

Debugggginnng

CompSci 4

Debugging

12.1

The Plan

- ❖ Define debugging
- ❖ Overview of how to debug
- ❖ Guided practice on `PolarGrid.java`
- ❖ Independent practice on `RectangularGrid.java`

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12.2

Debugging Defined

What it is

- ❖ Solving runtime errors
- ❖ Stepping through code with anticipation
- ❖ Narrowing down the location of the bug
- ❖ Recreating the bug consistently

What it is not

- ❖ Fixing compilation errors
- ❖ Stepping though code blindly

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12.3

How to Debug

1. Be able to recreate the bug.
2. Identify the last place the code reaches during correct execution.
3. Anticipating what should happen next and step through the code.
4. When the unanticipated occurs, investigate why and fix the bug.

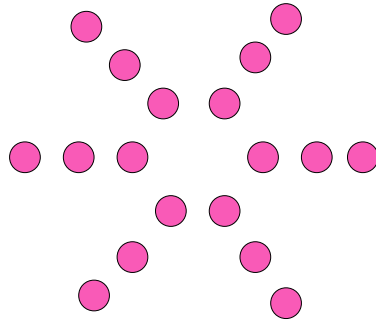
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12.4

PolarGrid.java

This class is intended to eventually be used to layout objects in concentric circles:



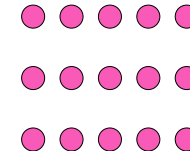
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12.5

RectangularGrid.java

This class is intended to eventually be used to layout objects in rows and columns



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12.6

Practice

Guided Practice

1. **Snarf 04_buggy.jar under classwork**
2. **Run PolarGrid.java**
3. **Look over the source code for PolarGrid**
4. **Follow the in-class dealing with the bugs**

Solo (or with a partner) Practice

1. **Fix RectangularGrid.java**

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12.7