

## Unit : 7 Estimation.

\* Explain Software Project Estimation.

=> Estimation is the process of finding estimate, which is a value that can give basic data about the software.

Estimation can give a basic estimate for software cost, resource or tracking.

Estimation Process can be Assumptions using the past data or Past experience.

Using estimation, we can identify the risk for the project.

Estimation Process gives a basic idea according to its cost, resource or time.

Using Estimation Process, we can estimate the how much time is require for create

the Software.

Using Software Process, We can estimate the how much time is require for create the software or how many resource is require for create the software.

- Software Estimation Issues:

- This are the basic Estimation Issues.

1 Sometime, Estimation Process can not collect the accurate data.

2 Estimation Process gives software project cost probability.

3 Estimation Process can done, Using the Past data or Past experience.

- Software Estimation Guidelines:

This are the basic Software Estimation Guidelines.

1 At the time of estimation, we have to take opinion

From Past Experience People.

- 2 We have to include time management in estimation.
- 3 During Estimation, we have to take resource utilization as less than 80%.
- 4 Always take proper time to do a proper Estimation Process.
- 5 Using Estimation Process, we have to take Past data support.

\* Explain Software Estimation Decomposition Technique.

=> Decomposition Technique we can estimate the software.

Decomposition Technique is use Divide and Conquer Approach.

This are the basic Decomposition Technique steps.

Steps :

1 Before the starting the Software estimation process, we have to understand the scope of the software.

2 Generate the estimation size of the Software. In this step we have to Decompose the software function and calculate the size of the each function.

After that combine the all the functions estimation.

3 Generate the estimation effort and Cost. In this step we have to breakdown the cost and effort of the activities.

In this method, we have to identify the Sequence of activities and how much cost and time require for complete this activities.

4 Reconcile Estimates:

In this step, we have to

Compare the value of step 2 and step 3 which is obtained from this two step.

5 Determine the cause of Two different things and then again Reconcile the estimates.

\* Explain Empirical Estimation Technique.

=> Empirical Estimation Technique is use for Cost Estimation of Software or Project.

Empirical Estimation Technique is provides different empirically Derived Formula.

Using Empirically Derived Formula, we have to predicting the data of the software.

This Techniques are usually based on the data which is collected previously from a Project.

In this method, we have to use data which is collected using the past experience people or past data.

It also uses the size of the software to estimate the effort.

Mainly In this method, we have to use the formula for the cost estimation.

For the cost estimation, we have to use all the data which is collected using the different activities.

\* Explain Software Feasibility.

Q<sub>1</sub> => Software Feasibility means, we have to do feasibility analysis of the software.

In Feasibility, we have to evaluate the proposed of the software system or software project.

In Feasibility Study, we have to do analyze of the software Product.

This are the Types of Feasibility Study.

There are main Three Types of Feasibility Study.

- (i) Technical Feasibility
- (ii) Operational Feasibility
- (iii) Economic Feasibility.

(i) Technical Feasibility :

In this Feasibility Study, we have to Analyze the Software Technical requirement.

In this study, we have to define the Software or Project Hardware and Software requirement.

In this study, we have to also analyzes the Technical Team skills and Capabilities.

### (ii) Operational Feasibility:

In Operational Feasibility, we have to analyze the software product requirements.

In this study, we have to analyze the software product which is how we can easily produce and operate.

In this study, we have to define the software product operational requirement.

### (iii) Economic Feasibility:

In Economic Feasibility, we have to analyze the software creation cost.

In this study, we have to analyze the software product creation cost.

In this study, we have to do all the cost estimation of the software.