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|  | WATERFALL | ITERATIVE | SPIRAL | V MODEL | RAD | BIG BANG |
| definition | The waterfall model is linear and sequential process | The iterative process model is the implementation of the software development life cycle in which the initial development | This method used for risk management that combines the iterative development process model with elements of the Waterfall model. | It is sequential manner in V-shape. It is also known as Verification and Validation model. | Rapid Application Development Model, is based on the concepts of both iterative and prototyping development model. | In this model, developers do not follow any specific process. |
| process | similar to the direction water flows over the edge of a cliff. It sets distinct endpoints or goals for each phase of development. | the total software development is divided into iterations and each iteration has design, development, testing and review. The remaining phases, planning and requirement analysis, deployment and maintenance are one time and doesn't involve in interations. | The spiral model analyzes all proposed solutions and identifies, analyzes and addresses all potential risks. | It is based on the association of a testing phase for each corresponding development stage. Development of each step directly associated with the testing phase. | The Rapid Application Development model basically take prior attention on assembling customer desires in the course of workshop and development | the result may or may not be as per the customer's requirement, because in this model, even the customer requirements are not defined. |
| advantages | simplifies understanding, following and arranging tasks | This model is very flexible | Changing requirements can  be accommodated. | Simple and easy to understand and use. | Large projects can be done easily through the RAD model. | There is no planning required. |
| disadvantages | It doesn't consider error correction. | It is not a good choice for small projects. | Management is more complex. | High risk and uncertainty. | RAD model-based software development fails because of a lack of commitment and dedication. | There are high risk and uncertainty. |
| phases | Requirement,  Analysis,  Design,  Coding and  Implementation  Testing,  Development,  maintenance | Requirement and  Analysis,  Design,  Implementation,  Testing,  Deployment,  Review,  maintenance | Planning,  Risk analysis,  Product development,  Next phase planning | Requirement,  Analysis,  Design,  Implementation,  Testing,  Deployment,  maintenance | Business modelling,  Data modelling,  Process modelling,  Application generation,  Test and turn over | No phases and plannings. |
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