## **Non-Functional Requirements**

Non-functional requirements for a (project name) are characteristics or qualities that describe how the system should behave, rather than specifying what the system should do. These requirements are crucial for ensuring the system's performance, reliability, security, etc. Here are some non-functional requirements for a medical waste management system:

### **Performance:**

#### Concurrent Users:

* To achieve optimal performance, the system must be able to handle multiple users (tourist, tour guide, admins) at the same time.

#### Throughput:

* Ensure smooth operation under heavy-use conditions.

#### Response Time:

* The response time for user interactions should be less than 2 seconds for all primary operations.
* Chat interface responses should take no longer than 5 seconds to create plan
* Payment confirmations should complete within **5 seconds**.

### **Scalability**:

* The system must support increased users’ registrations postings and data load over time without performance degradation.
* Add new features or modules with minimal disruption

### **Reliability:**

* The system must be reliable to ensure that user's information will not lost or corrupted like automatic backups and redundancy.
* Achieve a minimum system uptime of 99.9%, ensuring availability during critical periods.

### **Security:**

* Require multi-factor authentication (MFA) for users’ accounts.
* Use encryption to protect user data (e.g., personal details, payment info) and implementing secure payment

### **Usability:**

* The system should be user-friendly and intuitive so that users can easily know the basic feature within 10 seconds
* Payment process should have a response time of less than 5 seconds for payment confirmation.

**Compatibility:**

* The system must be compatible with a variety of platforms, browsers, and devices.

### **Maintainability:**

* A simple system that can be easily maintained and expanded should be the focus.
* To make the codebase more flexible, it should be well-documented so that future updates, bugs fixed as needed, and new features added.