REPORT PROJECT

Project Name: Hospital Management

1. PROPOSE

1.1. Scope:

- **Author:** Manage and query doctors, diseases, and patients information.
- **Patients:** Guarantee the order of patients corresponding to disease's priority.
- **Lobby:** Allow registering patient information and transfering them to reception.
- **Reception:** Allow editting patient information and transfering them to doctor's rooms (priority will be given to the doctor's empty slot).
- **Doctor's Room:** Display doctor and patients information, and empty slots remain. Order of medical examination: First-In First-Out.

1.2. Stack:

The project will use the following technologies:

- **NestJS:** a framework for building efficient, scalable Node.js server-side applications.
- **GraphQL:** a query language for APIs and a runtime for fulfilling those queries with your existing data.
- **MongoDB:** a document database designed for ease of application development and scaling.
- **Mongoose:** is a object modeling tool for MongoDB. Mongoose provides a straight-forward, schema-based solution to model your application data.
- **Socket.IO:** a library that enables low-latency, bidirectional and event-based communication between a client and a server.
- **EJS:** is a simple templating language that allow generating HTML markup with plain JavaScript.
- **Redis:** is an open source, in-memory data structure store used as a database, cache, message broker, and streaming engine.

1.3. Layer:

- **Presentation Layer:**

- **Application Layer & Data Access Layer:**

- **Database Layer:**

  o **Database:** Lưu trữ dữ liệu của web

- **External Services Layer:**

- **Utility Layer:**

1.4. Schema: