**NFR Description:**

Nonfunctional requirements describe how a system must behave and establish constraints of its functionality. This type of requirements is also known as the system’s quality attributes.

Let’s have a close look at typical nonfunctional requirements.

**Usability**

Usability defines how difficult it will be for a user to learn and operate the system. Usability can be assessed from different points of view:

* Efficiency of use: the average time it takes to accomplish a user’s goals, how many tasks a user can complete without any help, the number of transactions completed without errors, etc.
* Intuitiveness: how simple it is to understand the interface, buttons, headings, etc.
* Low perceived workload: how many attempts are needed by users to accomplish a particular task.

The usability is moderately-high priority because the client will not accept a working system where the users are unable to use, read or operate the system despite reaching functionality to what the client wants. Therefore developers will ensure that the website is consistent smooth design in which the client can operate and that the user can easily and quickly use the website’s features. The client and the user will not use the system if they can not read, navigate or identify how to use the website.

Example: Usability requirements can consider language barriers and localization tasks: People with no understanding of French must be able to use the product. Or you may set accessibility requirements: Keyboard users who navigate a website using <tab>, must be able to reach the “Add to cart” button from a product page within 15 <tab> clicks.

**Security**

Security requirements ensure that the software is protected from unauthorized access to the system and its stored data. It considers different levels of authorization and authentication across different users roles. For instance, data privacy is a security characteristic that describes who can create, see, copy, change, or delete information. Security also includes protection against viruses and malware attacks.

Example: Access permissions for the particular system information may only be changed by the system’s data administrator.

**Reliability**

Reliability defines how likely it is for the software to work without failure for a given period of time. Reliability decreases because of bugs in the code, hardware failures, or problems with other system components. To measure software reliability, you can count the percentage of operations that are completed correctly or track the average period of time the system runs before failing.

Example: The database update process must roll back all related updates when any update fails.

**Performance**

Performance is a quality attribute that describes the responsiveness of the system to various user interactions with it. Poor performance leads to negative user experience. It also jeopardizes system safety when it’s is overloaded.

The performance of the whole system aims to ensure ease of comfort to have the site load within five (5) seconds. This is to allow the user to be more productive within the given time they have during their working hours and as well as entering new data can easily be done without waiting. On the other hand developers, need to account for at least 174 users simultaneous because they must consider who will be using it at anyone time. This amount was discussion by the client. The priority of the performance is semi-low because as you develop the system, the focus will be come from design of the system and the coding of the system. Performance of the system will come once everything else of the system has been finalized.

Example: The front-page load time must be no more that 2 seconds for users that access the website using an LTE mobile connection.

**Availability**

Availability is gauged by the period of time that the system’s functionality and services are available for use with all operations. So, scheduled maintenance periods directly influence this parameter. And it’s important to define how the impact of maintenance can be minimized. When writing the availability requirements, the team has to define the most critical components of the system that must be available at all time. You should also prepare user notifications in case the system or one of its parts becomes unavailable. The reason why the system has to be up from 9am-5pm is because these are the working hours of the national parks, as discussed with the client. We therefore need to schedule any maintenance tasks around this time to ensure maximum uptime for its users.

Availability is a moderate priority because the system will be required to functioning to allow operations to be done during the working hours of the business.

Example: New module deployment musn’t impact front page, product pages, and check out pages availability and mustn’t take longer than one hour. The rest of the pages that may experience problems must display a notification with a timer showing when the system is going to be up again.

**Scalability**

Scalability requirements describe how the system must grow without negative influence on its performance. This means serving more users, processing more data, and doing more transactions. Scalability has both hardware and software implications. For instance, you can increase scalability by adding memory, servers, or disk space. On the other hand, you can compress data, use optimizing algorithms, etc.

Example: The website attendancy limit must be scalable enough to support 200,000 users at a time.

**Modifiability**

The modifiability of the system will be modeled with Model View Controller (MVC). This will allow maintainability and more structural means for a developer to easily make changes to the system when it is required. It is a high priority because the system needs to able to easily maintainability if the original developer leaves or is unavailable to make changes to the system. As well as this it is important that the code of the system is easy to understand and readable.

**Testability**

The reason that system will need to be able to be testable, is to ensure that the system aligns to the requirements of what is being developed by the client and furthermore to be able to provide a way for testers to show it reaches those requirements outline in the specifications of the clients. This is adequate priority for the system because the system needs to be created first before anything else to prove if the system passes on all known requirements brought up by the client.

**Operability and Operation**

 is the ability to keep an equipment, a [system](https://en.wikipedia.org/wiki/System) or a whole industrial installation in a safe and reliable functioning condition, according to pre-defined operational requirements.

**Development**

**Programming**The first skill one needs to master for being a web developer is programming. Many languages exist for different aims, but you need to know at least a few of them to be able to code a website. You can choose the ones you like by simplicity or complexity of learning, the universal use, the web development standards, the trends, recommendations, etc. For example, **HTML** **, CSS, JavaScript, PHP, SQL…etc.   
Basic Knowledge of Design**A developer is not the same as a designer, but design skills are useful and helpful to developers in their everyday work, and awareness of development is helpful for a designer. Developers should learn a bit of **graphic design**, because this can bring him a good awareness of many graphic tools which are useful for better development. When developers learn design techniques, they get a better understanding of website appeal and acquire better design taste. Taste is essential for every creative artist.

**Technology**

**HTML** is the standardized markup language to create documents on the web, in other words to format the content on the webpage. This includes titles, headings, text and links. It is the most common and basic language used in website development.  
**CSS**, which means Cascading Style Sheets, is a language paired with HTML to allow a programmer to set the webpage style. Here we mean layout, colors, and fonts. These elements are kept separate from the main webpage code.  
**JavaScript** is the solution for animation, games, apps, and interactivity on a website. All dynamic effects on a site are created via this programming language.

## These languages were for the front end of website now we will see the back end part will do by: PHP is a server scripting language, and a powerful tool for making dynamic and interactive Web pages.PHP is a widely-used, free, and efficient alternative to competitors such as Microsoft's ASP. SQL is a standard language for storing, manipulating and retrieving data in databases.

**Delivery**

**1. IMAGES**The most important item needed to build an impressive site all starts with the images provided. The more images you provide, the more creative we can be. Please make sure the images are all hires (1MB or higher preferred), and jpeg or tiff format.

**2. WISHLIST**It's important that we accurately design your vision, which is it very important to provide a detailed idea and concept of the certain items i.e. navigation items (bio, contact etc), as well as other sample sites that you can provide as an example.

**3. COPY**Please provide detailed and spell-checked copy i.e. your bio, contact information etc. We do not write or create content.

**Legal**

* company name,address.
* developer name,number.
* contact details, including an email address.
* **…**

### Minimize the risk of user-generated content Obtain the necessary licenses for content Follow the exception of fair use Follow the rules for selling things online Know your software rights