

Talk to them about Midterm and Project!
Apologize for last week

Discussion 4

Use Ross/Sadist Example!

Talk about “Golden Rule” + Right-Left Rule
^With box and pointer

When static types are checked! **Also called compile types**

Come from type labels on variables.

2 Types:

Assignment Check

Method/Field check

^Looks in class, then up!

Static types meaningless after compilation!

This caution creates some annoyances though...

Dynamic Type; go over (“ box label” on box pointer diagram) **Also called Runtime type**

Comes from constructor...

Controls called methods

Casting example

```
Sadist s = new Ross();
```

```
Ross r = s ← static type s
```

Java, Baby. Just trust me.

Can calm Java down with a promise... IF you know the box s points to IS a Ross...

If we break it, bad shiiittttt

You bastard, you lied to me!

```
Ross r = (Ross) new Sadist();
```

(UH OH)

Questions?