Software Requirements Specification

Project Theme: Design and implementation of a file management platform “upload documents / download documents”.

FileHive

1. Introduction

FileHive is a response to the growing need for efficient and accessible file management solutions in today's digital landscape. As businesses and individuals increasingly rely on digital documents, there arises a necessity for a centralized platform that enables seamless uploading, downloading, and sharing of files worldwide.

- ***Purpose:***

The purpose of this Software Requirements Specification document is to delineate the intricate details of **FileHive**, offering a comprehensive overview of its functionalities and features. It serves as a roadmap for development, ensuring a clear understanding of the platform's requirements and constraints among all stakeholders involved in its creation. By establishing a common ground, this document facilitates the successful realization of **FileHive** as an effective file management platform.

- ***Scope:***

FileHive aims to provide users with a user-friendly interface to effortlessly manage their digital documents. Users will have the ability to upload, download, and share files securely with individuals or groups worldwide. The platform will be accessible through web browsers, catering to the needs of diverse users. Security measures will be implemented to safeguard user data, ensuring confidentiality and integrity throughout the file management process. The scope of **FileHive** does not extend to physical document management or any services beyond the online platform.

- ***Overview:***

This document is written following the IEEE Std 830-1998 document, it is organized as follows:

• Section 1: Introduces the document and presents the platform **FileHive**.

• Section 2: Gives an Overall description of the platform **FileHive**.

• Section 3: Describes the specific requirements, divided into external interfaces, functional requirements and non-functional requirements.

2. General Description

FileHive is an intuitive online file management platform designed to streamline the handling of digital documents.

With **FileHive**, users can effortlessly upload, download, and share files with individuals or groups across the globe.

The platform offers a seamless user experience through both web and mobile interfaces, ensuring accessibility from any device.

FileHive prioritizes security, implementing robust measures to safeguard user data and maintain confidentiality throughout the file management process. Whether for personal or professional use, **FileHive** empowers users to efficiently organize and collaborate on their digital documents with ease.

- ***Product Functions for all users:***

  • Registration.
  • Update account information (phone number, account photo, password).
  • Reset password.
  • Upload documents.
  • Update uploaded files.
  • Download shared documents.

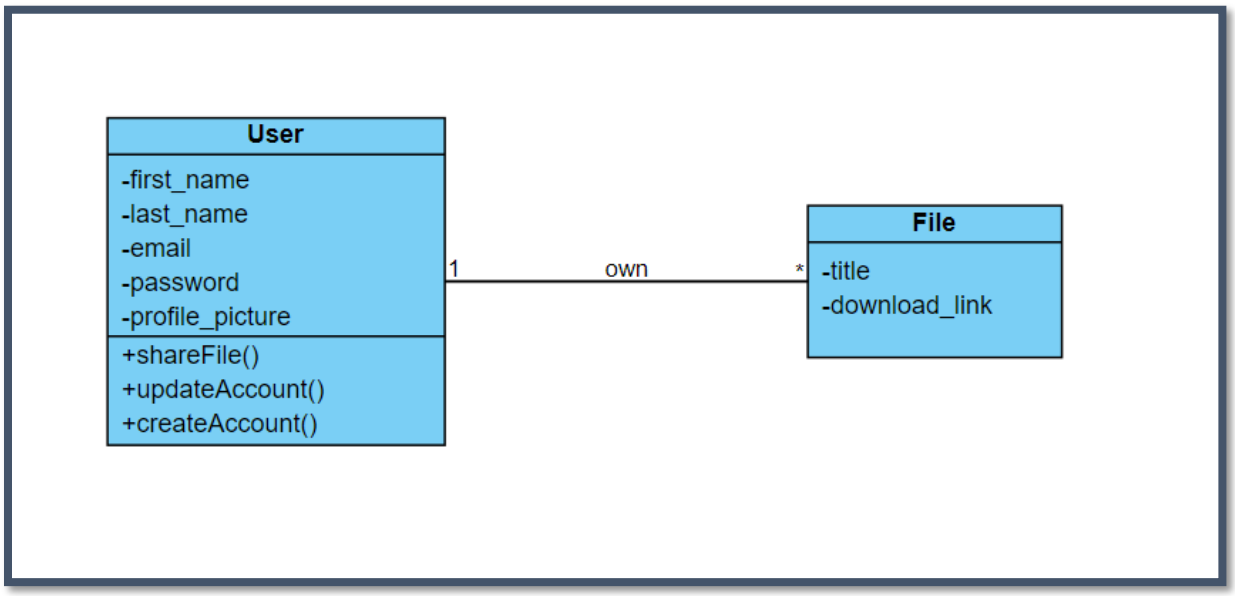


Figure 1: Class diagram

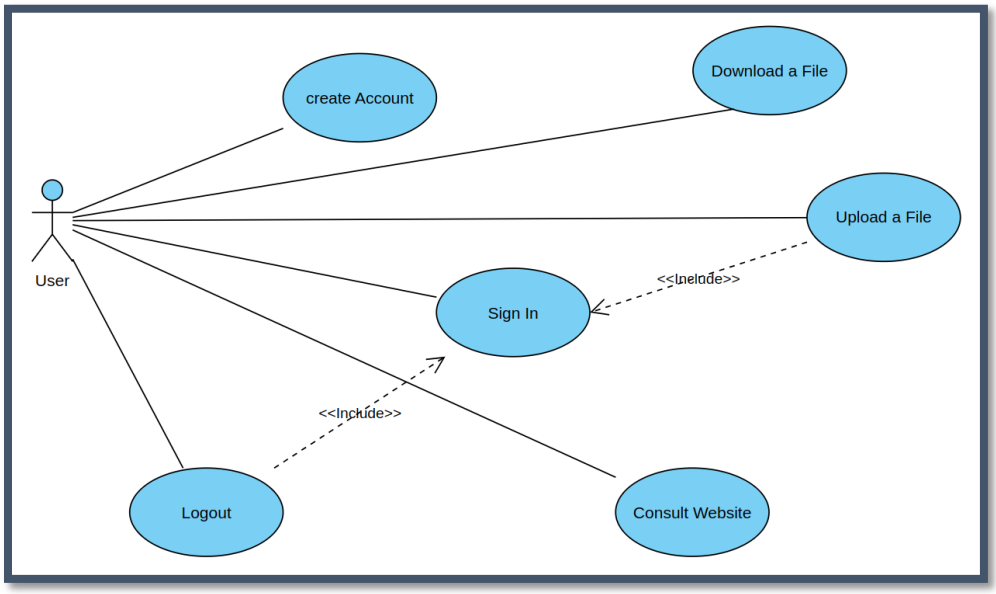
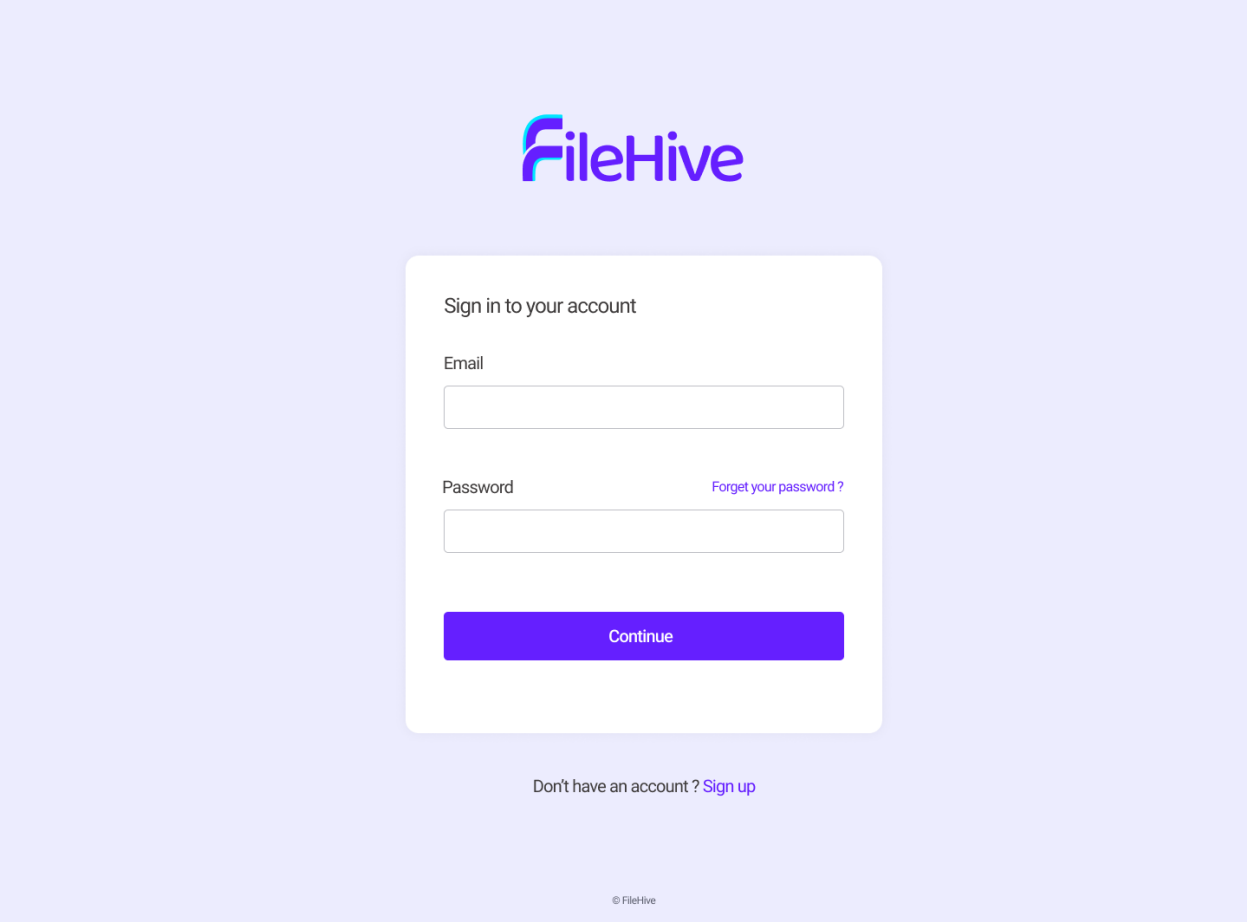


Figure 2: User Use Case Diagram

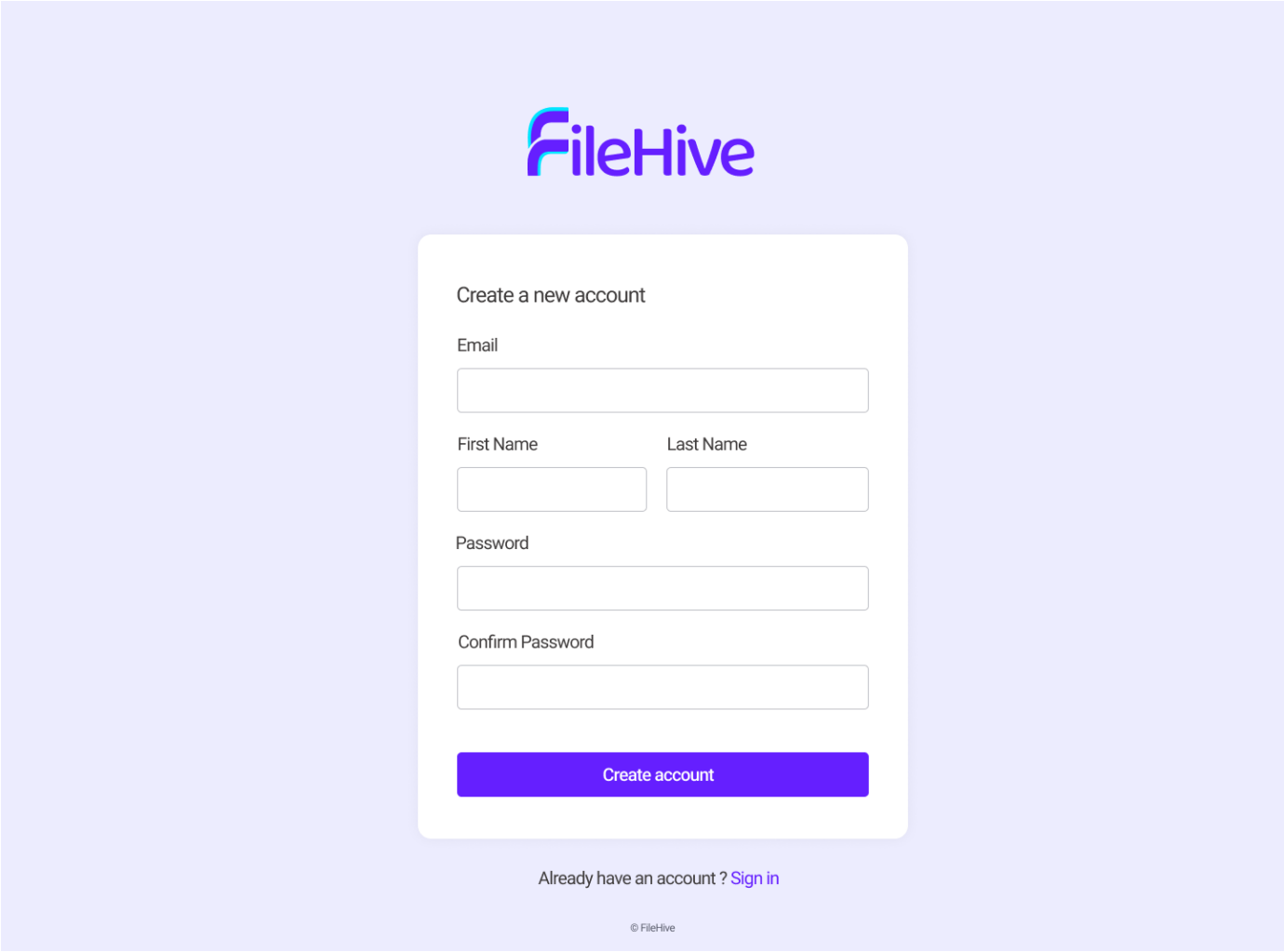
3. Specification of Requirements

3.1. Web interfaces

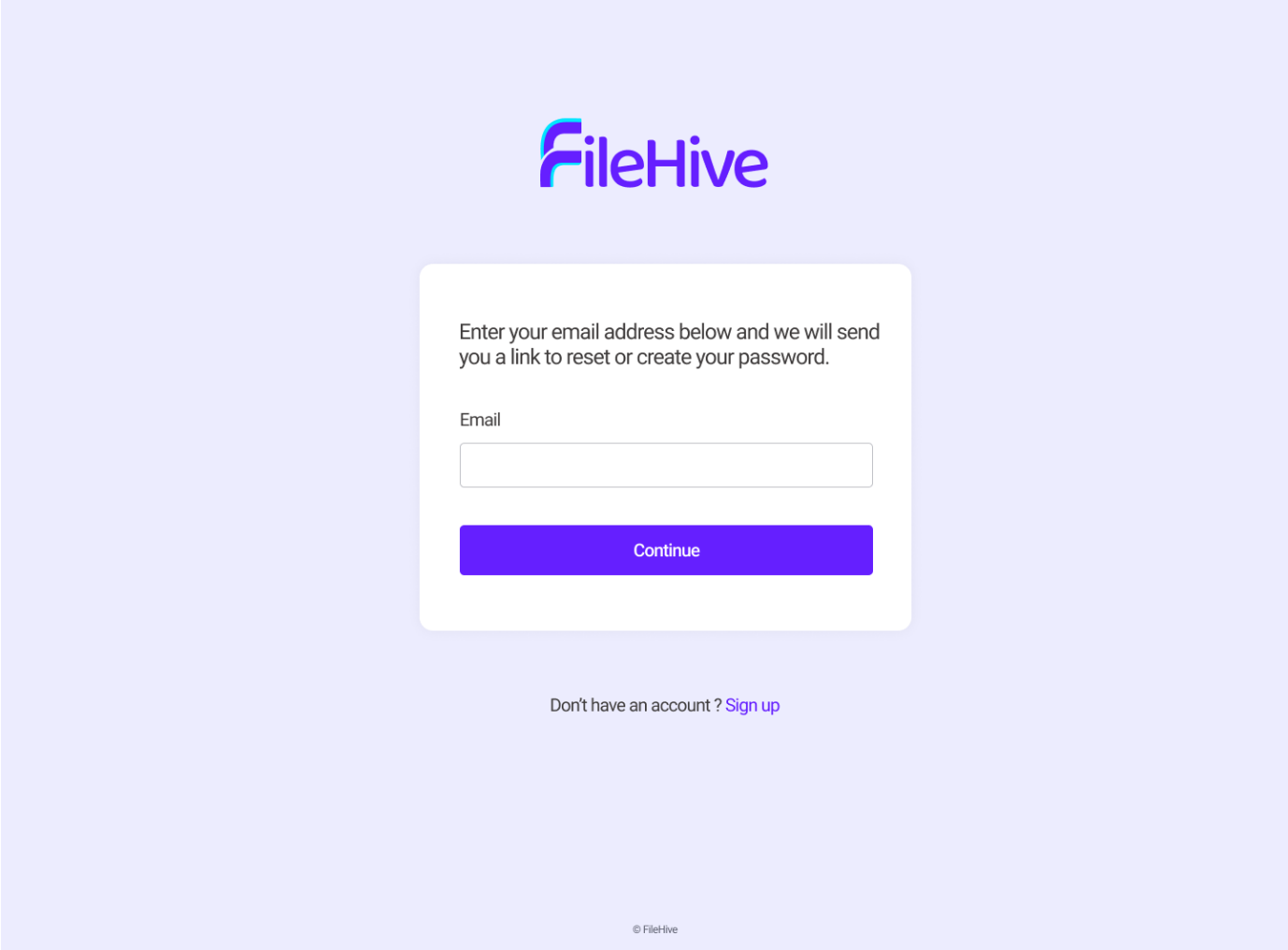
** Login Screen:*



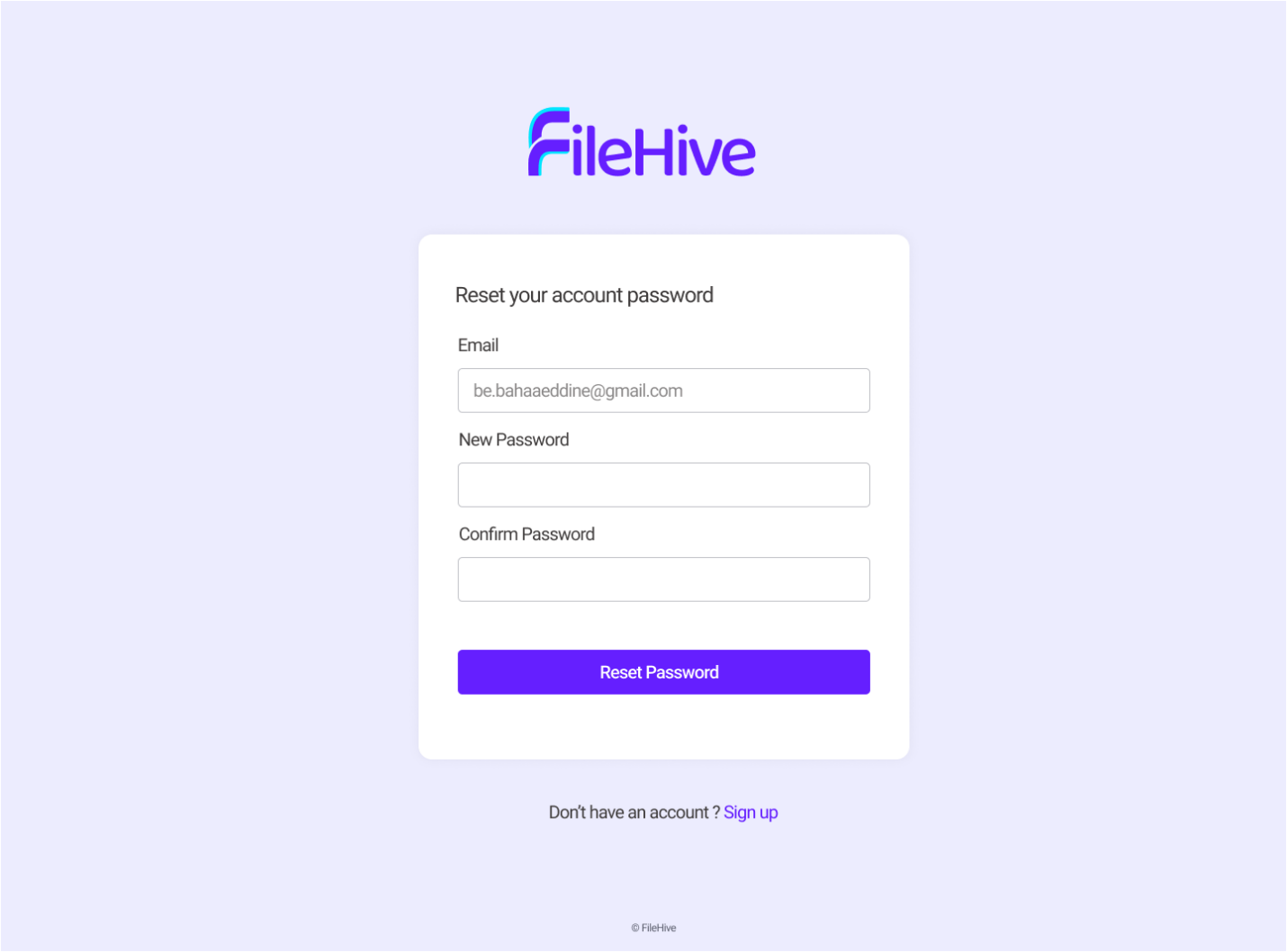
** Registration Screen:*



** Reset Password Screen:*



** Update Password Screen:*



3.2. Functional Requirements

- Registration:

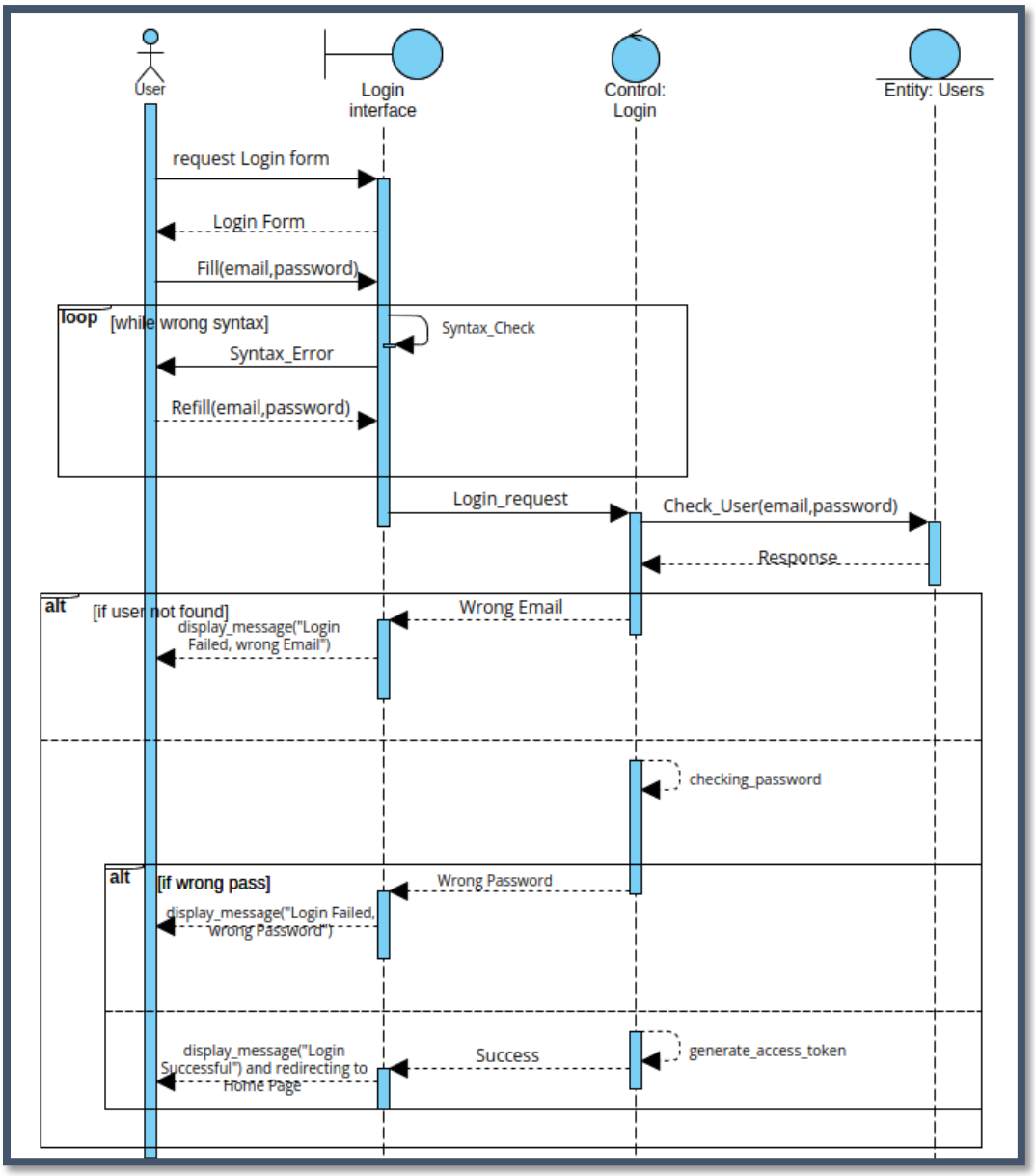


Figure 3: Sequence diagram (login process)

- File Upload:

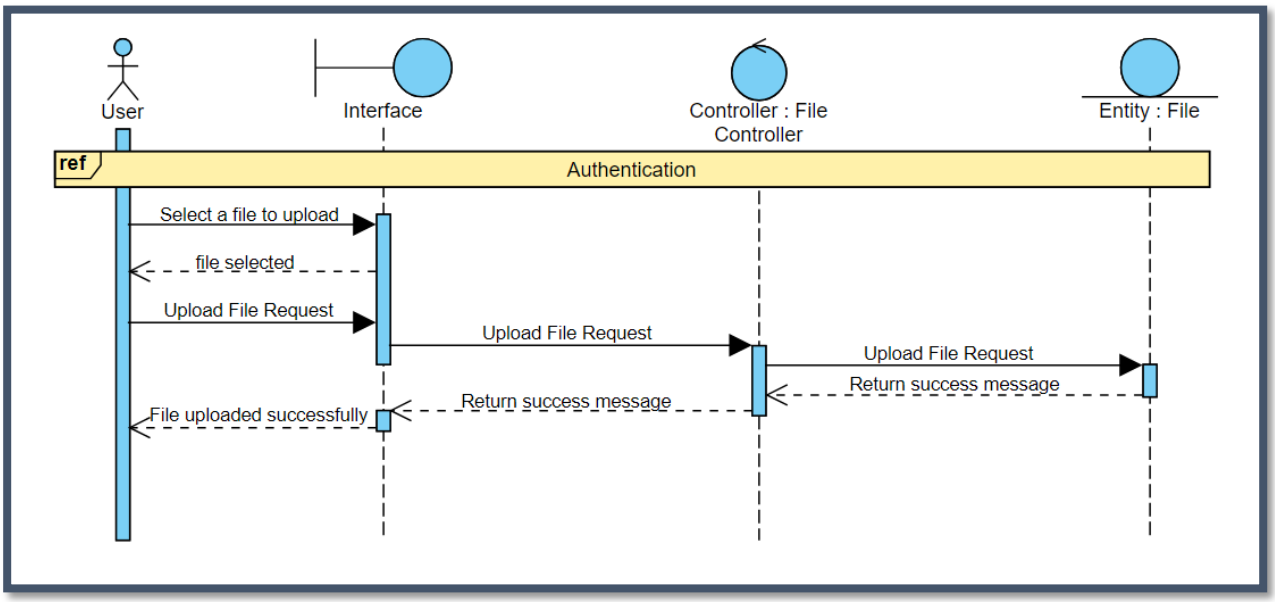


Figure 4: Sequence diagram (upload document process)

3.1. Non Functional Requirements

This section outlines the various qualities and characteristics that the system must possess beyond its specific features and functions. Meeting these non-functional requirements is critical to the success of the **FileHive** platform and ensuring a positive user experience.

- Performance:

• The platform must be able to handle a large number of end-of-studies projects simultaneously without significant performance degradation.

• The platform must be able to handle a large number of concurrent users without any performance issues.

- Security:

• Authentication is a must.

• The platform must manage different roles, each with its own level of access to ensure the security of user data and project information.

• The platform must have a mechanism to prevent unauthorized access and protect against cyber-attacks.

• All user data and project information must be encrypted to protect against data breaches and theft.

- Reliability:

• The system must be able to recover from any errors or faults within a short period of time.

• The platform must have a system for backing up user data to ensure that no data is lost in the event of system failures.

- Usability:

• The platform must have a simple and user-friendly interface that is easy to navigate.

• The platform must be intuitive and require minimal training for users.

- Availability:

• The platform must be available for use all the time, with minimal downtime for maintenance or upgrades.

• The platform must have a mechanism to ensure continuous operation in the event of hardware or software failures.