**What is a Functional Requirement?**

In software engineering, a functional requirement defines a system or its component. It describes the functions a software must perform. A function is nothing but inputs, its behavior, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality which defines what function a system is likely to perform.

Functional software requirements help you to capture the intended behavior of the system. This behavior may be expressed as functions, services or tasks or which system is required to perform.

**What is Non-Functional Requirement?**

A non-functional requirement defines the quality attribute of a software system. They represent a set of standards used to judge the specific operation of a system. Example, how fast does the website load?

A non-functional requirement is essential to ensure the usability and effectiveness of the entire software system. Failing to meet non-functional requirements can result in systems that fail to satisfy user needs.

Non-functional Requirements allows you to impose constraints or restrictions on the design of the system across the various agile backlogs. Example, the site should load in 3 seconds when the number of simultaneous users are > 10000. Description of non-functional requirements is just as critical as a functional requirement.

**Visual Mathematics Formula**

Functional Requirements

Visual mathematics formula does not require you to login or sign in. The only requirement you have to fulfill is provide a formula for the representation of the graph. Next to the formula you move ahead to the assignment of values so as to plot the graph. Plotting values can ensure the feasibility of the formula and preciseness of the formula. This way we can acknowledge the working of the formula and how else we can modify the formula.

Non-Functional Requirements

The graph can Move as we desire. We can zoom the graph to study how precise it is. Published formulas can be tested and studied by plotting the using value substitution.