



MeggyJava Programming Language

Recitation tomorrow

- Everyone has been split into 10am or 11am. Be in 228 at your respective time.
- Bring your student ID. You will be checking out the Meggys.
- Know your group for PA1, we will be setting up github repositories for each group. (NOTE: the people in your group do NOT have to be in the same recitation)
- I expect everyone to treat TAs and helpers with just as much respect as you show me.

Today

- Some grading policy notes.
- Java-only Meggy Java programs
- MeggyJava grammar
- Class example
- Peer reviews

Grading Policy

Late Policy

- Programming assignments (PAx), homeworks (HWx), and peer reviews
- Within 24 hours of due date and time, 20% off
- Homeworks will mostly be implemented as D2L quizzes. If late will need to request pdf of quiz and mark up that pdf by hand or electronically. Then need to submit electronically.

Midterms and Finals

- IF the average for exam is $<75\%$ (of those who took exam), then
 - will let X be top score in $[91,95]$ xor 91
 - will add $(100-X)$ to ALL exam scores.
- Only recall having to curve an exam in 453 at CSU once.

Example MeggyJava program

```
/**
 * PA2twodots
 * Lights up two pixels: (col 1,row 2):red (3,4) :white
 * MMS, 2/5/13
 */
import meggy.Meggy;

class PA2twodots {
    public static void main(String[] whatever){
        Meggy.setPixel( (byte)1, (byte)2, Meggy.Color.RED );
        Meggy.setPixel( (byte)3, (byte)4, Meggy.Color.WHITE );
    }
}
```

MeggyJava

Three ways to execute a Meggy Java program:

- (1) Java-only using the meggy package that contains the Meggy class and interface.

```
javac TestProg.java
```

```
java TestProg
```

- (2) **Compile to .s**

this is what you are building in this class, then:

- (2.1) Simulate AVR assembly code with MJSIM

```
java -jar MJSIM.jar // for GUI
```

```
java -jar MJSIM.jar -b -f ExampleFile.java.s // for command line
```

- (2.2) Create executable from .s, download on device, run on device.

Java-Only MeggyJava

meggy package

→ go look at Meggy interface and discuss it

arg_opts input file

– format

int

bool

(button* delay)*

-What is “(button* delay)*”?

→ Let's go try it out.

MeggyJava Grammar

→ Check it out on web page.

→ How can we generate the example program?

```
import meggy.Meggy;

class PA2twodots {
    public static void main(String[] whatever){
        Meggy.setPixel( (byte)1, (byte)2, Meggy.Color.RED );
        Meggy.setPixel( (byte)3, (byte)4, Meggy.Color.WHITE );
    }
}
```

Class Example

Let's write a MeggyJava program

- Infinite loop
- If we press the A button then let's light a pixel.
- If we press the B button then ...
- ...

Peer Reviews

Why?

- Reading other people's code is a great way to learn new coding patterns.
- Providing constructive feedback to others will be part of most jobs.
- We should all learn the value of readable code.

--> Look at draft peer evaluation form for PA1

Evaluation Criteria

- What makes code more readable for you?
- What makes code overly complex?

Rewriting code (like rewriting essays)

- Consider the initial working code to be a draft.
- Attempt at least one rewrite that improves the code readability.

Before Tuesday

Post possible peer evaluation criteria for PA1 on the google form posted on piazza. (Potential extra credit).

(DUE Monday!) Finish HW1, which is implemented as a quiz in D2L.

Instructor office hours today 5-6pm in G-S 707.

- If you are considering dropping, please consider coming to talk.

Discussion sections tomorrow in 228. 10am or 11am.

Erman lab hours Monday 8am to 9:50am in 228.