LECHTURE HALL MANAGEMENT SYSTEM

SOFTWARE ENGINEERING GROUP PROJECT

RAJAPAKSHA K.G.M.S - 2022/E/080

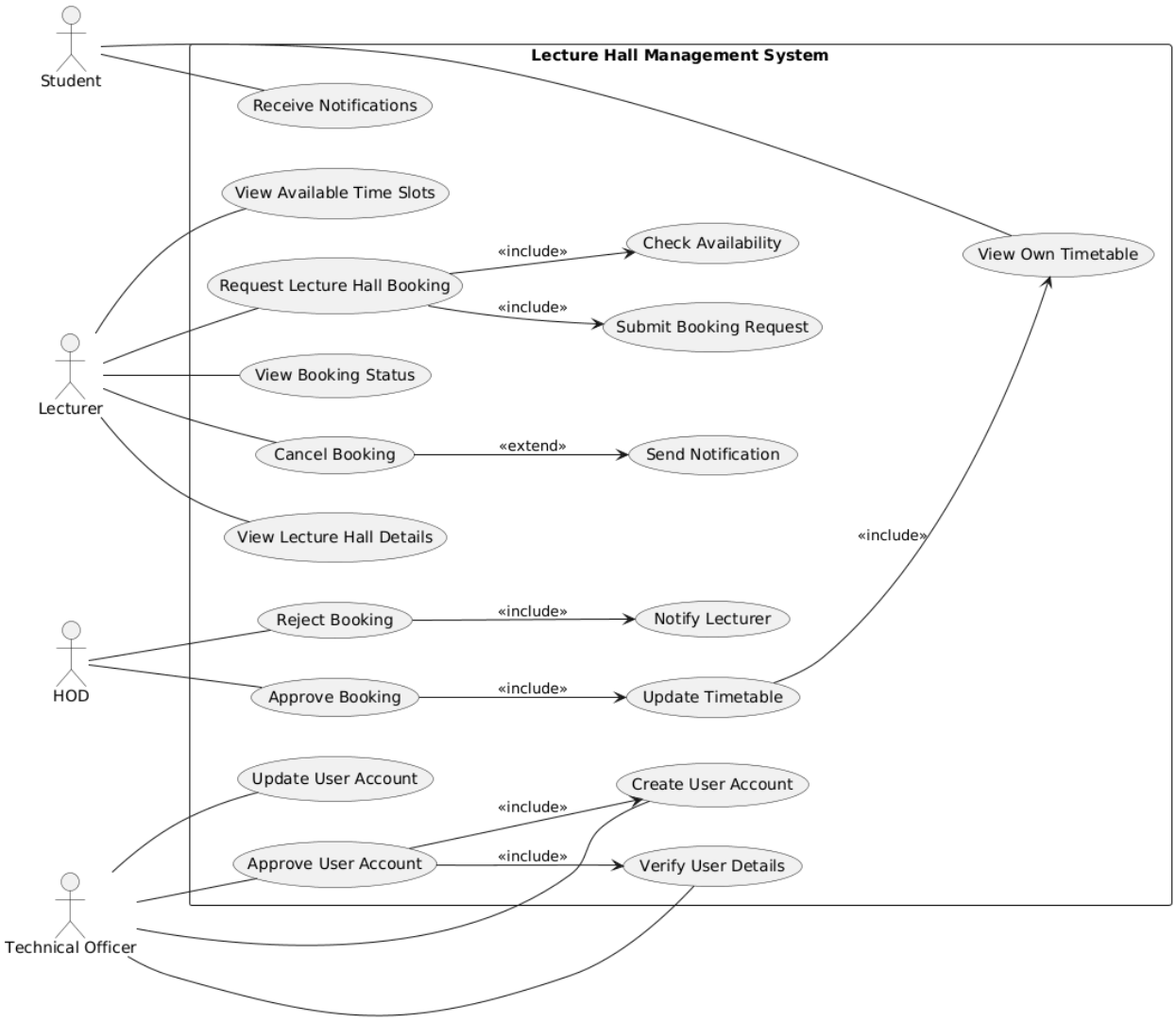
DE COSTA M.S.M. - 2022/E/092

RATHNAYAKE R.G.R.M.D.R.- 2022/E/122

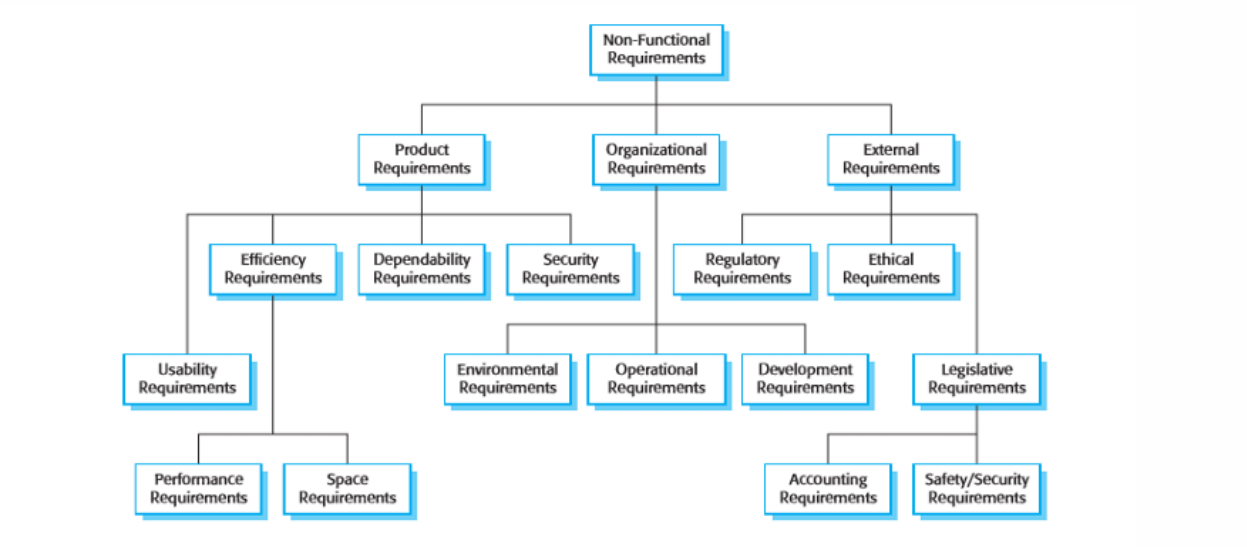
SENARATHNA S.A.D.H.D. - 2022/E/141

MADUSHANKA W.N.L - 2022/E/167

USECASE DIAGRAM:



NON FUNCTIONAL REQUIREMENTS



Usability Requirements

- The system shall provide a simple and user friendly interface for lecturers, students, and HOD.
- The system shall be easy to learn and use without formal training.
- The system shall be accessible through common web browsers.

Performance Requirements

- The system shall display lecture hall availability within an acceptable response time.
- The system shall support multiple concurrent users without performance degradation.

Space Requirements

- The system shall use minimal storage space for booking, timetable, and notification data.
- The system shall efficiently manage stored data without unnecessary duplication.

Security Requirements

- The system shall enforce role-based access control for Lecturer, Student, and HOD.
- The system shall prevent unauthorized access to bookings and timetables.
- The system shall require user authentication before accessing system features.

Dependability / Reliability Requirements

- The system shall provide accurate and consistent booking and timetable information.

Environmental Requirements

- The system shall operate using the existing faculty IT infrastructure.
- The system shall function correctly under normal network conditions within the faculty.

Operational Requirements

- The system shall be available during normal academic working hours.
- The system shall be manageable by authorized faculty staff.

ELICITING NON –FUNCTIONAL REQUIREMENTS

Category	Example questions
Usability	1.What is the level of technical expertise of lecturers and students? 2.Should the system be optimized for mobile devices as well as desktops?
Performance	1.How fast should the system respond when checking lecture hall availability? 2.How many users are expected to access the system simultaneously?
Space	1.How large is the expected data store for bookings and timetables? 2.Should old booking and notification data be archived or deleted?
Dependability / Reliability	1.How should the system behave if a failure occurs during a lecture hall booking? 2.Is it acceptable to restart the system in case of a failure? 3.How should the system prevent loss of booking or timetable data?
Security	1.What security measures are required to protect user data? 2.Should access logs be maintained for approval actions?
Environmental	1.What hardware and network environment is currently available? 2.Are there any environmental constraints such as power or connectivity limitations?
Operational	1.Who is responsible for managing and monitoring the system? 2.During which hours should the system be operational?