Iterative Model: SDLC (software development life cycle)

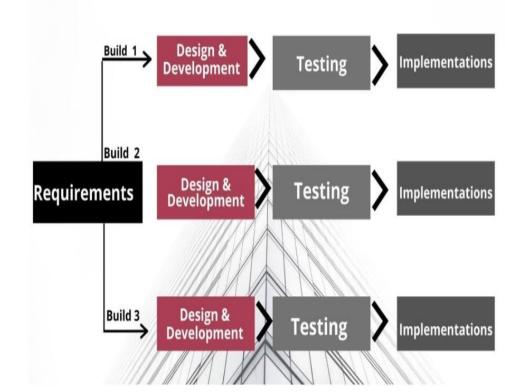
- It is known from the name of the Iterative model that how the project has been developed through this model.
- Inside this model the project is divided into small parts and they are repeatedly iterated until the problem is solved. Doesn't happen.
- When developing the project inside this model. So in this we develop some specifications of the project which is the first version of the project.
- This first version is a part of the main project.
- This first version of the project is given to the client.
- Which shows that the project has been developed according to the requirement of the client.
- The first version of the developed project fulfills all the needs of the client.
- So that first version is developed again.

- In the Iterative model, the project is developed in such a way that incremental development is provided in developing the project.
- In this model, the first version of any project is developed which is of low capacity.
- After that a main project is developed while developing this first version.

- Iterative model helps in developing the first version of any project.
- Which decides the final output of the project in Software Development Life Cycle (SDLC) processing.
- Iterative model has seven phases.

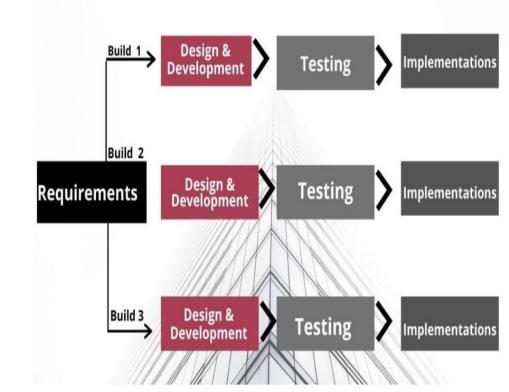
1. Requirement gathering & analysis:

- To develop this project, the client should have all the requirements in this phase and all these requirements are analyzed by an expert.
- After analyzing the requirements, the requirements are explained to the team.
- After that the processing of developing the project is carried forward.



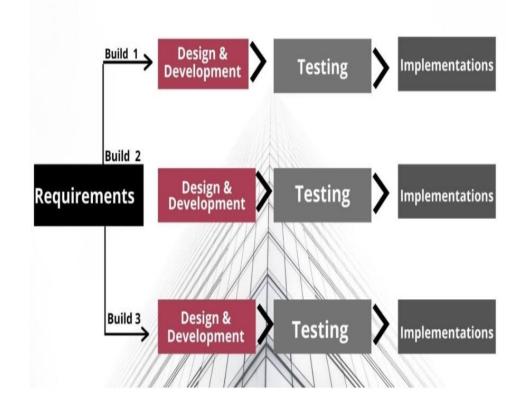
2. Design:

- In the design phase of the Iterative model, different types of diagrams are designed by the team.
- Such as data flow diagram, activity diagram, class diagram and state transition diagram.
- Due to which it is very easy for the team to develop the project.



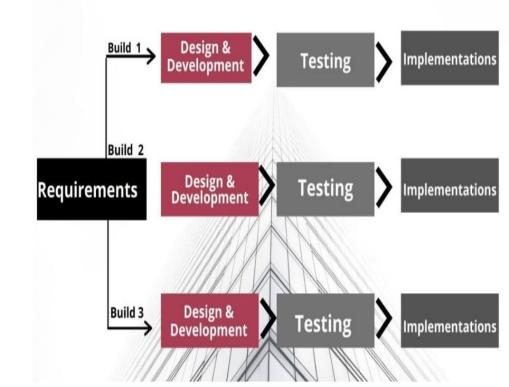
3. Implementation:

- In this phase, by implementing inside the project, according to the requirements, all the needs of the user are converted into computer programs by coding (programming language).
- Which is called software.



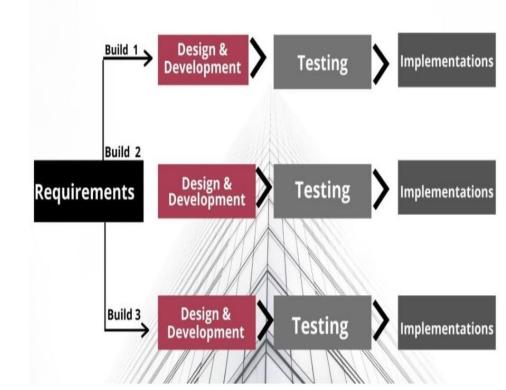
4. Testing:

- This phase is used after the coding phase is completed.
- Within which all the functions of the project are tested by many types of methods.
- There are many methods in the market to complete this phase.
- But these are some popular methods. white box, black box, and gray box test methods.



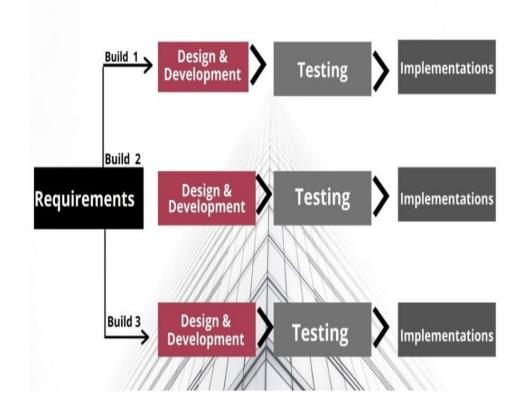
5. Deployment:

- After the completion of all the phases of developing the project, that project is landed in the market.
- That is, to do the work for which the project was developed.



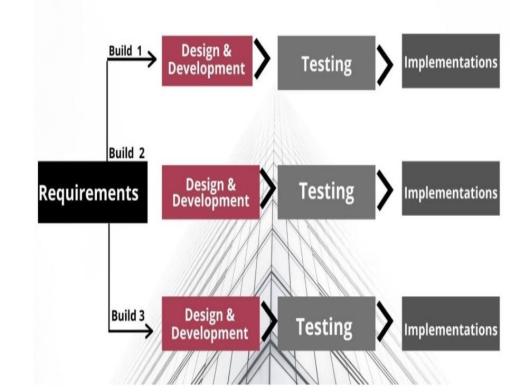
6. Review:

- From the name of the review itself, it is known what it means.
- In this, people are asked about the project.
- Is this particular software able to be used properly for the purpose for which it was developed or not?
- If any error is found in this.
- So, all the phases of the Iterative model are used again to remove that error.



7. Maintenance:

- After developing the project, after unloading it in its environment, some bugs, errors or some updates may be needed in the project.
- Therefore an additional option of maintenance of the project has been added.



When to use the Iterative Model?

- This model is used where the requirement has been well analyzed and understood.
- With the Iterative model, a large project can be developed very easily.
- This model should be used when you feel that further updates may be needed in your project.

Advantage Iterative Model

- It is easy to test and debug the project within this model. Because in this
 we develop the project in the form of iteration.
- Within this model, you can easily update the project.
- Risks can be easily identified in the project due to Iteration.
- In this model, more is given focus in the design in the project.

Disadvantage of Iterative Model

- Iterative model models are not more stable for smaller projects. Because iteration keeps happening again and again in this.
- More resources are needed to develop the project using this model. Due to which development is costly.
- If the client's requirements are changing frequently, then more cost will be required to develop the project. Due to which there is more trouble in analyzing the requirement.