

# Requirement Itemization

## What is Requirement Itemization?

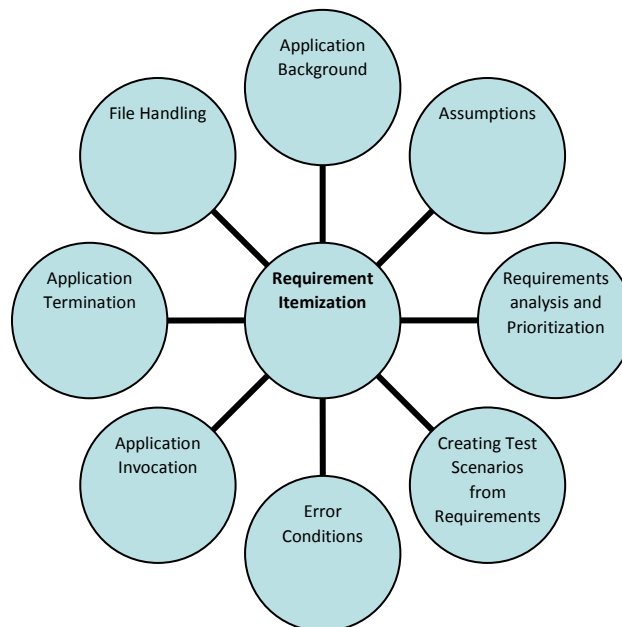
Requirement Itemization simplifies the requirements for better understanding:

## Need of Requirement Itemization

Requirement Itemization helps identifying different Test Scenarios, identifying testable items for the application.

## How Requirement Itemization can be done?

Below diagram display how can be requirement itemization done for better understanding of requirements.



- **Application Background**
  - Identify the background of the Application Under Test
- **Assumptions**
  - Identify the assumptions for the Application Under Test
- **Requirements Analysis and Prioritization**
  - Analyze and prioritize the requirements
- **Creating Test Scenarios from Requirements**
  - Create Test scenarios from the requirements given
- **Error Conditions**
  - Identify expected and unexpected error conditions
- **Application Invocation**
  - Identify the different ways to start the application
- **Application Termination**
  - Identify the different ways to end the application
- **File Handling**
  - Analyze how file handling takes place in the application

This template is used for requirement itemization



Requirement Prioritization helps to identify the most essential requirements from this set by distinguishing the critical few from the trivial many

**Requirements** are also **prioritized** to minimize risk during development so that the most important or high risk **requirements** are implemented first.

Requirements need to be prioritized because stakeholders can't always have everything they want.

**Requirements: “I want it all!!!”**



## **Benefits of Requirement Prioritization**

It enables the development team and stakeholders to plan and design optimal set of software requirements for implementation in successive releases.

Helps in choosing only a subset of the requirements and still produce a system that will satisfy the customer.

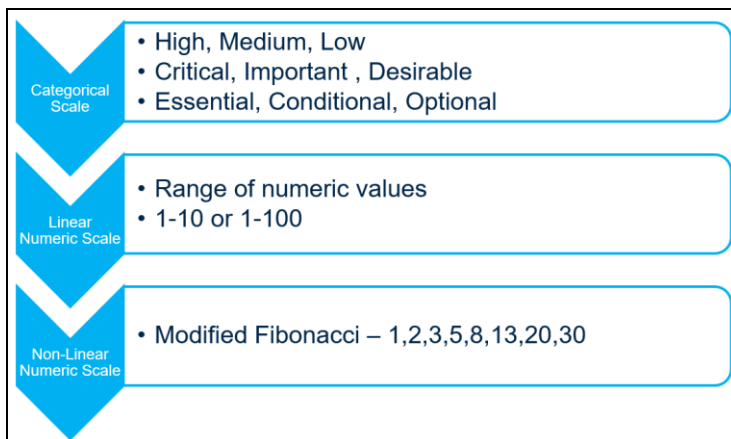
It lessens the risk of project cancellation as valuable progress is being demonstrated with each increment.

## **Requirement Priority Scales**

The effective requirement prioritization demands the use of a ranking scheme.

**It is important for all stakeholders to understand the meaning of each priority value**

Requirement priority scales are shown as follows:



Priority	Meaning
High/Critical/Essential	A critical requirement without which the product is not acceptable to the stakeholders
Medium/Important/Desirable	A necessary but deferrable requirement which makes the product less usable but still functional
Low/Conditional/Optional	A nice feature to have if there are resources but the product functions well without it

## **Prioritization Techniques**

Following are some of the known requirement prioritization techniques used to determine, negotiate, and develop a consensus regarding the priorities of the requirements:

<ol style="list-style-type: none"> <li>1. Business Case Analysis / Return On Investment (ROI) estimation</li> <li>2. Pair-wise comparisons</li> <li>3. Prioritization working groups</li> <li>4. Scale of 1-to-10 rankings</li> </ol>	<ol style="list-style-type: none"> <li>5. Voting schemes</li> <li>6. Weightings (e.g., weight the votes of different stakeholders)</li> <li>7. Value-Based Software Engineering</li> <li>8. WIN-WIN</li> <li>9. Quality Function Deployment (QFD)</li> </ol>
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