Week6 – Continue with Class

COMP90041 Programming and software development

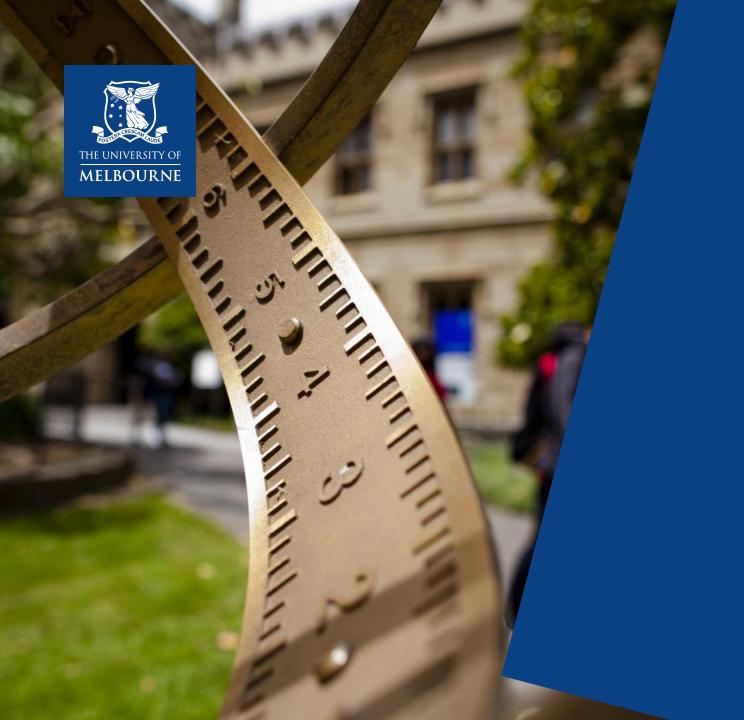**Prepared By: Chenyang Lu**

Some academic term

- Class

- variable

- Instance

- Instance variable

Some academic term

- Class

- Instances: objects of that class

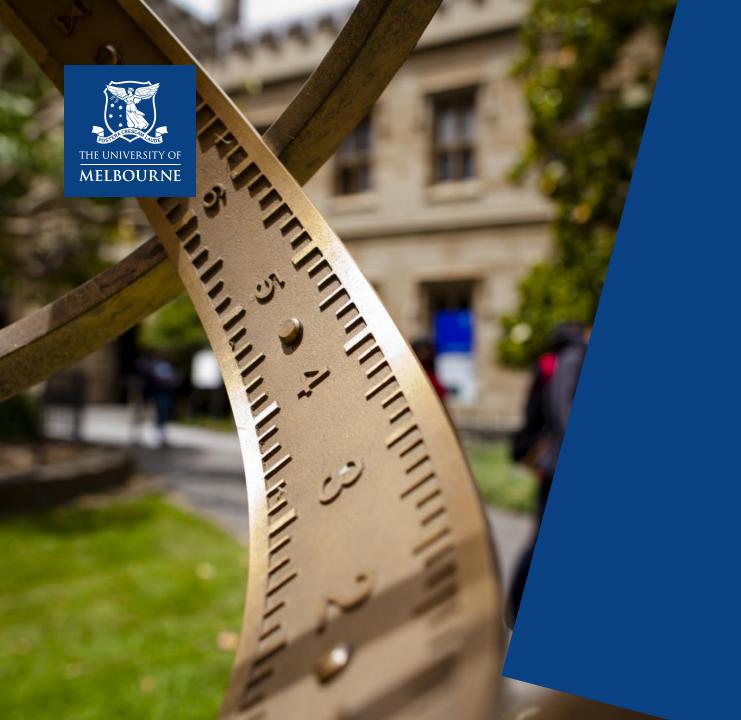- Instance variables : Some data/ variables that a class have

Static Method

Static variable and Static method

- Static method/variable is directly called by class name

- Static method/variable is directly belong to a class instead of

  instances of that class

- Static method can not be invoked in non-static method

Wrapper class

Wrapper class

Primitive Data types and their Corresponding Wrapper class

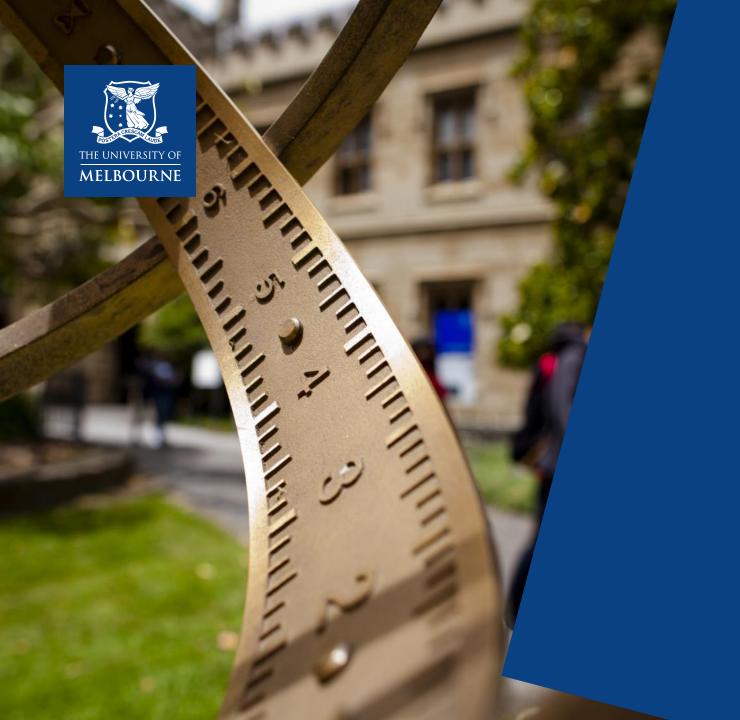| Primitive Data Type	Wrapper Class
char	Character
byte	Byte
short	Short
long	Integer
float	Float
double	Double
boolean	Boolean

- Boxing: Covert primitive type to class type

- Unboxing: convert class type to primitive type

Wrapper class

- Now, java support automatic boxing and unboxing:

```
Integer intergerObject = 40; // boxing
int i = intergerObject; // unboxing
```

Pitfall: Variable and memory

Secondary Memory and Main Memory

- Secondary memory: Permanent memory (disc). It is the place to

  store your java source code.

- Main memory: used when computer is running program. When we

  execute a java program, all the data would be loaded into main

  memory.

Main Memory

- Consist a long list of numbered location (byte)

- All the data is stored in that list. Typically each data consist of

  several byte

- Address: the number of that identify a byte