**Non-Functional Requirements**

These are the requirements that are non-functional in nature.Specifically, these

are the constraints the system must work within. The application must be compatible

with almost all type of standard web browsers.

**Usability**

The Screens should be designed for ease of use by non-technical users who do not have any computer knowledge. The GUI design shall be intuitive and task-based without any superfluous design.

Familiarity – The system’s interfaces and navigations should be based on other systems that the users are familiar with.

**Standards Compliance**

There shall be consistency in variable names within the system.

The graphical user interface shall have a consistent look and feel.

Performance Requirements

1. The load time for user interface screens should not take a long time.

2. The system shall consume very little primary memory.

3. The server should be capable of handling a large number of requests

Simultaneous requests(around 100-150).

4. Thus the internet bandwidth should be as high as possible, minimum of 100 Mbps is required

5.It is recommended that the server hardware should have at least 2 GHz processing speed and

4 GB RAM.

6. The management application should be able to process queries within a very few seconds.

**Reliability**

1. The system should be able to manage to leaves even after some years without

errors.

2. The failure rate of the system should be very nominal.

3. The system shall be tested on end cases to offer the user quality and reliable package.

**Availability**

1. As the whole institutes leave processing will be dependent

on the system thus it should not be down for more than few hours.

2. Uptime for the system should be 24X7.

3. Anyone shall be able to connect to it from anywhere.

4. In case of application or a hardware failure, the system should re-initiate immediately.

5. In case of a possible hardware failure or corruption of database, the system administrator should immediately restore the backup.

**Security**

1. Unauthorized creation/modification/publishing of data - through the username and password authentication as defined for relevant user groups.
2. Unauthorized viewing of data - through the username and password authentication as defined for relevant user groups.
3. The software should adhere to security guidelines, standards and policies prescribed by NIC’s Security Division and should be audited & certified for compliance with these standards by Security Division before it is hosted in Production Environment.
4. Privacy of every user should be maintained.
5. The operating system begins used on the server should be the latest version so that it must be free bugs.
6. The leave management should be free from common vulnerabilities such as SQL Injection, Cross-Site-Scripting, Broken Authentication and Session Management, Insecure Direct Object References, Cross Site Request Forgery.

Etc.

7. The administrator shall also be carrying out a timely inspection of a database to ensure safety.

**Language Support**

1. The application will store data using Unicode representation.
2. Only languages where Unicode font file and keyboard manager/driver are available will be supported.

**Maintainability**

1. Software Code must be modular and well documented.
2. All the artifacts related to the software such as code, SRS, User Manual etc. should be well documented and self-explanatory for any programmer to understand. Detailed documentation shall be available at each stage for easy comprehensions of the application system.
3. All documents shall be prepared as per the defined documentation standards.
4. The database should be accessible to the administrators so as to carry out maintenance. The database should also be periodically backed up to prevent information loss due to system crashes.

**Logical Database Requirements**

1. The names, contacts, addresses should be in a valid standard format to maximize correctness of information.
2. Redundancy should be minimum in the database.
3. At least 10 GB storage is recommended for database storage requirements.

**Portability**

1. The platforms on which the system runs should be generic enough to allow substantial amount of portability.