

The background of the slide features a light gray circuit board pattern with various traces and circular components. A solid dark gray horizontal band runs across the middle of the image, serving as a background for the text.

CMSC 131

Fall 2018

Announcements

- Project #5 has been posted

Complex Example, continued..

Take a look at the three getters in the CDCollectionOwner class.

Let's draw memory diagrams.

Do any generate memory leaks?

Which one is best?

Now let's do the same analysis for the RewriteableCDCollectionOwner class.

Using a Debugger

What's a debugger?

Let's practice JUnit and learn about the Eclipse debugger by testing and debugging a mutable class called FancyWord. Here is the API:

```
public FancyWord(String word);  
public String toString();  
public void reverse();  
public void shiftLeft();  
public void shiftRight();  
public void translateToGamerSpeak();
```