Java & OOP

2. Basics of Java Classes

Concepts

- Objects & Classes

- Property, State and Behaviour

Objects

- Entities of an application (Real Life or Conceptual)

- A hospital System

  - Patients, Doctors, Nurses

  - Stock, Medicines, Prescriptions

  - Nurse/Doctor shift schedules

  - Test Battery and Test

State & behaviour

- **State** is represented by the values of *properties*

  - A car running at a speed of 60 km/hr

- **Behaviour** is the action carried out by the object for an external stimulus

  - Add an item to the prescription

Class

- Comes from *Classification*

- Classify objects that have identical behaviour (& properties?)

- Set of rules governing the behaviour

- Defines an Object type

- Code component in Java

- Template for making Objects

How it works

- We write classes Which interact amongst themselves to solve a problem

- A single class wont do everything (in real applications)

- Classes depend on each other

- At runtime Objects invokes the behavior of each other and do their part of work

- Objects (Classes) use each other

Dependency - Terms we use

- If class A uses class B then

  - A is client of B

  - A depends on B

  - A invokes behaviours in B

  - B can also be called as a server

- We will be developing our code using multiple classes rather than one single class

Next

Using Classes