

Best Coding Practices

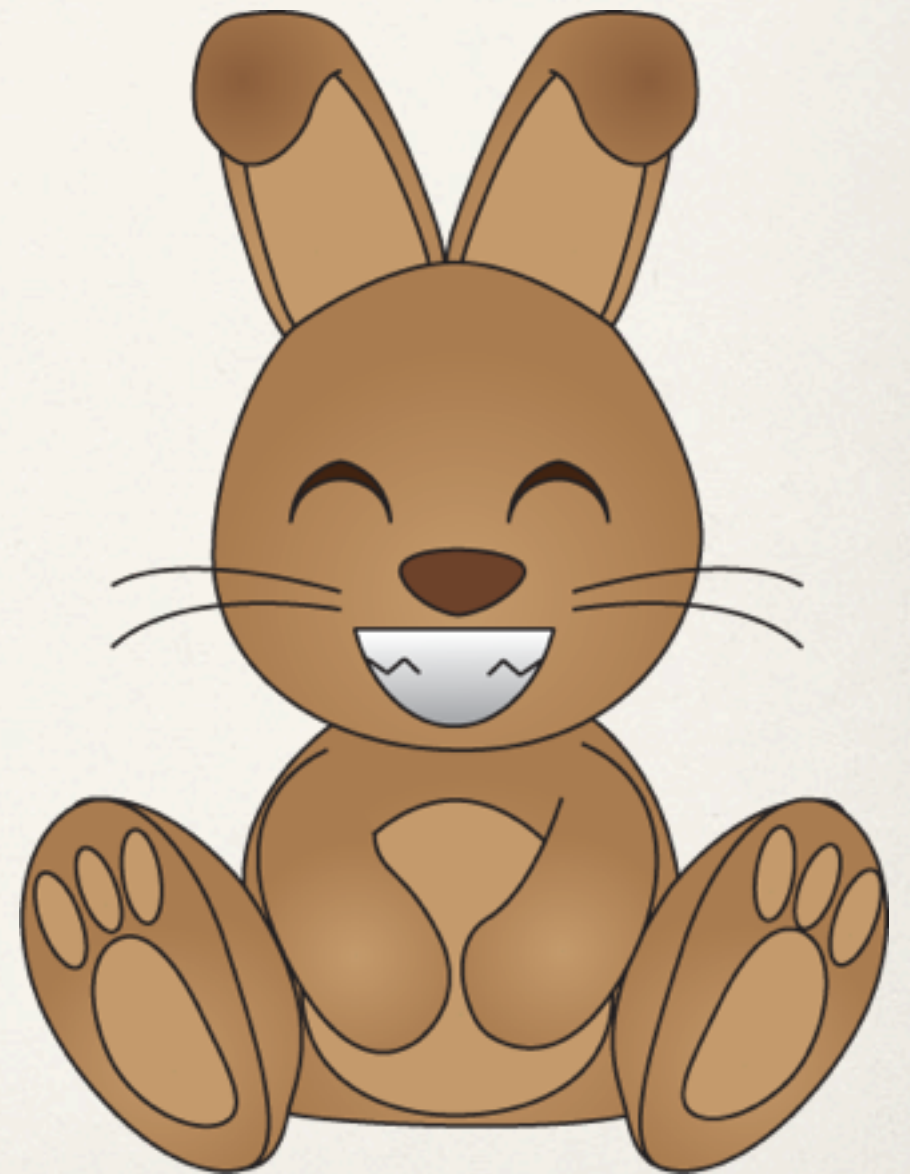
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Who Am I?

And why does it matter?

- ❖ Ruby on Rails, Java, PHP, C++ freelancer
- ❖ Ruby on Rails documentation contributor
- ❖ The guy with a beard
- ❖ <https://GitHub.com/TheEmpty>
- ❖ An eighteen year-old university student



Reliable Rabbit

An Overview

- ❖ Don't overuse variables, use constants when possible
- ❖ When you name an object, it should be descriptive
- ❖ Don't define methods in the main scope
- ❖ Document methods, their parameters and return values
- ❖ Write many small reusable methods, instead of one big method
- ❖ If you have to comment the code, you're probably make it too complex. The variable names and method names should be clear on the method's intentions.

Use Constants When Possible

- ❖ What is a constant?
- ❖ How do they affect performance?
- ❖ How do I declare a constant in Java?

Naming Your Things

- ❖ What does `toString()` do?
- ❖ What does `marksAlgorithm()` do?
- ❖ What does `int year` hold?
- ❖ Is `int carYear` a bit more concise?
- ❖ How to refactor in Netbeans IDE (what we use in this course)

Don't Define Methods in the Main Scope

- ❖ What is the main scope in Java?
- ❖ What about other languages that have a driver file instead of method?
- ❖ Why Not?

Document *All* the Things!

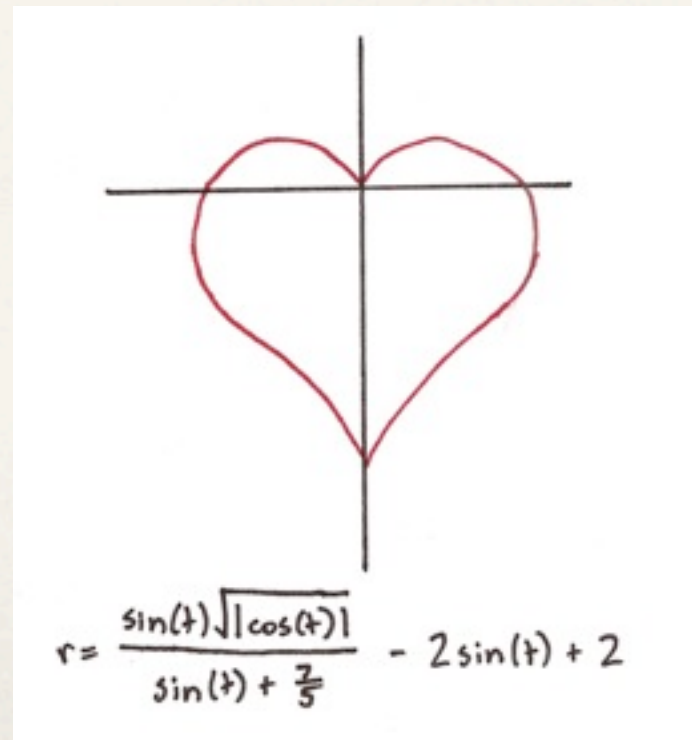
- ❖ What is JavaDoc?
- ❖ Why use JavaDoc?
- ❖ How to document classes
- ❖ How to document variables
- ❖ How to document methods

I'm Small In Japan

- ❖ Reusability
- ❖ Being able to keep function names concise
- ❖ Easier to read and track down bugs

Keep It Simple Stupid! (K.I.S.S. _{me})

- ❖ Code should rarely need comments, the identifiers should be the comments
- ❖ See “Naming Your Things”



Questions?

- ❖ Professor Kraft says, that if you don't ask questions, the teacher is either explaining everything crystal-clear, or you're so confused you don't even know how to ask a question.
- ❖ Next: Practice Application!

Practice Application

- ✧ Taking in a person's names (First, Last)
- ✧ Start building a Person class
- ✧ Create a constant for separator (Want a challenge? Make a String[] of banned names and create getters / setters so you can check against it)
- ✧ If you want more of a challenge, make a nickname and make it optional
- ✧ Document all the things!
- ✧ KEEP this application, ir will use it for the JUnit presentation