# CSE 341 AA: Section 1

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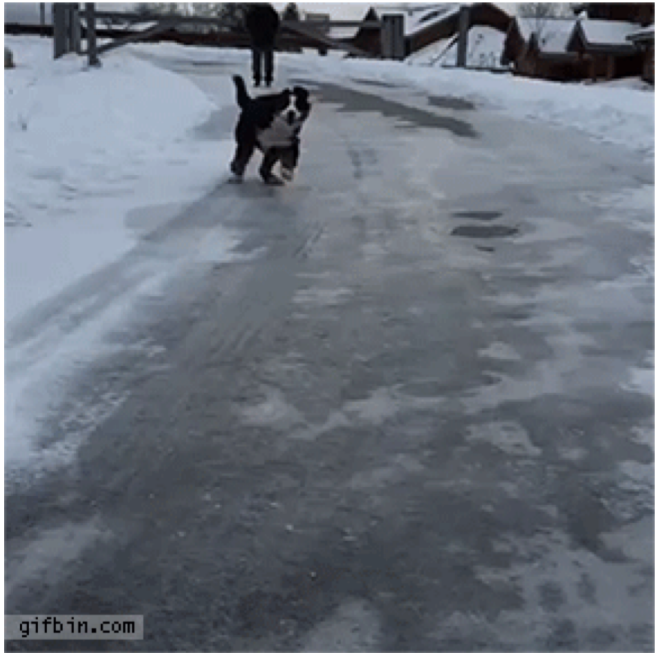
Office Hours: Wednesdays 8:30 - 10:30am

# Introductions



# Course Resources

- Amazing readings/videos covering course content
  - Great for reviewing post-lecture, pre-exam, or whenever!

- Dan/the TAs (We're happy to help!!!)
  - Can email questions to **cse341-staff@cs.washington.edu**
  - Come to office hours!
  - Google group discussion board for general questions/discussions you think would be helpful to everyone!

# Emacs Setup

- Setup instructions are on the course website
- Find someone with a similar system and troubleshoot together!
- Of course ask questions if you have them
- If you finish early, feel free to start reading up on HW1

# Shadowing

```
val x = 17;

val y = x + 3;

val x = 10; (* This binding shadows an earlier binding *)

val z = x + y; (* The most recent binding for x will be used,
                                        so z is bound to 30 *)


(* Shadowing is generally bad style, makes code hard to read! *)
```

# Shadowing w/SML REPL

- `use “<path-to-file>”;` loads the bindings from the given file into the REPL environment
  - If the same file is loaded after being changed, there are potential shadowing issues
  - Safest strategy: Completely restart the REPL when wanting to load the bindings from a file after making changes.

# Syntax and Semantics (from Dan's slides)

- Syntax is just how you write something

- Semantics is what that something means
  - Type-checking (before program runs)
  - Evaluation (as program runs)

# Error Messages

- Sample syntax error:

```
stdIn:1.13-6.3 Error: syntax error: deleting  SEMICOLON IDA
```

- Sample type checking error:

```
stdIn:1.6-5.1 Error: operator and operand do not agree [overload conflict]
    operator domain: [+ ty] * [+ ty]
    operand:       [+ ty] * bool
    in expression:
      4 + true
```

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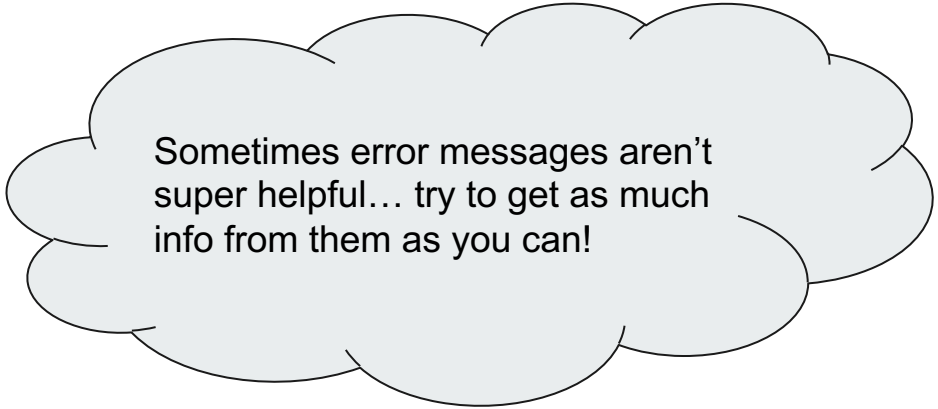


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# Testing in SML

- You must turn in a testing program with homeworks. It won't be graded, but it must be turned in
- Testing is important! Try to write efficient tests, pick out certain cases
- One possibility for testing is to write a sequence of bool bindings that should evaluate to true, such as:

```
val test_1 = some_fun_fun(some_input) = expected_value
```

# SML Practice

- First week about the course is all about getting comfortable with potentially unfamiliar concepts, including:
    - Recursion, depending on your past experience/practice
    - SML, also depending on your past experience/practice, but my guess is that it's less likely you've had large exposure to SML in the past :)

# ASK QUESTIONS!!!!

How sad I'll be if no one asks the questions they have

# Language of the day

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# SML!!! Surprise!

**We will learn more about the super awesome functional programming concepts that make up SML in the coming weeks!**