# Practical 1: Prepare an SRS document in line with the IEEE recommended standards for the specified Case Study. (Functional Requirements)

**1. Introduction**

1.1 **Purpose**

The purpose of this Software Requirements Specification (SRS) document is to delineate the functional requirements for the "Project Link Hub" system.

1.2 **Scope**

The SRS defines the functional requirements for:

* User Registration and Authentication
* Student Features
* Faculty Member Features

**2. System Overview**

2.1 **System Architecture**

The system will follow a two-tier architecture:

* Front-end: Developed using HTML, CSS, and Bootstrap.
* Back-end: Utilizing PHP for server-side processing and interacting with a MySQL database for data storage.

2.2 **Users**

* **Students**: Able to browse available project ideas, propose projects, and track proposal status.
* **Faculty Members**: Have additional privileges to manage projects and approve student proposals.

**3. Functional Requirements**

The functional requirements specify the system's behavior and capabilities.

**3.1 User Registration and Authentication**

**3.1.1 User Registration (FR-1)**

* Users must register with their name, email, and password.
* Passwords should be securely hashed and stored.
* The system must validate user input during registration.

**3.1.2 User Authentication (FR-2)**

* Registered users must log in to access the system securely.

**3.2 Student Features**

**3.2.1 View Available Projects (FR-3)**

* Students can view available project ideas, showing title, description, faculty member, a request button, and status.

**3.2.2 Propose a Project (FR-4)**

* Students can select an available project and propose it.
* The proposal will be sent to the corresponding faculty member for approval.

**3.2.3 Check Proposal Status (FR-5)**

* Students can check the status of their project proposals (approved, rejected, or pending).
* Rejected proposals should display feedback or comments from faculty members.

**3.3 Faculty Member Features**

**3.3.1 Add Project Ideas (FR-6)**

* Faculty members can add new project ideas, including title, description, and status (available).
* They should be able to edit or delete project ideas.

**3.3.2 Approve/Reject Student Proposals (FR-7)**

* Faculty members can review and approve or reject student project proposals.
* Comments or feedback can be provided upon rejecting proposals.

**3.3.3 Mark Projects as Unavailable (FR-8)**

* Faculty members can mark approved projects as unavailable.
* Unavailable projects should no longer be visible to students.

**4. Conclusion**

This Software Requirements Specification (SRS) document focuses on the functional requirements of the "Project Link Hub" system, adhering to IEEE standards. It provides the necessary framework for the development team to implement the system according to the specified requirements.

This version specifically concentrates on the functional requirements outlined in the provided SRS. Adjustments and additions can be made based on more detailed requirements or specific IEEE standards you might be expected to follow.