Worksheet 0: Motivation

Instructions:

1. Download or make a copy of this assignment.
2. In groups of up to 4 students, complete the work below in class. If you do not have time to complete the activity in class, you may finish it at home (individually or in groups).
3. You may collaborate within your group to complete the assignment but you must work on each question together and come up with a consensus response. You may not collaborate between groups and the work you submit must be your own.
4. Turn in your solution as a PDF on Canvas. Each group member is responsible for turning in their own copy of the assignment on time.

Rubric:

This activity is worth 4 points. Full points will be awarded for complete work, 2 points will be awarded for incomplete or clearly wrong work, and 0 for substantially incomplete or missing work.

Team:

Divide the roles below between students who participated in this activity. As you complete these activities throughout the semester, please rotate roles.

Role	**Name**
Manager: Start quickly, remain focused, keep track of time, ensure everyone participates and all voices are heard, assign duties, etc.	<Diego Aranda>
Reflector: Observe how the team is working, reflect, and give suggestions during the work on how to improve performance. In the end, record what the team learned, what went well, and what could be improved.	<Diego Duran>
Recorder: Create a copy of this document and share it with the team. Although everyone can write, the recorder should ensure the quality and completeness of the answers.	<Mitchell>
Presenter: Communicate team questions and clarifications with the instructor or other teams. Present the answers to the whole class, as requested. Be ready to explain the	<Braydon>

reasoning for each answer.	

Work:

1. What is the largest piece of software any of your group members have worked on? Please describe.

<Largest corporate website, majority with academic website projects>

2. List some difficulties that appeared in working in this system that usually do not appear in simple or small systems.

<Project Deployment and messing up other developer's code>

3. Estimate (your best guess) the approximate size (lines of code) of the following projects based on a discussion with your peers and some light research using Google:

- Average academic assignments: <500>
- A typical corporate project: <1000's>
- Facebook: <100,000,000>
- Software that runs in a car: <150 million>
- Google: <Over 2 billion>

4. Other factors that add complexity to a project are the number of developers and technologies. Choose a project at https://www.openhub.net/ and fill in the following:

- Name of the project: <Google API>
- Open Hub URL: < https://openhub.net/p/google_apis >
- Number of contributors: <4159>
- Number of commits: <572887>
- Number of Lines of Code: <101,404,870>
- Estimation of effort (in years) according to the COCOMO model: <35,707>

5. Can projects like this be developed without software engineering? Justify your answer.

No, because projects of this scale will need to have a lot of complex code to manage, team coordination, quality and maintenance. That is why the large-scale project like this one require these practices to succeed.

6. Reflection (to be completed by the Reflector)

- What did the team learn from this activity?: <How to work together and communicate as a team>
- What worked well in your team?: <Our chemistry worked well as we all did what we were supposed to do and communicated efficiently>

- What could have helped the team perform better?: <So far nothing, but it would be better to do this together in person as it would be the most efficient way>

Project Managers in Hell