## SDLC Models

-There are various software development life cycle models defined and designed which are followed during software development process. These models are also referred as "Software Development Process Models".

-Process for software development are as below

1. Waterfall Modell / Linear Sequential Model / Traditional Model
2. Spiral Model
3. V Model
4. Prototype Model
5. Agile

Prototype Model

Fig: Prototype Model
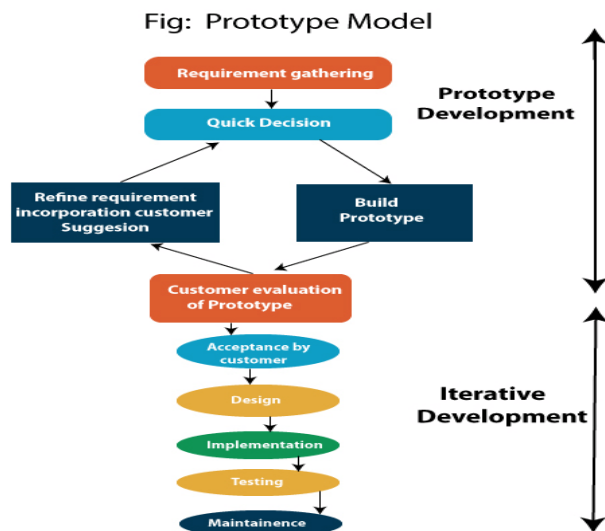
-It is a trial version of a software.

- The Prototyping Model should be used when the requirements of the product are not clearly understood or are unstable.

-Flow like,

1. we will take basic requirements / Initial requirements

2. Based on judgment, we will create initial prototype (Prototype – is a working model)

3. Once working prototype is build, we will ask client to check

4. Next step will be test and enhance / revise

5. Again, we will call user to check and use it and again we will make change as per user's feedback until we get all the requirements from user

6. Once, all requirements are fulfilled and client will agree, then SRS document made and then only SDLC process will start.

-The prototype are usually not complete systems and many of the details are not built in the prototype. The goal is to provide a system with overall functionality.

Advantages of Prototype model :

1. Users are actively involved in the development

2. Missing functionalities can be identified easily

3.Based on user feedback , SRS document is finalized

4.Reduce the risk of incorrect user requirement

5.Errors can be detected much earlier as the system is made side by side.

Disadvantages of Prototype Model

1.Sample model is not used for actual implementation

2.Scope of the system may expand beyond original plans

3.An unstable/badly implemented prototype often becomes the final product.

4.Prototyping tools are expensive.

5.It is a time-consuming process.

When to use Prototype Model/example-

Online system or any project start from scratch