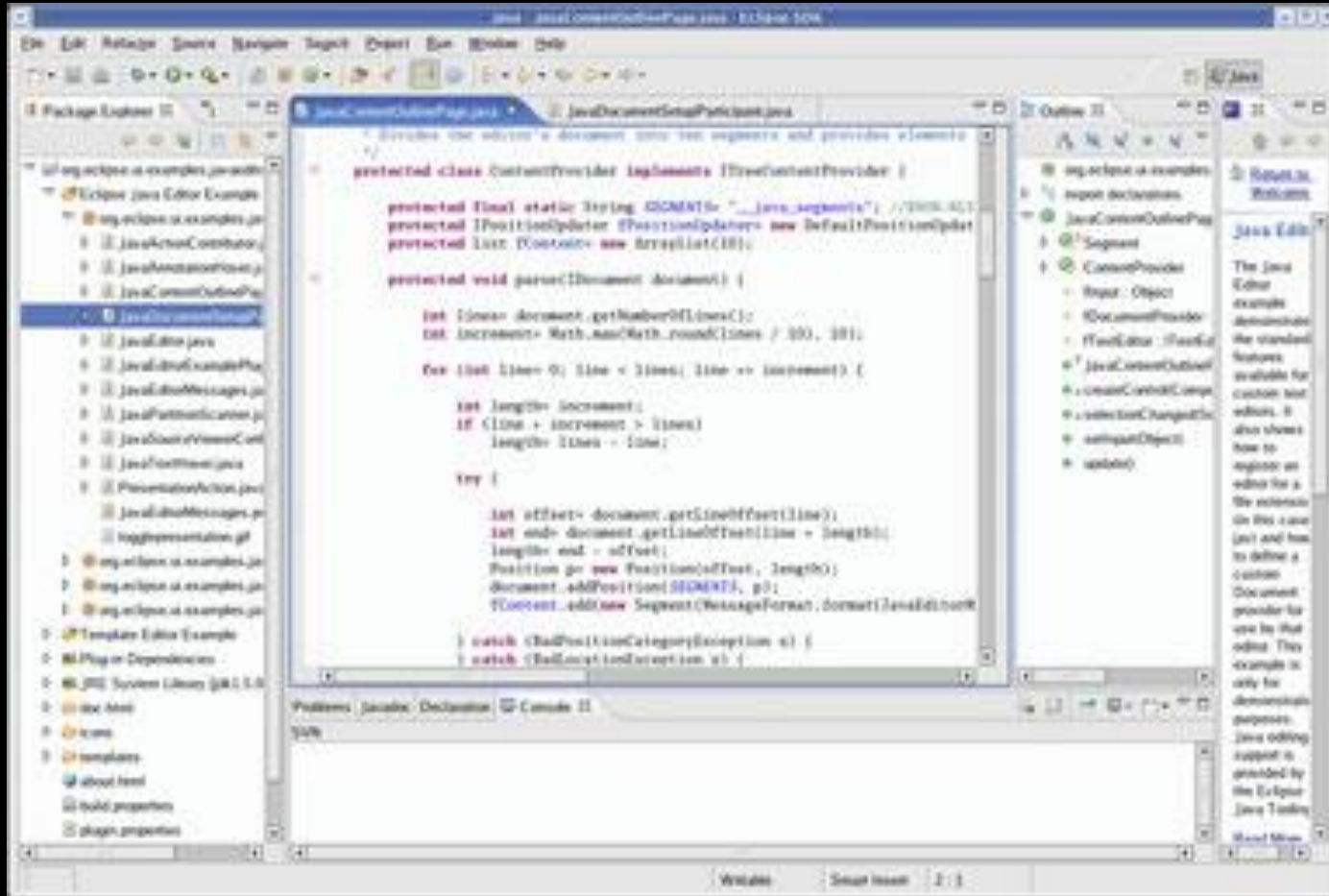
Reminder: Class webpage

- Look over all of it (especially syllabus)
- Authentication for “study questions”
- Do the survey (link in class announcements)!

Reminder: Install Eclipse

- Instructions on class webpage
- First project (Hello World) has been posted
- If you're stuck, come to office hours

Eclipse (a Modern IDE)



Eclipse Demo:

- Installing Eclipse
- Connecting to your CVS repository
- “Checking Out” a project
- Working on the project
- Submitting the project
- Test results on the server

Computer Systems Overview (First Hardware)

- CPU
- RAM (more detail on next slide)
- Secondary Memory devices
- I/O devices

Random Access Memory (RAM)

- What's a bit?
- What's a byte?
- Mental picture (abstraction) of RAM:
- Each cell has an "address"
- How many combinations can be stored in one "cell"?
- More generally, how many combinations can be represented by k bits?

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7275	10111010
7276	01001011
7277	10110011
7278	11110011
7279	00011101
7280	11010001
7281	01010110
7282	10010011
7283	10110110
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Units of Storage Capacity

- kilobyte
- megabyte
- gigabyte
- terabyte