Introduction

CS 211

Winter 2020
Road map

• What’s it all about?
• Topics
• Policies & grades
• Academic honesty
• Help & advice
What CS 211 is all about (1/2)

From the course abstract:
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- Topics include…
Topics

- Language mechanisms
- Design techniques
- Engineering practices
Topics

- Language mechanisms
  - New syntax for functional programming

- Design techniques

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Topics

- **Language mechanisms**
  - New syntax for functional programming: expressions, values, conditionals, variables, functions

- **Design techniques**

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Topics

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  ▶ New syntax for functional programming: expressions, values, conditionals, variables, functions
  ▶ Imperative programming
    ▶ Statements: sequencing, iteration
    ▶ Mutation: objects, assignment

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## Grade composition

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* Divided equally.

† May be used for close calls or to tweak weights in your favor.
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- Most will be pair-programmed with a registered partner
- Late code will not be accepted
- You'll need to do a self-evaluation for each
- No cheating
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In CS 211, we take cheating very seriously.

• Cheating is when you:
  ▶ Receive help of any kind on an exam (except from authorized course staff)
  ▶ Give help of any kind on an exam
  ▶ Share (give or receive) homework code with anyone who is not your official, registered partner
  ▶ Obtain code from an outside resource, such as Stack Overflow

• Please don’t do these things, because:
  ▶ If you don’t write code, you won’t learn; try to embrace the struggle!
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• If unsure about your particular situation, ask the instructor or other course staff
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- Be kind to each other.
I try not to make fun of people for admitting they don't know things.

Because for each thing "everyone knows" by the time they're adults, every day there are, on average, 10,000 people in the US hearing about it for the first time.

\[ \text{Fraction who have heard of it at birth} = 0\% \]
\[ \text{Fraction who have heard of it by 30} \approx 100\% \]
\[ \text{US birth rate} \approx 4,000,000/\text{year} \]
\[ \text{Number hearing about it for the first time} \approx 10,000/\text{day} \]

If I make fun of people, I train them not to tell me when they have those moments, and I miss out on the fun.

"Diet coke and mentos thing"? What's that?

Oh man! Come on, we're going to the grocery store.

Why?

You're one of today's lucky 10,000.
Relative homework difficulties

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<tr>
<td>6</td>
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</tr>
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</table>
Relative homework difficulties

(On a scale from 1 to 10)

<table>
<thead>
<tr>
<th>HW</th>
<th>Difficulty</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
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<tr>
<td>6</td>
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</tr>
<tr>
<td>FP</td>
<td>8ish</td>
</tr>
</tbody>
</table>
Suppose each function is called with an arbitrary integer value. Circle *all possible* outcomes:

- **T** The function returns `true`
- **F** The function returns `false`
- **A** The program terminates *abnormally* (a crash!)
Preexamination!

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{
    return false;
}
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```cpp
bool h(int z)
{
    int y = z / 0;
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