**6. System requirement specification**

**6.1 Function Requirements**

This section **Function Requirements** contains the specification of function requirements of the system, below tables are the lists of function requirements

**6.1.1 Manage Articles [MA]:**

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| MA 1 | System allow users who are logged to it to **(Add / Upload)** New articles |
| MA 2 | System allow user who are logged to it to **(Update)** his articles |
| MA 3 | System allow user who are logged to it to **(Delete)** his articles |
| MA 4 | System allow user who are logged to it to **(read statistics)** of his articles |

Table 1 Manage Articles

**6.1.2 Liked Articles [LA]:**

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| LA1 | User who logged to system can **put likes** to the articles |

Table 2 Likes

**6.1.3 Reply on Articles / Comment on Articles [CA]:**

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| CA1 | User who logged to system can **comment on** the articles |

Table 3 comment

**6.1.4 Generating Mind-map [GM]:**

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| GM1 | System **generating mind map automatically** To the uploaded Articles |

Table 4 Mind Map

**6.2 Non- Functional Requirement**

**6.2.1: Performance Requirement [PR]**

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| PR1 | System must respond The Operations in less 7 seconds for user |
| PR2 | The System should be **compatible** with all android versions and browsers |
| PR3 | **"Accessibility/direct access"**  System should be accessible for all |
| PR4 | **"Maintainability"** Make the system capable to use in order to achieve a particular goal |
| PR5 | **"Extensibility"** The ability to make extend a system and this is by can be through the modification of previously existing functionality or through addition of new functionality in the system |
| PR6 | **"Usability"** the system provide for user capability to use in order to achieve a particular goal |
| PR7 | **"Privacy"** the system must be able to protect user information and articles from unauthorized person |
| PR8 | **"Security"** the ability to provide protection to the system from attack and intrusions. |

Table 5 : performance Requirement

**6.2.2: Safety and Security Requirement [SSR]:**

|  |  |
| --- | --- |
| **Requirement ID** | **Requirement Description** |
| SSR1 | The System must handle safe login and logout through session. |
| SSR2 | Hashing technology and Algorithms should be used to handle the secure login for users. |
| SSR3 | The database should be secured from SQL Injection to prevent leak or loss of information |
| SSR4 | The system could use SSL (Secured Socket Layer) certificates to secure the data transmitted. |

**6.2.3: Reliability [R]:**

System should be designed in modular manner to ease in software maintenance. By designing modularly, we are able to reduce coupling allowing each module to perform a specific function.

|  |  |
| --- | --- |
| **Requirement ID** | **Requirement Description** |
| R1 | The Program should be **reliable** and provide catching of exceptions so that unintended result do not occur such as system crashes or data validation failure. |

**6.2.4 Other Software Quality Attributes:**

**6.2.4.1 Usability:**

**Usability** the system provide for user capability to use in order to achieve a particular goal.

The system should have user-friendly interface

**6.2.4.2 Availability:**

The system must be available 24/7, with no more than 20 minutes down time per day