

COMP2511

Tute01



Agenda

- Lab Marks + Advice
- Icebreaker!
- Solving a design problem
- Java + Git
- Example 1: Sum
- Example 2: Shouter
- Abstraction



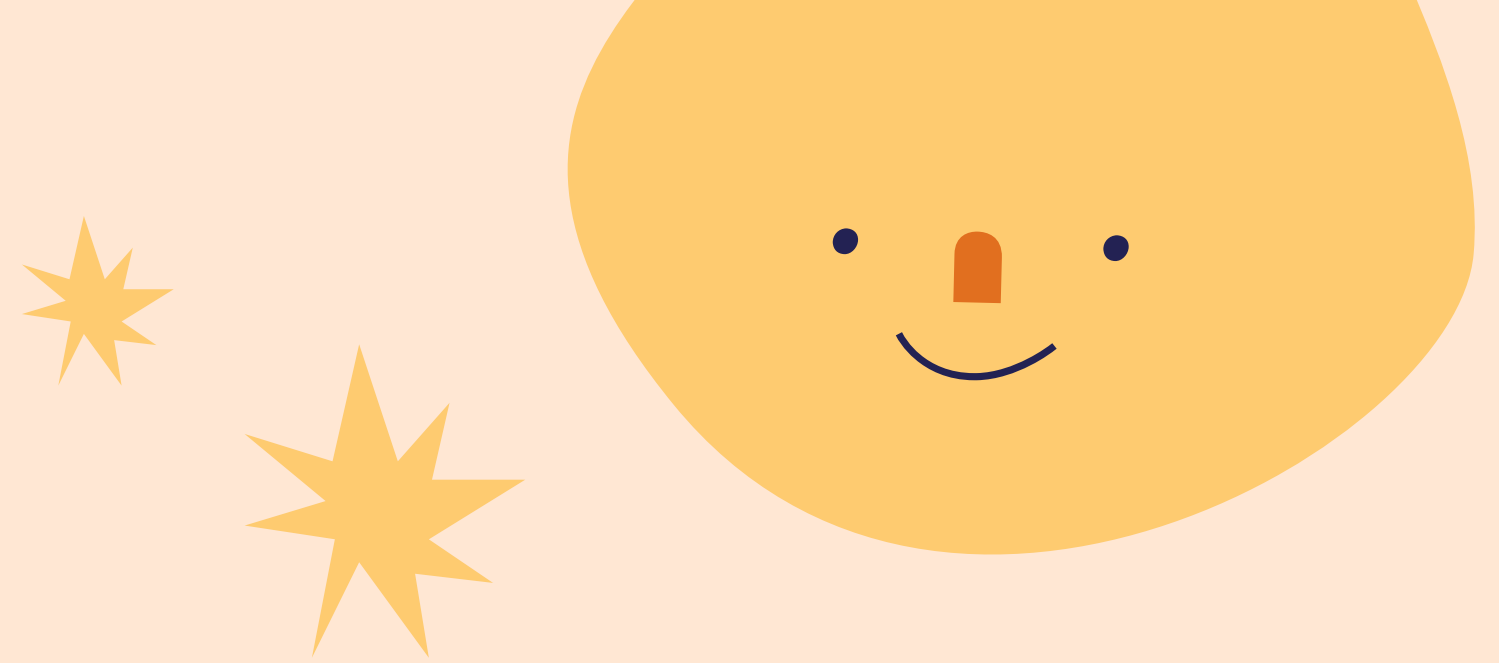
Lab Marks

Worth 15%!!!

- Eight labs, each worth **ten marks**
- Capped at **70 marks**, leaving one lab's worth of marks as a **buffer**
- Labs must be marked **in person** within **2 weeks of the due date**
- Lab 9 has an attendance + participation mark
- Sample Exam will run in Week 10



Advice



- Stay on top of lectures!
- Read the course outline.
- Practise practise practise!
- Start labs/assignments; they can take up a lot of time!
- Be curious! We're here to answer your questions!
- 50% of the exam will be very similar to tutorial + lab content! - so try to understand them!

Icebreaker!

Find the most random connection you have with the person next to you!!! It could be a mutual friend, or maybe you both love a game or perhaps you've met before!





Design Problem

UNSW has decided that they want to create their own light rail, which takes students from upper campus to lower campus. Design a solution for this - how will it work? What will need to be changed about the campus layout for it to work?



Hello Java



How To Git

1

Git Add

Add any
changes

2

Git Commit

Commit added
changes

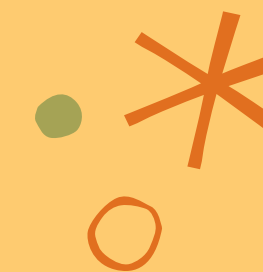
3

Git Push

Push committed
changes



Sum & Shouter



Abstraction?

Abstraction is the practice of hiding the implementation of some functionality and exposing only the necessary information to the user.



Where Have We Seen Abstraction?

EXHIBIT 1

COMP2521 ADTs:

- Stack
- Queue
- Priority Queue
- Hash Table

EXHIBIT 2

COMP1531 APIs:

- Requests through HTTP
- `server.ts`

EXHIBIT 3

COMP1511 & 1521
Helper Files



Why Use Abstraction?



Why Use Abstraction?

Simply, to reduce the
complexity of our code.

OOP & Abstraction

?

Idea of a
Vehicle

A

Implementation
of an Airplane

B

Implementation
of a Boat

C

Implementation
of a Car