**Advantages and Disadvantages of Waterfall Model:**

**Waterfall Model:**

Waterfall Model is process of software development which is divided into different phases:

The Phases are:

* Requirement Analysis
* System Design
* Implementation
* Testing
* Deployment
* Maintenance

**Advantages of Waterfall Model:**

* Waterfall Model is simple to use and understand.
* Phases of waterfall model are approached only one in the cycle.
* Waterfall Model is best for the projects with well-defined and understood requirements.
* Results and Process are well documented

**Disadvantages of Waterfall Model:**

* Waterfall model is not suggested for long and on-going projects.
* It can’t accept the new requirements during the process.
* Waterfall model can’t handle the project with the chance of change in requirement.
* Once a phase is completed we can’t go back for improvement and changes, we can just give feedback on it.
* If any new requirement are to be added then they are considered in next life cycle of project.

**V Model:**

In the V Model both testing and development is planned parallel.

There are two phases that are considered parallel in V Model. Coding is dependent on the Both phases.

**Verification Phase:**

* Business Requirement Analysis.
* System Design Analysis.
* Architectural Design Analysis.
* Module Design Analysis.

**Validation Phase:**

* Unit Testing
* Integrated Testing
* System Testing
* Acceptance Testing

**Coding Phase:**

Based on the outcomes of validation and verification phases in Coding Phase the design and implementation of project is considered and code accordingly is done.

**Advantages:**

* All the Phases are completed one at a time.
* Simple and easy to understand.
* As each phase is test and has deliverables, managing the project is easy.

**Disadvantages:**

* Once a phase is completed we can’t go back for improvement and changes, we can just give feedback on it.
* V model is recommended for long and on-going project.
* Once the project is at testing Stage it is difficult to go back and add any new requirement.