**Non-Functional Requirements.**

**Modular Requirements.**

The basic principle of Modularity is that “Systems should be built from cohesive, loosely coupled components (modules)” which means s system should be made up of different components that are united and work together in an efficient way and such components have a well-defined function. To define a modular system, several properties or criteria are there under which we can evaluate a design method while considering its abilities.

These criteria are defined by Meyer. Some of them are given below:

**Modular Decomposability –**

Decomposability simply means to break down something into smaller pieces. Modular decomposability means to break down the problem into different sub-problems in a systematic manner. Solving a large problem is difficult sometimes, so the decomposition helps in reducing the complexity of the problem, and sub-problems created can be solved independently. This helps in achieving the basic principle of modularity.

**Modular Composability –**

Composability simply means the ability to combine modules that are created. It’s actually the principle of system design that deals with the way in which two or more components are related or connected to each other. Modular composability means to assemble the modules into a new system that means to connect the combine the components into a new system.

**Modular Understandability –**

Understandability simply means the capability of being understood, quality of comprehensible. Modular understandability means to make it easier for the user to understand each module so that it is very easy to develop software and change it as per requirement. Sometimes it’s not easy to understand the process models because of its complexity and its large size in structure. Using modularity understandability, it becomes easier to understand the problem in an efficient way without any issue.

**Modular Continuity –**

Continuity simply means unbroken or consistent or uninterrupted connection for a long period of time without any change or being stopped. Modular continuity means making changes to the system requirements that will cause changes in the modules individually without causing any effect or change in the overall system or software.

**Modular Protection –**

Protection simply means to keep something safe from any harm, to protect against any unpleasant means or damage. Modular protection means to keep safe the other modules from the abnormal condition occurring in a particular module at run time. The abnormal condition can be an error or failure also known as run-time errors. The side effects of these errors are constrained within the module.

**Usability Requirements**

There are many types of usability criteria. One of the most popular is by Nielsen Norman Group that suggests evaluating usability with five dimensions:

**Learnability.** How fast is it for users to complete the main actions once they see the interface?

Efficiency. How quickly can users reach their goals?

**Memorability**. Can users return to the interface after some time and start efficiently working with it right away?

**Errors.** How often do users make mistakes?

**Satisfaction.** Is the design pleasant to use?

Example of usability requirements:

The error rate of users submitting their payment details at the checkout page mustn’t exceed 10

With that in mind, consider how to make these requirements measurable.

### How to approach

**Start with the old design.** If you already have a product, consider measuring the number of errors and the time it takes to learn the interface and complete tasks to set up a baseline and define usability goals.

**Establish thresholds based on your product KPIs.** Can you afford that only 50 percent of users can find what they are looking for? What would be the number that satisfies your strategic plans?

**Run usability testing on competitor products.** If you don’t have an existing product, run tests with competitors to reveal areas of improvement. You may also check our article on usability requirements to learn more.

**Test usability on prototypes rather than on a finished product.** This is a no-brainer since usability must be established before your engineering even begins.