# 1. Session 2: Introduction to Object oriented world, UML and Basic Java

# 2. Intended Learning Outcome:

- a. Become more familiar with Java programming language.
- b. Appreciate the concept of OOP and can realize its importance.
- c. Apply OOP general concept to model to real life scenarios.
- d. Learn how to draw UML diagram.

### 3. Expected skills:

#### a. Basic Java:

- Have clear concept on Variable & data type.
- Can work with java Method & Method overloading.

### b. OOP concepts:

- Can think in Object Oriented way.
- Can model any real life object by distinguishing them into Characteristics and Behaviors.
- Will be able to draw different UML class diagrams.

## 4. Tools Required:

- a. JDK
- b. ECLIPSE / NETBEANS

#### **Session Detail:**

- **5.** 1. Teacher will review last class exercises.
  - 2. Will give lecture on **Object Oriented Programming**, what it is and why it is important.
  - 3. Will talk about how to **think** in Object Oriented standpoint and give examples.
  - 4. Will teach what is **UML** and show some basic examples and do some exercise.
  - 5. Will give brief idea on Object & Class.

## **6.** Post Lab Exercise:

a. Write a Java method to find the smallest number among three numbers.

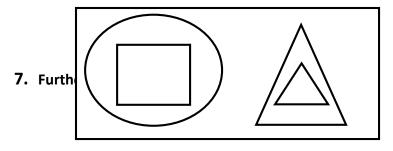
Test Data:

Input the first number: 25
Input the Second number: 37
Input the third number: 29

**Expected Output:** 

The smallest value is 25.0

b. Draw the UML model for the following figure.



- a. <a href="https://www.tutorialspoint.com/java/java">https://www.tutorialspoint.com/java/java</a> methods.htm
- **b.** http://www.javatpoint.com/method-overloading-in-java