

## Introduction:

"StudySync" is a desktop application designed to revolutionize the way students manage their academic materials and study routines. The core concept revolves around providing students with a comprehensive platform to organize their courses, academic resources, tasks, and study schedules effectively. By leveraging technology, "StudySync" aims to enhance productivity, promote better time management, and ultimately contribute to academic success and personal growth.

## 2. Functionality:

A cornerstone of "StudySync" is its comprehensive Desktop app ,task manager, empowering students to effectively manage and track their exams and assignments. This feature enables setting deadlines, receiving reminders, and organizing academic tasks within a user-friendly interface.

Additionally, the app boasts a Planner section a versatile arena for to-do lists, note-taking, or mind mapping. This particularly benefits visual learners and those inclined towards structured study approaches, offering a digital canvas for thoughts, plans, and goals.

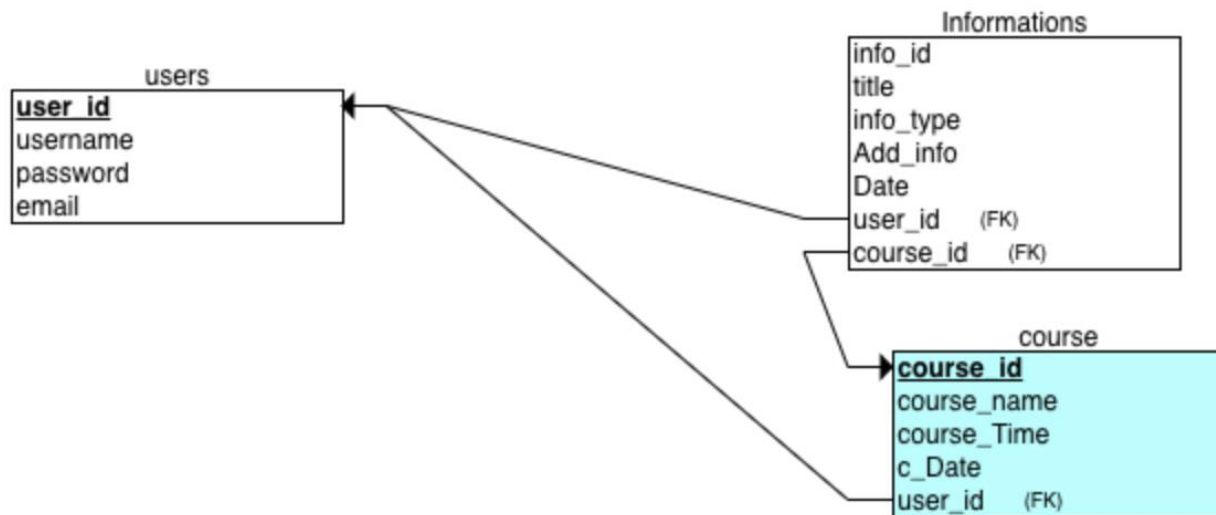
An exceptional highlight of "StudySync" is the seamless integration of the Pomodoro Technique, a renowned time management method. The built-in Pomodoro timer aids students in maintaining focus and averting burnout through structured study and break intervals, thereby enhancing productivity and promoting a healthier study-life balance.

To ensure a personalized and secure experience, students are required to create an account and log in. This feature enables the app to tailor its functionality to individual student needs and preferences.

## Notification System:

- Real-time notifications for upcoming deadlines, new forum posts, grade updates, etc.
- Customizable notification preferences for each user.

## Data-base:



#### Users Table:

- Essential for managing user accounts.
- Fields include user ID, username, encrypted password, email address, and date of account creation.
- User ID serves as the primary key.

#### Courses Table:

- Contains information about the courses each user is enrolled in.
- Fields include course ID, user ID (linked to the Users table), course name, schedule, and instructor's name.
- Course ID serves as the primary key, with the user ID acting as a foreign key.

#### Info Table:

- Stores data related to academic information uploaded by users.
- Fields include info ID, course ID, user ID, title, info type, deadline, and uploaded file data.
- Info ID serves as the primary key, with both course ID and user ID acting as foreign keys.

Services:

User Services:

1. addUser:

- This service adds a new user to the system.
- It facilitates the creation of a new user account, incorporating essential details such as username, password, email address, etc.
- Utilized during user registration to establish new user accounts within the system.

2. updateUser:

- This service updates existing user information.
- It allows users to modify their account details, such as username, password, email address, profile picture, etc.
- Employed when users wish to update or revise their account information post-registration.

3. getUser:

- This service retrieves user information based on user ID.
- It enables the retrieval of user details stored within the system, facilitating personalized user interactions.
- Utilized for various system functionalities that require access to user-specific data.

4. deleteUser:

- This service deletes a user account from the system.
- It facilitates the removal of user accounts and associated data from the system, ensuring proper data management.
- Employed when users choose to deactivate or delete their accounts permanently.

Course Services:

1. getCoursesByUserId:

- This service retrieves courses associated with a specific user.

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- It enables users to view the courses they are enrolled in, providing personalized course management capabilities.
- Utilized to fetch course information tailored to individual user profiles.

2. addCourse:

- This service adds a new course to the system.
- It facilitates the creation of new course entries within the system, incorporating essential course details such as course name, schedule, instructor's name, etc.
- Employed during course enrollment or creation processes.

3. updateCourse:

- This service updates existing course information.
- It allows administrators or course coordinators to modify course details such as schedule, instructor's name, etc.
- Utilized to update course information as needed, such as changes in course schedule or instructor assignment.

4. deleteCourse:

- This service deletes a course from the system.
- It facilitates the removal of course entries and associated data from the system, ensuring proper data management.
- Employed when courses are no longer offered or need to be removed from the system.

Info Services:

1. getInfo:

- This service retrieves all academic information entries stored in the system.
- It enables users to access a comprehensive list of academic resources uploaded by users.
- Utilized to provide users with a complete overview of available academic materials within the system.

2. getInfoByCourseId:

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- This service retrieves academic information associated with a specific course.
- It enables users to access academic resources relevant to a particular course, facilitating course-specific resource management.
- Utilized to fetch course-specific academic materials for user reference and study purposes.

3. addInfo:

- This service adds a new academic information entry to the system.
- It facilitates the uploading of academic resources such as lecture notes, assignments, etc., to the system.
- Employed when users wish to contribute or upload academic materials for sharing with other users or personal reference.

4. updateInfo:

- This service updates existing academic information entries.
- It allows users to modify details of uploaded academic resources, such as title, deadline, additional notes, etc.
- Utilized to edit or revise existing academic information entries as needed.

5. deleteInfo:

- This service deletes an academic information entry from the system.
- It facilitates the removal of academic resources and associated data from the system, ensuring proper data management.
- Employed when academic materials are no longer needed or require removal from the system.

Estimated views:

[Home](#) [schedule](#) [courses](#) [tasks](#)

**TODAY:**

**TO-DO LIST:**

**NOTE :**

**dont forget to !!!**

studySYync!

**LOGIN**

[forgot my password](#)

[Create an Account](#)

studySYync!

**create new account**

[Already have an account log in](#)

**Development Environment:**

- Platform: macOS
- IDE: NetBeans 12.4

**7. Project Timeline:**

- **User Services:**
  - **addUser: Estimated time - 2 days**
  - **updateUser: Estimated time - 1 day**
  - **getUser: Estimated time - 1 day**
  - **deleteUser: Estimated time - 1 day**
- **Course Services:**
  - **getCoursesById: Estimated time - 2 days**
  - **addCourse: Estimated time - 2 days**
  - **updateCourse: Estimated time - 1 day**
  - **deleteCourse: Estimated time - 1 day**
- **Info Services:**
  - **getInfo: Estimated time - 2 days**
  - **getInfoByCourseId: Estimated time - 2 days**
  - **addInfo: Estimated time - 2 days**
  - **updateInfo: Estimated time - 1 day**
  - **deleteInfo: Estimated time - 1 day**

**Total Estimated Development Time: 18 days**

**Submission Date: March 26, 2024.**