1. **Overall Description**

**2.1 Product Perspective:**

The hospital management software is designed to operate within the context of a larger healthcare system. It will integrate with the central database maintained by the health ministry, which contains the patient's medical records. Our software will have a local database that stores relevant information for efficient and quick access. The local database will synchronize with the central database periodically to ensure data consistency.

**2.2 User Classes:**

The software is designed to cater to multiple user classes within the hospital setting. These user classes include:

* Administrators: Manage user accounts, handle billing and invoicing, and oversee inventory management.
* Doctors: Access patient records, schedule appointments, prescribe medications, and order tests.
* Patients: Access their medical records, book appointments, receive test results.
* Laboratory Technologists: Enter and access test results, manage laboratory data.
* -Staff: View work schedule, inventory management
* -Nurse: Access Patient Information, Update Patient Condition, View Work Schedule
* -Pharmacy: Store Medicines, Accept Prescription from Doctor, Sell Medicine

**2.3 Operating Environment**:

The hospital management software will operate in a networked environment within the hospital premises. It will run on a server infrastructure with appropriate hardware specifications and operating systems. The software will be accessible through web browsers, and it will be compatible with common operating systems such as Windows, macOS, and Linux. Mobile access through dedicated applications will also be provided.

**2.4 Constraints**:

* The software requires a stable and reliable network infrastructure within the hospital premises to ensure uninterrupted access and data synchronization.
* The local database should have sufficient storage capacity to handle the anticipated volume of patient records and related data.
* The software must adhere to relevant privacy and security regulations to protect patient data, including the utilization of the security code mentioned earlier.

**2.5 Assumptions**:

* + It is assumed that the health ministry will provide timely and accurate updates to the central database for patient medical records.
  + The availability and delivery of security codes to patients via phone messages will be implemented effectively to maintain data security.
  + Users of the software will have a basic level of computer literacy and training to operate the system efficiently.

**2.6 Dependencies:**

* + The hospital management software relies on the availability and functionality of the central database maintained by the health ministry.
  + The software's security code generation and validation process depend on the successful integration with the messaging system used to deliver codes to patients.
  + The successful implementation of the software relies on the cooperation and support of hospital staff and administration for user training and data input.