

Debugging

EECS 2311 - Software Development Project

Click to edit Master text styles

Second level

Third level

F

Fifth level

Monday, February 6, 2017

Competition

- Download the WordAnalyzer.java class from the course website
- Create a new Eclipse project for the WordAnalyzer class, and a testing class for it
- Create test cases for its methods (the specification for each method is given in Javadoc format)
- Find as many bugs as you can and fix them!
- The team with the most bug fixes wins!
- *Based on a lab exercise from Big Java by C. Horstmann*

Logging

- Print statements is a rather crude way to debug
- Instead of `System.out.println`, simply use `Logger.getGlobal().info`.
- See the API of the `Logger` class in `java.util.logging`
- You can turn off all logging with `Logger.getGlobal().setLevel(Level.OFF)` ;
- You can have finer-grain logging. Instead of `info`, use `fine` or `severe`

Eclipse Debugger

- Complex perspective
- Can get by with a few basic commands:
 - Set breakpoint
 - Step through
 - Inspect variables
- Demo...

Lab Task

- Demonstrate one test case that fails
- Set breakpoints to track execution
- Step to the problem

Our project

- The selected Simulator API and implementation will be available early next week
- In the meantime, we can start working on the Player app
- It will run on a Raspberry Pi that will physically be in the same box as the Braille cells and buttons
- It plays scenarios that have been stored in a particular format
 - One of your main jobs is to design and document this format

To get started

- Take a look at the Sample Scenario on the course webpage
 - It will give you a pretty good idea of the kind of capabilities the Player app needs to have
- All the interaction in the scenario is stored in the file that the Player app will read

To get started

- The Player app will use audio to communicate with the visually-impaired user
- You will need to support two options
 1. Playing audio clips stored as files (either for speech or for sound fx)
 2. Using a text to speech library to create audio on the fly

Next week I will expect...

- A first version of the Player app
- It should be able to play audio clips stored on the disk
- It should be able to use text to speech to read a sentence
- A first version of your file format
 - Both the location of the audio clips and the sentences to read are obtained from the story file