

2.2 Design Requirements

2.2.1 Functions

The functions of the EduTrack project are:

- **Track Assignments:** Allows users to input and monitor assignment due dates.
- **Schedule Study Sessions:** Enables users to plan and allocate time for study sessions.
- **Set Reminders:** Provides notifications and reminders for upcoming deadlines and tasks.
- **Monitor Progress:** Tracks academic performance and progress over time.
- **Organize Courses:** Allows users to add and manage courses and associated tasks.
- **Generate Reports:** Creates summaries and reports on study habits and performance.
- **Sync Calendars:** Integrates with external calendars to sync important dates.
- **Manage Tasks:** Enables users to create, update, and delete tasks related to their courses.

2.2.2 Objectives

The objectives of the EduTrack project are:

- **User-Friendly:** The application should be intuitive and easy to use for students.
- **Efficient:** The application should perform its functions quickly and without lag.
- **Reliable:** The application should function correctly and consistently without crashing.
- **Customizable:** The application should allow users to tailor it to their specific needs.
- **Engaging:** The application should have a visually appealing and interactive interface.
- **Informative:** The application should provide clear and useful information to help students manage their academic responsibilities.
- **Secure:** The application should protect user data and privacy.

2.2.3 Constraints

The constraints of the EduTrack project are:

- **Platform Compatibility:** The application must be compatible with major operating systems (Windows, macOS, Linux).
- **Data Security:** The application must use encryption to secure user data.
- **Performance:** The application must load and perform tasks within a specified time frame (e.g., less than 2 seconds for most operations).
- **Usability:** The application must pass usability testing with a score above a predetermined threshold.
- **Compliance:** The application must comply with relevant educational and data protection regulations.
- **Accessibility:** The application must meet accessibility standards to be usable by students with disabilities.
- **Scalability:** The application must handle a growing number of users without performance degradation.
- **Maintenance:** The application must be maintainable and allow for easy updates and bug fixes.