Rapid Application Model (RAD) :

**RAD Model** or Rapid Application Development model is a software development process based on prototyping without any specific planning. In RAD model, there is less attention paid to the planning and more priority is given to the development tasks. It targets at developing software in a short span of time. It focuses on input-output source and destination of the information. It emphasizes on delivering projects in small pieces; the larger projects are divided into a series of smaller projects.

The main features of RAD modeling are that it focuses on the reuse of templates, tools, processes, and code.

SDLC RAD modeling has following phases

1. Business Modeling : On basis of the flow of information and distribution between various business channels, the product is designed.
2. Data Modeling: The information collected from business modeling is refined into a set of data objects that are significant for the business.
3. Process Modeling: The data object that is declared in the data modeling phase is transformed to achieve the information flow necessary to implement a business function.
4. Application Generation: Automated tools are used for the construction of the software, to convert process and data models into prototypes.
5. Testing and Turnover: As prototypes are individually tested during every iteration , the overall testing time is reduced in RAD.

Advantages of RAD

* Flexible and adaptable to changes
* It is useful when you have to reduce the overall project risk
* Due to prototyping in nature, there is a possibility of lesser defects
* Due to code generators and code reuse, there is a reduction of manual coding
* With less people, productivity can be increased in short time

Disadvantages of RAD

* It can’t be used for smaller projects
* When technical risk is high, it is not suitable
* If developers are not committed to delivering software on time, RAD projects can fail
* Requires highly skilled designers or developers