**ICS B GROUP 3**

| | |
|---|---|
| **Joy Karanja** | **189731** |
| **Alvin Mugoya** | **190156** |
| **Austine Igunza** | **166990** |
| **Felicia Agwata** | **189807** |
| **Nicole Omuoyo** | **175642** |
| **Audrey Ayieko** | **172827** |
| **Paul kiragu** | **190135** |
| **Darren Mwange** | **169272** |

# Notes Sharing App –

## 1. Project Overview

**The Notes Sharing App will provide a collaborative platform where students can upload, organize, and access study materials such as notes, past papers, and guides. Users will be able to:**
**- Upload and download resources.**
**- Search notes by subject/topic.**
**- Engage through ratings and comments.**

**This system addresses the challenge students face in accessing quality learning resources by creating a centralized, easy-to-use repository.**

← Back to search

# [Note Title 1]

Subject:
**[Mathematics]**

Date Uploaded:
**[2024-01-15]**

Author:
**[John Doe]**

File Type:
**[PDF]**

Pages:
**[15]**

Downloads:
**[120]**

Description:

[This is a description of the note content. It includes comprehensive coverage of the topic with examples and explanations.]

[Download Note] ☆

## Rating

☆ ☆ ☆ ☆ ☆ [Click to rate]

**Average Rating:** ★★★★☆ (4.2/5 from 45 ratings)

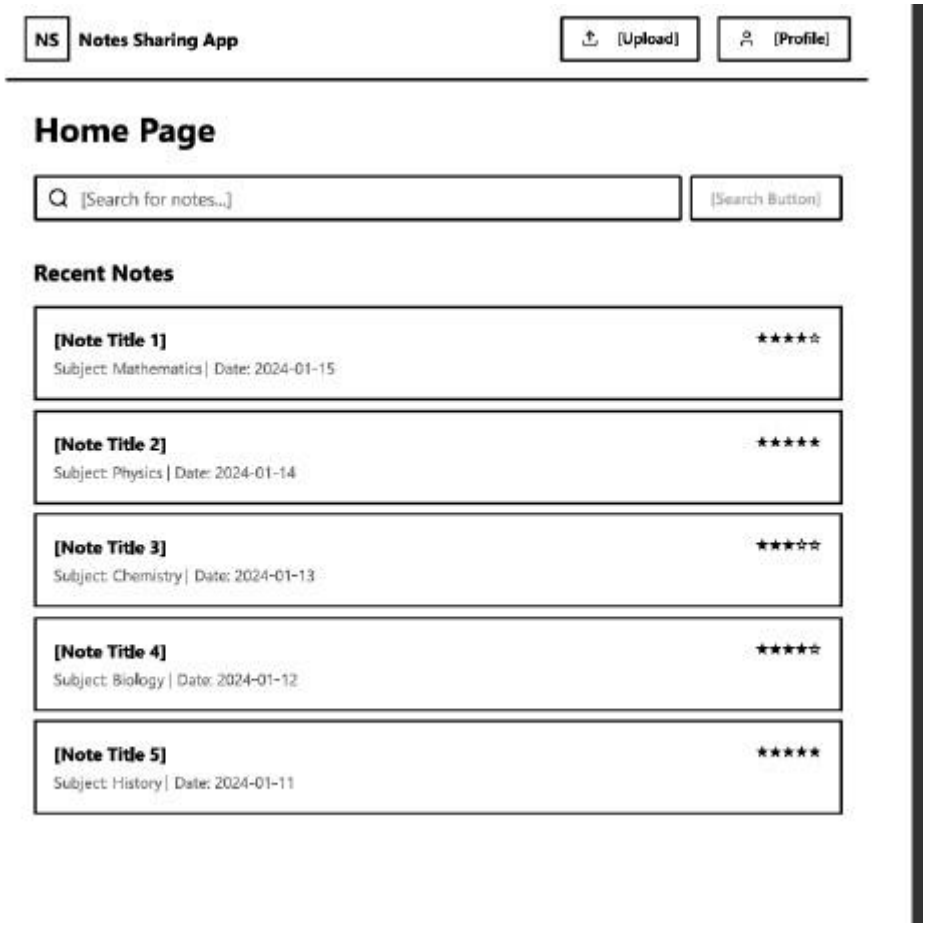
## Comments (3)

[Write a comment...]

[Post Comment]

**[User1]** 2024-01-15

Great notes! Very helpful.


NS
Notes Sharing App
[Upload]
[Profile]
Home Page
[Search for notes...]
[Search Button]
Recent Notes
[Note Title 1]
★★★★☆
Subject: Mathematics | Date: 2024-01-15
[Note Title 2]
★★★★★
Subject: Physics | Date: 2024-01-14
[Note Title 3]
★★★☆☆
Subject: Chemistry | Date: 2024-01-13
[Note Title 4]
★★★★☆
Subject: Biology | Date: 2024-01-12
[Note Title 5]
★★★★★
Subject: History | Date: 2024-01-11


NS
Notes Sharing App
Wireframe v1.0
Login
Email
[text input]
Password
[text input]
[Login Button]
Register
Email
[text input]
Username
[text input]
Password
[text input]
[Register Button]


NS
Notes Sharing App
[Upload]
[Profile]
Search Results
Mathematics
[Search Button]
Filters
Subject
[All Subjects]
Date Range
dd/mm/yyyy
dd/mm/yyyy
Rating
5 Stars
4+ Stars
3+ Stars
[Apply Filters]
3 results found
[Sort by: Relevance]
[Note Title 1]
★★★★☆
Subject: Mathematics | Date: 2024-01-15 | Downloads: 120
[Preview text snippet of the note content...]
[Note Title 2]
★★★★★
Subject: Mathematics | Date: 2024-01-14 | Downloads: 95
[Preview text snippet of the note content...]

← Back to home

# Upload Note

**File Upload**

[Drag and drop file here]

or

[Browse Files]

Supported formats: PDF, DOC, DOCX, TXT (Max 10MB)

**Note Title***

[Enter note title]

**Subject***

[Select Subject]

**Description***

[Enter note description...]

**Tags**

[e.g., calculus, derivatives, integration]

Separate tags with commas

**Academic Level**

[Select Level]

# User Profile

**[Username]**

[user@email.com]

[Change Photo]

**Statistics**

| | |
|---|---|
| Notes Uploaded: | **3** |
| Total Downloads: | **105** |
| Member Since: | **Jan 2024** |

**Profile Information** [Edit]

**Username**

johndoe

**Email**

john@example.com

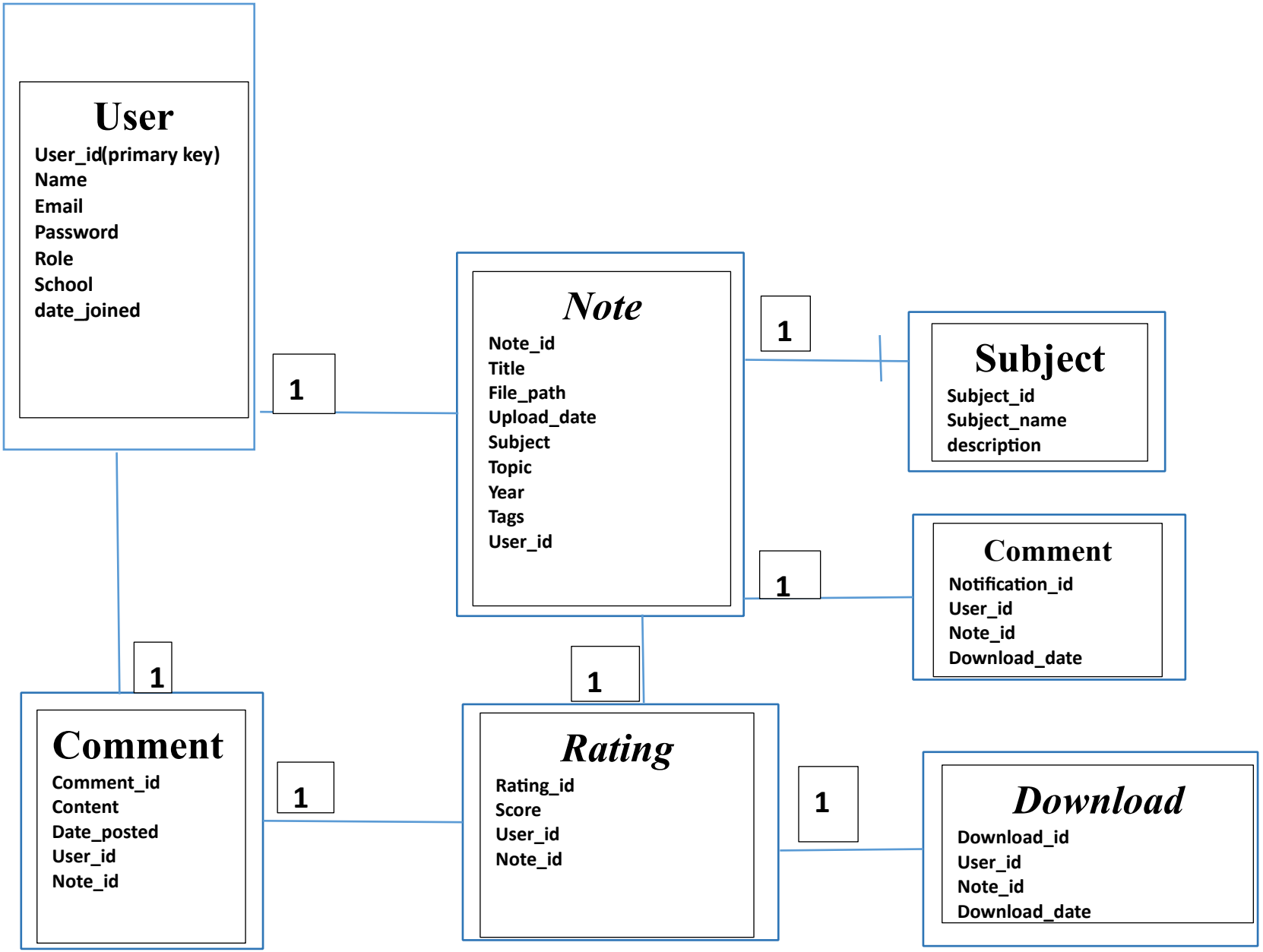
**Bio**

[Tell us about yourself]

**Institution**

[University/School name]

**END OF WIREFRAMES**


User
User_id(primary key)
Name
Email
Password
Role
School
date_joined
1
Note
Note_id
Title
File_path
Upload_date
Subject
Topic
Year
Tags
User_id
1
Subject
Subject_id
Subject_name
description
1
Comment
Notification_id
User_id
Note_id
Download_date
1
1
Comment
Comment_id
Content
Date_posted
User_id
Note_id
1
Rating
Rating_id
Score
User_id
Note_id
1
Download
Download_id
User_id
Note_id
Download_date

# ERD Entities and Keys

## User

**Primary Key-User_id**
**Relationships;**
1. **One user can upload many notes= 1 to many (user to note)**
2. **One user can post many comments=1 to many (user to comment)**
3. **One user can give many ratings=1 to many (user to rating )**
4. **One user can download many notes=1 to many(user to donwload)**
5. **One user can receive many notifications=1 to many(user to notification)**

## Note

**Primary key- Note_id**
**Foreign Keys- User_id=references user(user_id)**
**Subject_id=references Subject(Subject_id)**

**Relationships;**
**One note belongs to one user= many to 1**
**One note belongs to one subjects= many to 1**
**One note can have many comments, ratings, downloads and notifications= 1 to many**

## Subject

**Primary Key- Subject_id**
**Relationships**
**One subject can have many notes 1 to many (Subject to note)**

## Comment

**Primary Key- comment_id**
**Foreign Keys- User_id= references user(user_id)**
**Note_id=references Note(Note_id)**

**Relationships**
**Many comments  can belong to one note and one user- many to 1**

## Rating

**Primary Key- Rating_id**
**Foreign keys- user_id References user(user_id)**
**Note_id References note(note_id)**
**Relationships**
**Many ratings belong to one user and one note- many to 1**

## Notification

**Primary key- Notification_id**

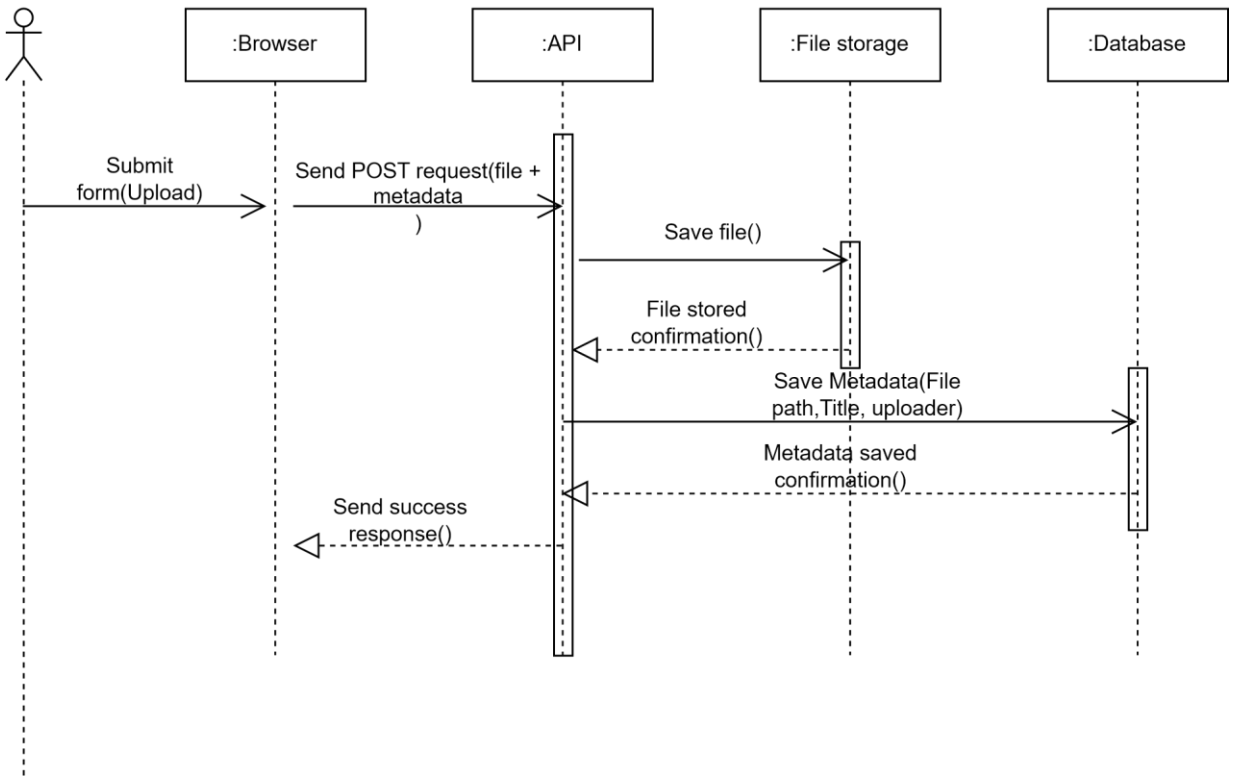
**Foreign keys- User_id references the user**
**Note_id references the Note**

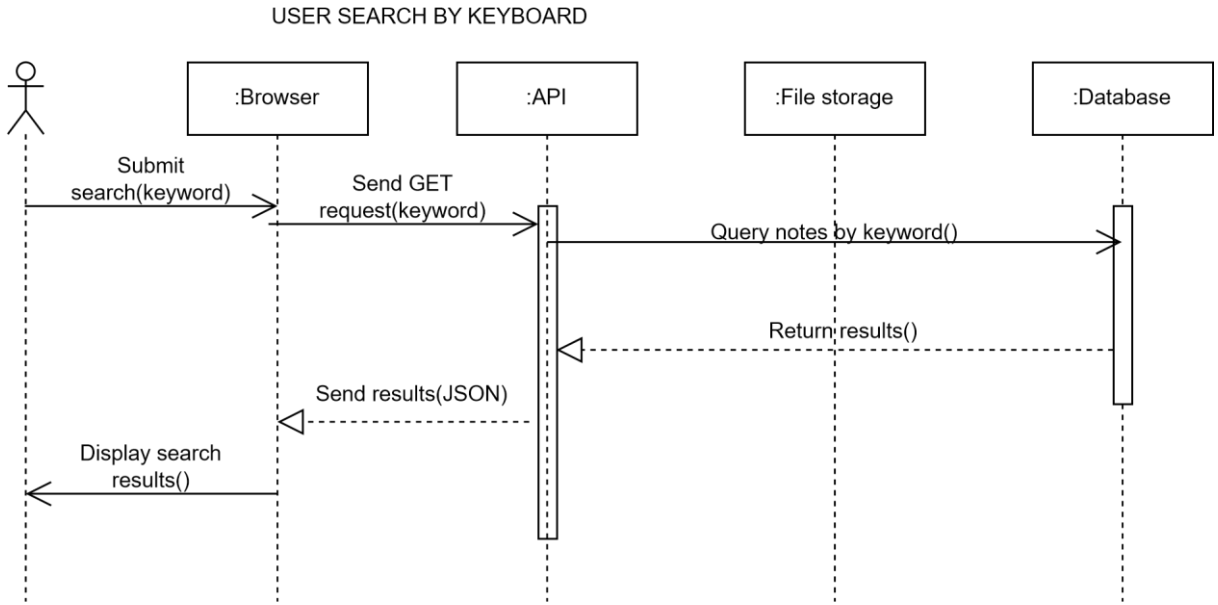
**Relationships**
**Many notifications can belong to one user and one note many to 1**

## Download

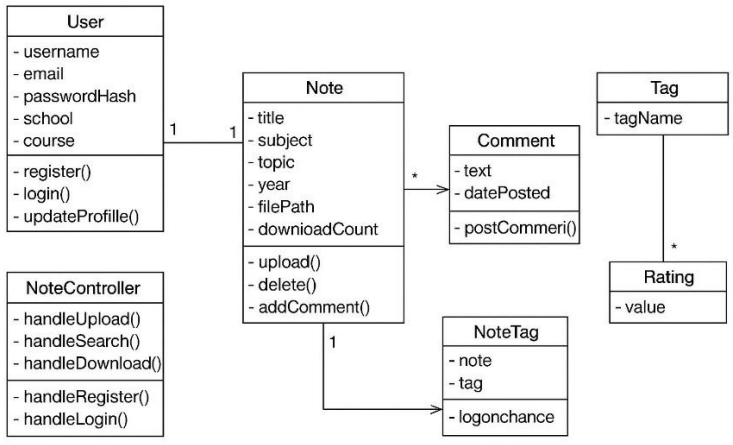
**Primary Key- download_id**
**Foreign Keys- user_id references the user**
**Note_id references the note**
**Relationships**
**One user can download many notes -1 to many**
**One note can be downloaded by many users -many to 1**

SUCCESFUL NOTE UPLOAD

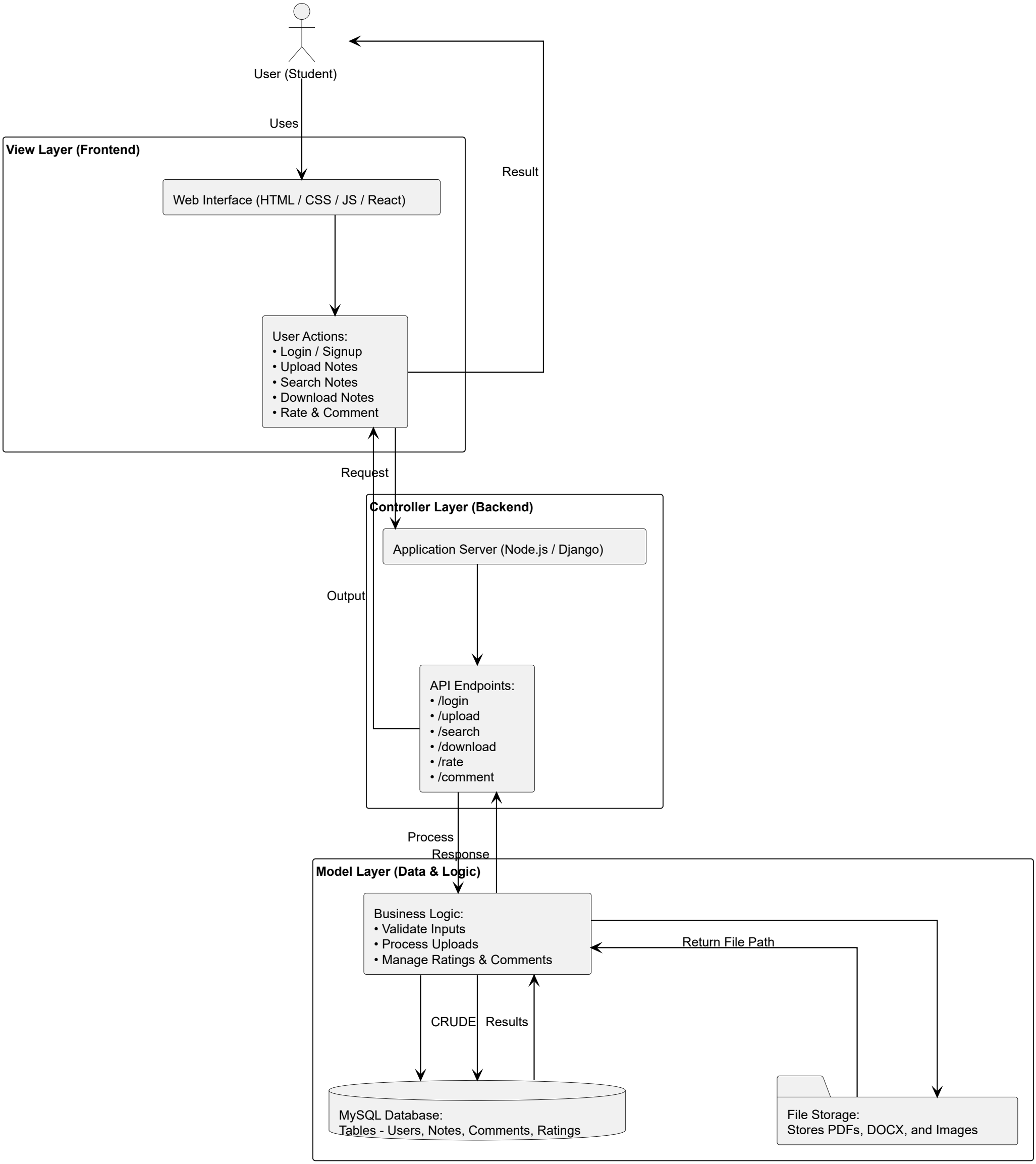



USER SEARCH BY KEYBOARD
:Browser
:API
:File storage
:Database
Submit search(keyword)
Send GET request(keyword)
Query notes by keyword()
Return results()
Send results(JSON)
Display search results()

**END OF SEQUENCE DIAGRAM**




**Class diagram and System Architecture**


User (Student)
Uses
Result
View Layer (Frontend)
Web Interface (HTML / CSS / JS / React)
User Actions:
• Login / Signup
• Upload Notes
• Search Notes
• Download Notes
• Rate & Comment
Request
Output
Controller Layer (Backend)
Application Server (Node.js / Django)
API Endpoints:
• /login
• /upload
• /search
• /download
• /rate
• /comment
Process
Response
Model Layer (Data & Logic)
Business Logic:
• Validate Inputs
• Process Uploads
• Manage Ratings & Comments
Return File Path
CRUDE
Results
MySQL Database:
Tables - Users, Notes, Comments, Ratings
File Storage:
Stores PDFs, DOCX, and Images