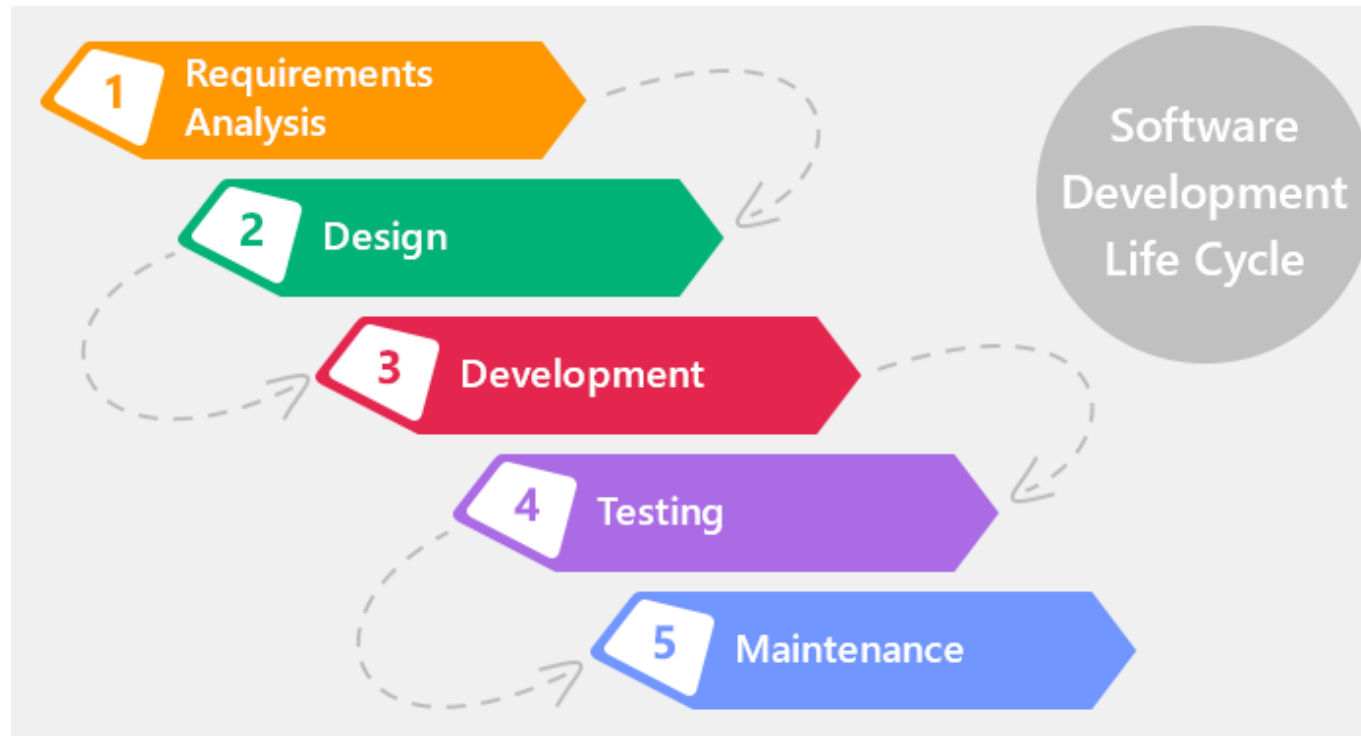


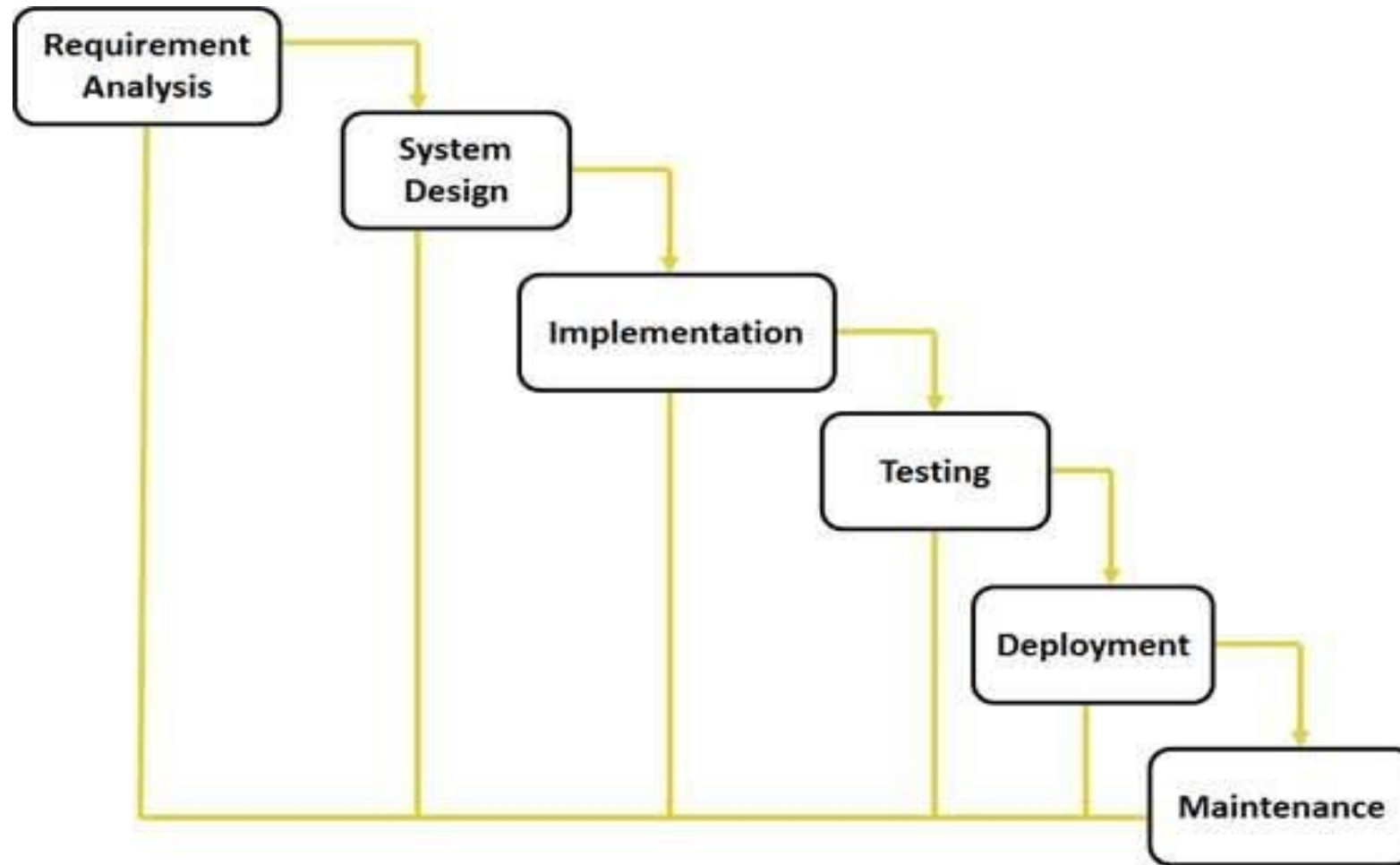
Manual Testing Session-2

Software Development Life Cycle (SDLC)

- SDLC, Software Development Life Cycle is a process used by software industry to design, develop and test software's.



Waterfall Model



Waterfall Model(Advantages & Disadvantages)

▪ Advantages of Waterfall Model

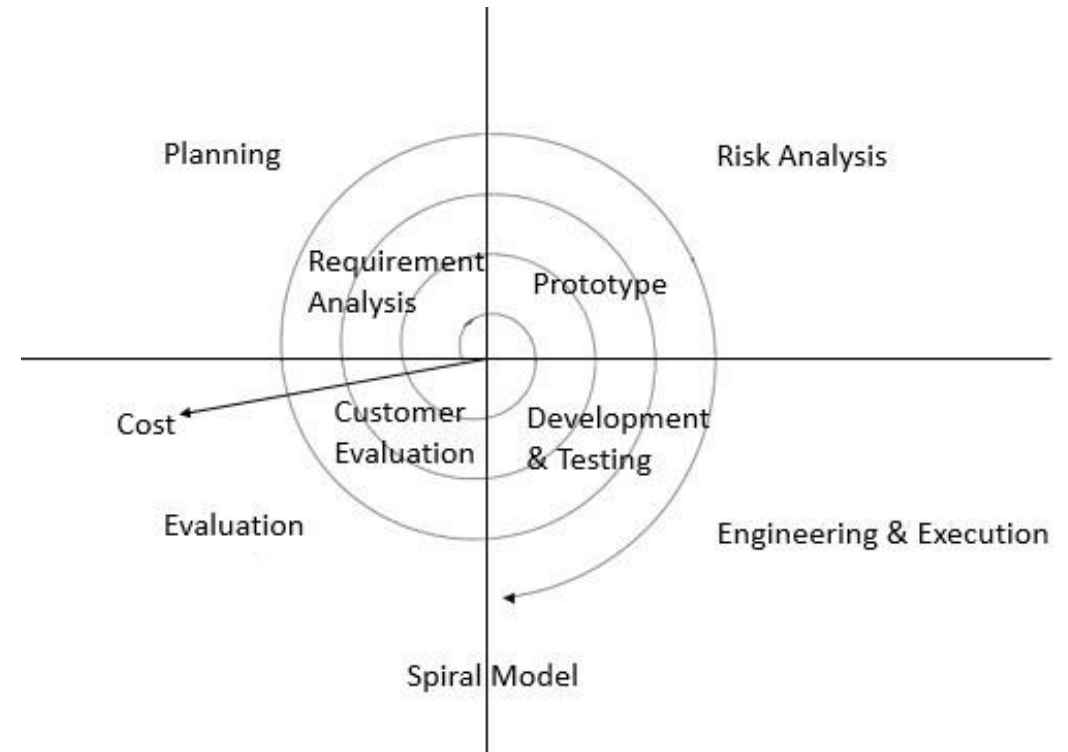
- Quality of the product will be good.
- Since Requirement changes are not allowed , chances of finding bugs will be less.
- Initial investment is less since the testers are hired at the later stages.
- Preferred for small projects where requirements are freezed.

▪ Disadvantages of Waterfall Model

- Requirement changes are not allowed.
- If there is defect in Requirement that will be continued in later phases.
- Total investment is more because time taking for rework on defect is time consuming which leads to high investment.
- Testing will start only after coding.

Spiral Model

- Spiral Model is iterative model.
- Spiral Model overcome drawbacks of Waterfall model.
- We follow spiral model whenever there is dependency on the modules.
- In every cycle new software will be released to customer.
- Software will be released in multiple versions. So it is also called version control model.



Spiral Model (Advantages & Disadvantages)

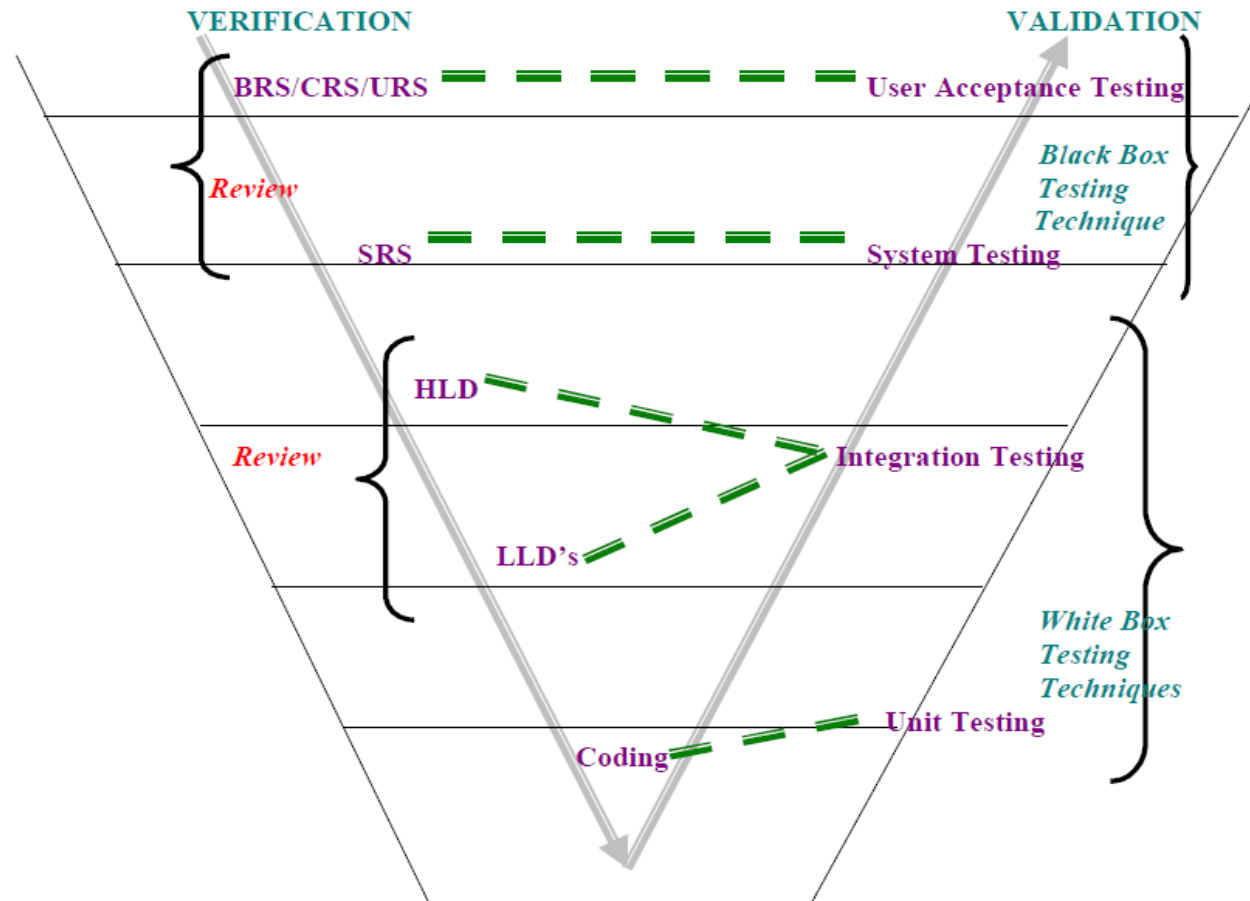
- **Advantages of Spiral Model**

- Testing is done in every cycle, before going to the next cycle.
- Customer will get to use the software for every module.
- Requirement changes are allowed after every cycle before going to the next cycle.

- **Disadvantages of Spiral Model**

- Requirement changes are NOT allowed in between the cycle.
- Every cycle of spiral model looks like waterfall model.
- There is no testing in requirement & design phase.

V-Model



Advantages and Disadvantages of V-Model

- **Advantages**

- Testing is involved in each and every phase.

- **Disadvantages**

- Documentation is more.
- Initial investment is more.

Verification V/S Validation

- **Verification** checks whether we are building the **right product**.
- Focus on Documentation
- Verification typically involves.
 - Reviews
 - Walkthroughs
 - Inspections
- **Validation** checks whether we are building the **product right**.
- Takes place after verifications are completed.
- Focus on Software
- Validation typically involves actual testing.
 - Unit testing, integration, system testing, UATtesting



**Verification
Vs
Validation**

Static V/S Dynamic Testing

- **Static testing** is an approach to test project documents in the form of Reviews, Walkthroughs and Inspections.
- **Dynamic testing** is an approach to test the actual software by giving inputs and observing results.

