**“Naaman”**

**Non-Functional Requirements Specification**

# **1.** **Introduction**

## **1.1** **Purpose**

This document's main goal is to show the criteria for a remote mental health management platform that improves mental wellness through online consultation. The paper contains a thorough description of the functional and non-functional needs that have been suggested. The goal of this project is to create a simple way to keep track of mental health management documents.

## **1.1** **Intended Audience and reading Suggestions**

This document acts as a contract between the parties involved. The purpose of this document is to help stakeholders, the design team, developers, project managers, and the testing team better understand the system requirements.

## **1.2** **Scope of Development Project**

This web based remote mental health management platform is an online community designed to manage mental health consultations of users. This application provides the features to share thoughts, online consultation booking and access to professional help. Also this website provide the features blogging information all at once. The ultimate goal of this complete system is to upgrade users’ mental health to a better state.

The project is simple to apply in a variety of circumstances. Reusability is possible in this system as there is flexibility in all the modules. Therefore, new features can be added in to the system. HTML, CSS, JavaScript, PHP are the language used to develop this software due to their advantages in terms of speed, security, cost efficiency and scalability compared to other languages.

## **1.3** **References**

**Books:**

* Designing data- Intensive Applications by Martin Kleppmann
* The Algorithm Design Manual (Handcover) by Steven S. Skiena
* Software Requirements and Specifications: A Lexicon of Practice, Principles and
* Software Requirements (Microsoft) Second Edition by Karl E. Wiegers
* Software Engineering: A Practitioner’s Approach Fifth Edition by Roger S. Pressman

**Websites:**

* <https://www.softwareadvice.com/>
* <https://theappsolutions.com/blog/development/how-to-develop-social-media-app/>
* https://www.sciencedirect.com/book/9781558608436/designing-data-intensive-web-applications

# **2.** **System-Wide Functional Requirements**

[Statement of system-wide functional requirements, not expressed as use cases. Examples include auditing, authentication, printing, reporting.]

* Account creation and option for the user to decide the privacy level for the shared story
* Sharing/reading/commenting on stories
* People comment get point or reduce a point based on how helpful the comment is
* Online consultation booking
* Access to professional help
* Type of support based on the issue (Stress, Trauma, Trust issue, etc.)
* Professional article/ Info Hub

# **3.** **System Qualities**

## **3.1** **Usability**

## The application should prioritize ease of use. Naaman is an application that depend on the user opening themselves and sharing their issues. This means that the user interface must be simple to use and provide consumers with a relaxing and pleasant experience. The mental health specialists and clients will utilize the suggested system that we are developing. As a result, the system's functions must conform to the criteria established by the users.

## **3.2** **Reliability**

The application needs to have a minimal downtime because the application is tackling a vulnerable issue. People with a low mental health have a hard time opening themselves and are fragile. Any kind of interruption can led to an unfortunate circumstances.

## **3.3** **Performance**

The application needs to have a quick response time and startup as those small windows of time can result in the user changing their mind from consulting. On the other hand, the application only needs a regular capacity as there won’t be a massive concurrent users and limited expert for online consultations.

* The system's performance should be quick and precise.
* This system will manage expected and unforeseen failures in a way that prevents data loss and extended periods of downtime. As a result, it should include built-in error checking to detect incorrect usernames and passwords.
* The system should accommodate a high number of transactions data without any fault. So, it should be able to handle large data amount.
* **Response Time** - Average response time shall be less than 2 second.
* **Throughput** - The system shall accommodate transactions data per minute.
* **Recovery Time** - In case of a system failure, redundant systems shall resume operations within 30 seconds. Average repair time shall be less than 1 hour.
* **Start-up/Shutdown** Time - The system shall be operational within 1 minute of starting-up.
* **Capacity** - The system accommodates 10000 concurrent users.
* **Utilization of Resources** - A maximum of one million Transactions may be stored in the database by the system. Old transactions must be backed up and removed from the operational database if the database expands over this limit.

## **3.4** **Supportability**

Naaman is a web-based and need to be compatible to browser for laptop and mobile phone. Due to the constant prolonged lockdown and social distancing, Naaman need to be easy to upgrade to prepare for more user.

# In addition, the system should be designed to be expandable. It should be simple to add new feature needs or accommodate changes to current ones.

# **4.** **System Interfaces**

There are many types of interfaces as such supported by this remote mental health management platform namely; User interface, software interface, hardware interface and communication interface.

## **4.1** **User Interfaces**

The user interface for the software should be compatible to any browser such as Internet explorer, Mozilla or chrome.

### **4.1.1** **Look & Feel**

The user interfaces should be simple and give a soothing/comforting feeling.

The system will ensure that all web pages have a consistent appearance and feel with using of icons and toolbars

### **4.1.2** **Layout and Navigation Requirements**

Navigation bar at the top of the website. Navigation bar should embrace predictability. Also navigation bar should have a clear hierarchical structure with every category and subcategory. Also navigation bar should contain a home button which can redirect users to the home page.

The user interface is available providing following functionalities to make it easy to access .

* Application will have menus and navigation bars in all pages at the same position.
* In application the logo should be appeared in each page.
* Search boxes should be appeared.
* Application should have an option to get help.

### **4.1.3** **Consistency**

This application should

* Gives a positive experience to user.
* Enables users to do their tasks in an efficient and quick way.
* Improve the website usability and learnability.
* Have an option to get help.
* Use the shades of the same color pallet. It shouldn’t be contains much varieties of colors.

### **4.1.4** **User Personalization & Customization Requirements**

As Consultants and clients are the system's users, members are expected to have a basic understanding of computers and how to use the internet. The person in charge of the program should have a better understanding of the system and how to repair any minor issues that may arise as a result of disk crashes, power outages, or other factors.

## **4.2** **Interfaces to External Systems or Devices**

### **4.2.1** **Software Interfaces**

[This section describes software interfaces to other components of the software system. These may be purchased components, components reused from another application or components being developed for subsystems outside of the scope of this SRS, but with which this software application must interact.]

* Front end client :
* Database server :
* Back End :
* Operating system : Windows XP or above
* Browser : Any latest browser

### **4.2.2** **Hardware Interfaces**

Since this remote mental health management platform must run over the internet, all the hardware which require to connect the internet will be hardware interface for the system. As for e.g. Modem, WAN-LAN, Ethernet Cross–Cable.

Software

* Processor: Pentium(R)Dual-core CPU or higher
* Hard Disk: 240GB or more
* RAM: 4GB or more

### Mobile

* Mobile App • Processor: 64-bit CPU with at least 4x Arm®
* Hard Disk: 16GB or more
* RAM: 2GB or more

### **4.2.3** **Communications Interfaces**

Because this remote mental health management platform must operate over the internet, all of the hardware required to connect to the internet will serve as the system's hardware interface. For the suitable use there must be a good internet connection among users. It will use the HTTP protocol for communication over the internet. And the intranet communication will be through TCP/IP protocol suite.

# **5.** **Business Rules**

Anything that takes and fulfills company policies and procedures is referred to as a business rule. A rule can be used to enforce company policy, make a decision, or infer new information from current data. This contains the rules and restrictions that users of the System must follow. This covers the project's cost as well as any discounts offered. Illegal protocols should be avoided by users.

* All users need a valid email address to sign up. This can be considered as valid if the user can prove that they have access to the email address.
* User’s sign-in and sign-up times must be tracked.
* If the submit button pressed on some form or document n the application and all the mandatory fields are present, the system should send a confirmation email to the user.

# **6.** **System Constraints**

As this is a mental health management platform certain boundaries must be maintained accessing client’s information. Most of these are center on maintaining the privacy of people. Also the software must be able to store data indefinitely if there is any consequences. If there is huge damage to the database due to the virus, or catastrophic failure, such as a disk crash. The recovery method should restore a past copy of the database that was backed up to archival storage and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed-up log, up to the time of failure. Payment gateways should be secured

# **7.** **System Compliance**

## **7.1** **Licensing Requirements**

A software license is a document that grants the right to one or more copies of a software tool to a customer. Using and disseminating the program without a license would be deemed a copyright violation.

To execute software, valid licenses are required to:

## Work with application development software

## In development, test, and production mode, to utilize web server, application server, and database software

These are the license required to the “Naaman” mental health management platform;

**Perpetual software license**

A perpetual software license is a license to use software that does not expire. The consumer is not required to pay for support or to upgrade the software version they purchased.

Perpetual licenses are preferred by customers because they are straightforward and easy to administer. They may, however, receive obsolete tools, leaving them dissatisfied and resulting in a negative reputation for the service.

**Subscription software license**

A subscription, on the other hand, is a license that is renewed each year. Customers usually renew their licenses every year, which includes support and updates for the duration of the coverage term. The license will be automatically cancelled unless the client renews it. Subscription licenses provide a constant stream of revenue for the publisher rather than a lump sum payment, which also means a lower initial cost for the consumer. A connection is formed between the customer and the supplier as a result of this continual engagement, making it simpler for the provider to anticipate their requirements.

**Consumptive software license**

There is a recurring charge for the consumptive license as well, however it is dependent on consumption. The client pays more the more they utilize the product.

The payment mechanism for a consumptive license is the one that is most closely connected to the value the consumer received from the product while simultaneously providing a reasonable revenue stream for the supplier. However, one disadvantage is that more management is necessary on both ends.

## **7.2** **Legal, Copyright, and Other Notices**

Naaman should be offer the disclaimers, copyright, word mark, trademark and product warranties of the [Organization name].

When original copyright holders donate source code, documentation, and other content to this project, the copyrights in those contributions generally remain with the original copyright holders.

So, it should be

* Copyright The “Naaman” Authors.
* Copyright The “Naaman” Contributors.
* Copyright Contributors to the “Naaman” project.

These statements are meant to convey the following information:

* The work is copyrighted;
* The contributors of the code licensed it, but retain ownership of their copyrights; and
* The project was licensed for distribution as part of the named project.

Also there should be

* Limitation of warranty
* Permission to reproduce manuals

## **7.3** **Applicable Standards**

This project should follow these standards.

* Clear definition of purpose
* Simplicity of use
* Ruggedness (difficult to misuse, kind to errors encountered)
* Delivered on time and when needed
* Reliability
* Efficiency (fast enough for the purpose it was created)
* Minimum development cost
* Conform to standards
* Clear, accurate and precise user documentation
* Clear, accurate and precise technical documentation.
* Development standards for all stages of the System Development Life Cycle
* Minimum software development activities, deliverables, and acceptance sign-off criteria

# **8.** **System Documentation**

The user interface, user manual, online assistance, and installation and management guide must all be sufficient to teach users on how to use the system without difficulty. Users should be provided with certain amenities by the administrator in the form of,

* Backup and recovery
* Forgot password
* User registration
* Data replication
* Updating the server
* Maintaining files and report