OIM3640 - Problem Solving and Software Design

So, how are you doing?

Please introduce yourself, including:

- **Who** are you?

- Which **year** are you in? What **concentration**?

- **Why** are you taking this class?

- Do you have any **programming experience**?

- How was your **2021**?

- How can we **remember** you?

Agenda

- Introduction to the course, syllabus and deliverables

- Term Project (*mentioned*)

- Software
  - Python
  - Visual Studio Code, and extensions
  - GitHub.com, GitHub desktop

- Write your first Python program!

Syllabus

- Instructor: Zhi Li (李直)
- Email: zli@babson.edu
- Office Hour:
  - by appointment
  - Canvas/GitHub/Slack
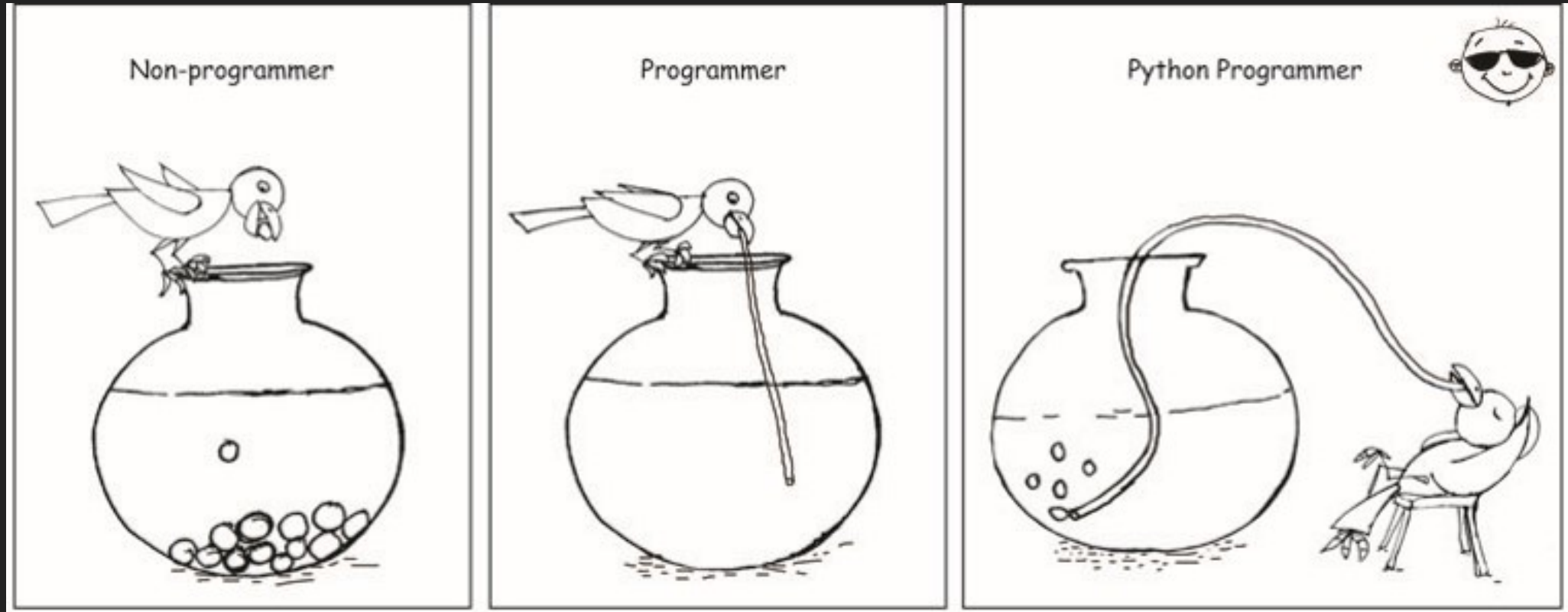- Class GitHub: github.com/OIM3640

Syllabus

- Course Objectives

- Prerequisites and Textbook

- Software

- Term Project

- Graded Homework/In-Class Exercises/Exam

- Grading

- Course Policies
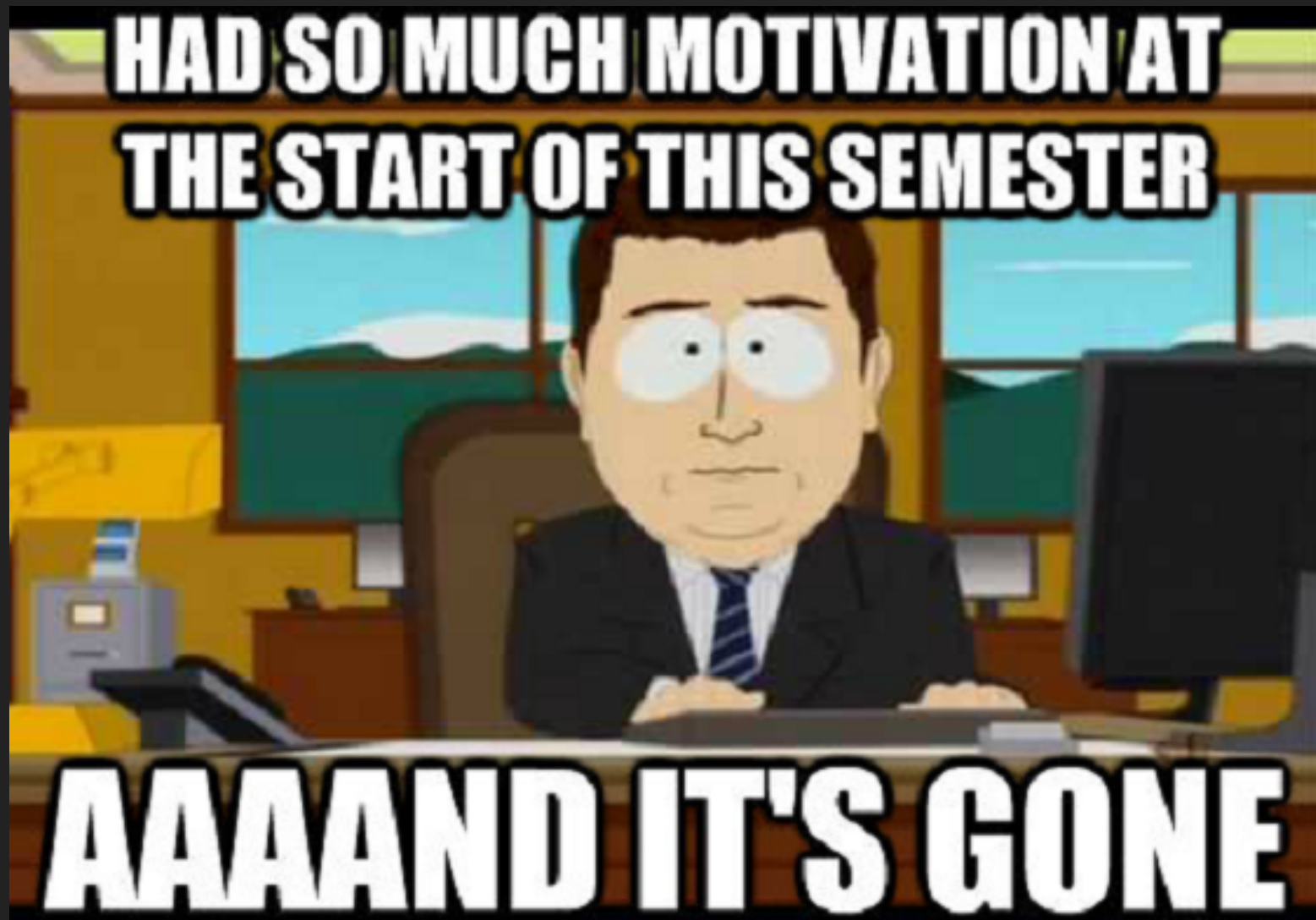
How to Learn Python Programming?

Python is ...Simple and Elegant!

However, coding is hard.

It takes time to get good at coding.

Further reading: There's no such thing as bad code

There are **NO STUPID QUESTIONS**

or stupid answers

but you can ask questions in a smart way

Further Reading: The XY Problem,

How do I ask a good question?,

How To Ask Questions The Smart Way

What If I need to..?

- figure out how to sort a list of numbers?

- understand a warning/error/alert, aka. *debug*

- find the solutions to XXX?

- hack my router?

- ...?

More on How to Succeed in this Course

- Do not take the *"couch potato"* approach

- Think of my code as one of the "answers"

- You need to code by yourself
  - This forces you to think and ask specific questions
  - **Never** copy and paste code you have not written yourself.
    - Even rewriting it verbatim makes you think about what it is you are actually copying.

- After you've attempted it yourself, look at my code and think about what you were missing and why

More on How to Succeed in this Course

- People *new* to programming don't know what it is like to be a programmer, or to take a programming course
- If you expect things to work the *first time*, you don't have a good sense of what it is really like
- **Don't give up** at the *first sign of error*
- **EXPECT**: to spend hours, entire nights, even multiple days getting things to work
- This is where the ***REAL LEARNING*** happens
- Being spoon-fed answers leads to *WEAK* problem solving abilities.

Now, prepare to get your hands dirty!