# **Software Development Life Cycle:** (SDLC)

High level representation of S/W development process or set of steps/phases to produce software.

The Seven Phases of the Software Development Life Cycle



Phase 1: Planning.

Phase 2: Requirements Analysis.

Phase 3: Design.

Phase 4: Coding.

Phase 5: Testing.

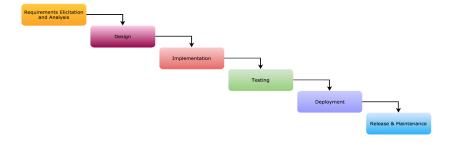
Phase 6: Deployment.

Phase 7: Maintenance.

# **SDLC Models:**

- 1) Sequential (Waterfall, V-Model)
- 2) Iterative (Spiral, Prototyping)
- 3) Incremental (Unified Process)
- 4) Iterative & Incremental ( Agile )

#### 1) Waterfull



#### **Advantages**

1) Well-Suited for Small Projects

2) Well-documented

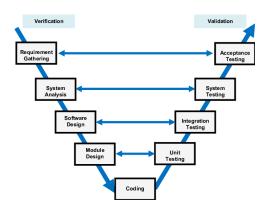
#### **Disadvantages**

1) Late Testing

2) Limited Customer Involvement

3) Inflexibility

# 2) V-Model



#### **Advantages**

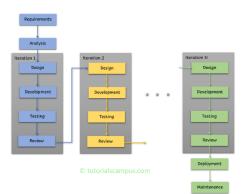
- 1) Early Testing
- 2) Save time & money

### **Disadvantages**

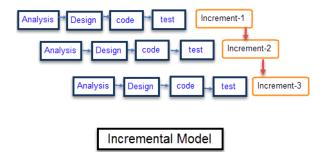
- 1) Inflexibility (cannot changes in requirements)
- 2) Limited Customer Involvement

3) Not Suitable for Complex Projects

# **Iterative-Model**



# **Incremental Models**



Flexibility to Change

Iteration take low time

Customer Involvement

Flexibility to Change

Easier Testing and Debugging

Early Delivery (Parts of the system can be released)

**Bad-Documentation only** 

Complex Integration

#### **Iterative & Incremental Models**

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(Agile)

