**2 Non-functional requirements:**

Non-functional requirements include all the remaining requirements which are not included by the functional requirements. They specify standards that judge the operation of a system, rather than specific behaviors. Non-functional requirements are important in their impact on the user experience because they define the behavior, features, and general characteristics of the system.

**2.1 Product requirements:**

* **Usage:** Librarian can access the network to be able to use the mobile application associated with the noise alarm system.
* **Usability in our system:** Each noise alarm device must be in a fixed place in the middle of each library table so that the device can accurately record the student's voice level, we use Flutter in building the user interface for the mobile application in our system.
* **Its accuracy:** The system works without failure (such as code errors, hardware failures, or problems with other system components).

* **Availability:** System functionality and services are available for use with all 24/7 processes.

**2.2 The organization of non-functional requirements:**

**1-** When talking about an organization In our system, we have eliminated the problem of the loud warning sound that causes great disturbance in the atmosphere of the library and thus in the university environment.

**2-** When we talk about organization, the noise alarm system needs to process students' voices quickly.

**2.3 External Requirement:**

**1. Ethical requirements:** Includes rules and instructions so that they are suitable for the user and the general public.

**2. Interoperability requirements:** These requirements describe how system components interact with each other.

**Performance constraints:**

1. **Speed**: Response time must not exceed 1 second
2. Size: should be acceptable, small size is preferred.
3. **Ease of use:** Easy enough for users to let them understand the function at first look by using a clear user interface.
4. **Reliability:** It is necessary to give the correct information about the user.
5. **Robustness:** If there is a malfunction in the system, the system will work again after less than a minute.
6. **Portability:** it easy for the user to navigate within the application easily.