could we create the control software for Skytrain?

For $121 Million...
Instructor: Dr. Fraser - call me Dr. Brian

- I like questions, and love feedback!
About Me

- **Home Town:** Surrey!
- **Degrees:** BSc & PhD from SFU (AI)
- **Favourite Video Game:** StarCraft II & WoW
- **Family:** Married with 2 girls (4y & 6y)
- **I miss the most during isolation:** Conversations with friends, colleagues, and students!

> Daughter’s biggest worry about my online teaching.
A pandemic changes everything

- How are you feeling?

- exciting
- nervous
- anxious
- curious
- worried
- intimidated
- stressful
- interested
- stressed
What are you worried about?
What do we all like?
Guide to Slides

• **Slide Colour Guide (often...):**
  - **Green:** headings.
  - **Yellow:** Highlighted text.
    - This course has **quizzes** and **one final**.
  - **Blue:** Term being defined.
    - **Hour:** 60 minutes.
  - **Sweep-in Text:** Blanked out text to keep (almost) everyone awake and hold attention.

• **Joke:**
  - My software never has bugs,..
Online Expectation

• Only one thing
  – Use a positive tone for all communication (asking questions, on Piazza forums, with TAs)
  – Anon trolling hurts someone. It won’t be tolerated.
  – Students have wide range of backgrounds; respect it

• If sending an email
  – Give a little context (class, your name, topic, ...)
  – U Shd rite th3 msg so i wnt 2 reed it.
  – Email: If you are sending more than 2 a week, may be too many.
Real-time Survey

• How much Android programming have you done?
  1: **None**, and I’m looking forward to learning!
  2: **A little**, and I’m looking forward to learning!
  3: **A fair amount**, and I’m looking forward to learning more.
  4: **A lot!**, and I’m looking forward to learning more!

Put up a 1-4 survey!
You already known

1) How to program in an object oriented language
   - Know Java? Great!
   - Know C++? You'll have to pick-up basic java quickly; we will have some resources

2) How to develop simple object oriented applications

3) How to use video chat systems!

If you feel you don’t know this, come talk to me today.

Just kidding!
Course Information
Course Topics

- **Basic Course Goal**
  - Cover the basics of developing software in a professional environment.
  - Learn to be part of a development team.

- **3 Components of Course**
Online Course Structure

- **Lectures**
  - MWF streaming live; recorded for later viewing.
  - Incomplete notes posted online ahead of time.

- **Quizzes** – every ~2 weeks, in class, announced.
  - Practice quiz coming soon

- **Assignments** – in Android Studio (your computer)
  - Run in emulator or on phone

- **Project** – Assigned groups, supported interactions

- **Office Hours** – Discord (text, or voice/video)
  - Piazza for most questions!

- **Exams** – Final exam
Website

- https://opencoursehub.cs.sfu.ca/bfraser/grav-cms/cmpt276/home
- https://tinyurl.com/briansfu
  - Notes
  - Assignments - about 2 weeks to complete
  - Project - assigned groups
  - Videos - some suggested for each assignment
  - Course Info - getting help; weighting.

Course grades likely scaled a little as assignment & project grades usually very high.

Suggested Texts
- Android Programming:
The Big Nerd Ranch Guide 3rd Ed in Java
  (4th is Kotlin; 2nd/1st ed likely OK)
Motivation

• **Hard to stay motivated studying at home**
  - *Very* common feedback from summer 2\textsuperscript{nd} to 4\textsuperscript{th} year students!

• **Schedule to stay on top of course each week**
  - **Watch videos** on Monday
  - **Do the labs** during your scheduled time
  - **Ask questions** during live lecture & office hours
  - **Study** for and write quiz each Friday (but not this week!)
Getting Help

• Make a habit of asking questions
  - Live lectures: type in a question!
  - Office Hours: get to know us, ask us stuff!
  - Piazza discussion forum: Primary support tool!
    Post and answer questions anytime! Anon OK.
  - As friends in class

• Start early
  - Give yourself time to learn and solve problems