

# **PROTOTYPE MODEL: ADVANTAGES AND DISADVANTAGES**

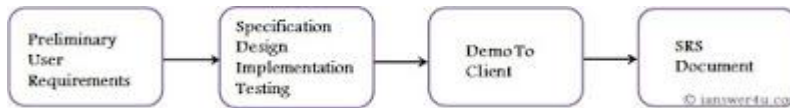
## **What is Prototyping Model SDLC?**

Lets discuss what is prototyping model in Software Development is. Here, a prototype is made first and based on it final product is developed. A prototype is a model or a program which is not based on strict planning, but is an early approximation of the final product or software system. A prototype acts as a sample to test the process. From this sample we learn and try to build a better final product. Please note that this prototype may or may not be completely different from the final system we are trying to develop.

## **Need of Prototyping Model**

This type of System Development Method is employed when it is very difficult to obtain exact requirements from the customer(unlike waterfall model, where requirements are clear). While making the model, user keeps giving feedbacks from time to time and based on it, a prototype is made. Completely built sample model is shown to user and based on his feedback, the SRS(System Requirements Specifications) document is prepared. After completion of this, a more accurate SRS is prepared, and now development work can start using Waterfall Model.

Now let's discuss the disadvantages and advantages of the Prototype model in Software Development Method.



Prototyping Process Model

## Advantages of Prototyping Model

- 1) When prototype is shown to the user, he gets a proper clarity and 'feel' of the functionality of the software and he can suggest changes and modifications.
- 2) This type of approach of developing the software is used for non-IT-literate people. They usually are not good at specifying their requirements, nor can tell properly about what they expect from the software.
- 3) When client is not confident about the developer's capabilities, he asks for a small prototype to be built. Based on this model, he judges capabilities of developer.
- 4) Sometimes it helps to demonstrate the concept to prospective investors to get funding for project.
- 5) It reduces risk of failure, as potential risks can be identified early and mitigation steps can be taken.

- 6) Iteration between development team and client provides a very good and conducive environment during project.
- 7) Time required to complete the project after getting final the SRS reduces, since the developer has a better idea about how he should approach the project.

### **Disadvantages of Prototyping Model:**

- 1) Prototyping is usually done at the cost of the developer. So it should be done using minimal resources. It can be done using Rapid Application Development (RAD) tools. Please note sometimes the start-up cost of building the development team, focused on making prototype, is high.
- 2) Once we get proper requirements from client after showing prototype model, it may be of no use. That is why, sometimes we refer to the prototype as "Throw-away" prototype.
- 3) It is a slow process.
- 4) Too much involvement of client, is not always preferred by the developer.
- 5) Too many changes can disturb the rhythm of the development team.

Source: <http://www.ianswer4u.com/2011/11/prototype-model-advantages-and.html#axzz3Qs5RV0Sb>