

Practice: Lab + course

Wajih El Tayyar - Set of problems:

Checklist:

- Watch video lectures
- Read the book
- Solve the programming projects (solutions): (Java Software solutions, Java: How to program)
- Office hours

FAANG ---> Internship opportunities (Summer 2023)

- Exceptions:

Inheritance:

- is a, software reuse
- protected
- super
- Method overriding vs Method overloading
- Object
- Abstract classes + interfaces

List and Set: ArrayList and HashSet

```
List<Integer> list = new ArrayList<>();
```

Polymorphism:

- Late binding vs early binding
- Polymorphic references through inheritance or through interfaces

Case studies: TimerDemo (Inheritance) and Design state pattern: state design pattern

- Exceptions:

Exception is a run-time error. a) Ignore them; b) Handle them where they occur
c) Handle the exception at another place in the code

- Example#1: ExceptionPropagation

- Creating your own exception classes:

Example#2: CreatingExceptionDemo

- Error-related example: assert reserved word (Unit tests)

Aims is to create assertions in the code:

foo() method: variable = 5 (pre-condition)

Postcondition

Example#3: AssertionDemo