SDLC MODEL	DESCRIPTION	USE	ADVANTAGE	DISADVANTAGE
1) Waterfall model	Waterfall is based on linear and sequential design. Waterfall model divides the life cycle into set of phases. This model considers that one phase can be started after the completion of the previous phase. Thus, the development process can be considered as a sequential flow in the waterfall. Here the phases do not overlap with each other.	1. It is use in small project. 2. Requirements are clear and fixed that may not change.	It is simple and easy to understand and use. Its work well for smaller and low budget project where requirement is very well understood. It is best suited when developer have already designed and developed similar software in the past.	The sequential nature of model does not allow to go back and undo or redo the action. It is not good model for long and object-oriented project.
2) Iterative model	Iterative process starts with a simple implementation of a small set of software requirement & iteratively enhances the evolving version until system is ready to be deployed. It does not attempt to start with full specification of requirements.	It is use in big project.	Parallel development can be planned. It includes in small portion of whole software process it is easier to manage the development process. Testing and Debugging during smaller iteration is easy.	More resources may be required. Not suitable for smaller project.

3) Spiral Model	Spiral model which supports for risk handling. The exact number of loops of spiral is unknow and can vary from project to project. Each loops in spiral is called phase of the software development process. Spiral model divided into four quadrants. 1.objective determination and identify alternative solution. 2.identify and resolve risk 3.develop next version of the product. 4.review and plan for the next phase.	Spiral model is used in larger project. Spiral model is useful for medium to high-risk project.	Additional functionality or changes can be done at a later stage Cost estimation become easy	Not advisable for smaller project, as it might cost more. For its smooth operation spiral model protocol needs to be followed strictly
4) V model	V model which has a testing phase parallel to each development phase. The V model is an extension of the waterfall model wherein software development and testing is executed in a sequential way. It is known as	V model used for small to medium sized project.	Simple and easy to used and understand V model is used for small project where project requirements are clear This model focuses on verification and validation activities early	High risk and uncertainty. It is not good for complex and object oriented project This model does not support iteration of phases.

	the Validation or Verification Model.		in life cycle thereby enhancing the probability of building an error free and good quality product.	
5) Big Bang model	Big bang model it is simplest model as it requires almost no planning. It required lots of funds and coding and takes more time, effort and resources to build a product. The product is gradually built as the requirements from the customer come, however the end product might not meet the actual requirement	Developing a project for learning purposes or experiment purposes. When newer requirements form the user side. Its suitable for small project.	There is no planning required for this. As there is no proper planning hence it does not require managerial staffs It is a good learning for new comers or students.	It is not good model for complex and object oriented projects. Can turn out to be very expensive if requirements are misunderstood.
6) RAD model	RAD is a software development methodology that focused on building application in a very short amount of time. It is a high speed adaption of the linear sequential model in which rapid development is achieved by using	When the system should need to create the project that modularizes in short span time (2-3 months).	This model is flexible for change. Each phase in RAD brings highest priority functionality to the customer.	It required highly skilled designers. All application Is not compatible with RAD model. For smaller projects, we cannot use the RAD model.

	component based construction.			