

**CSP-588 User Centered Design**  
**Project - 3**

**Team-P**

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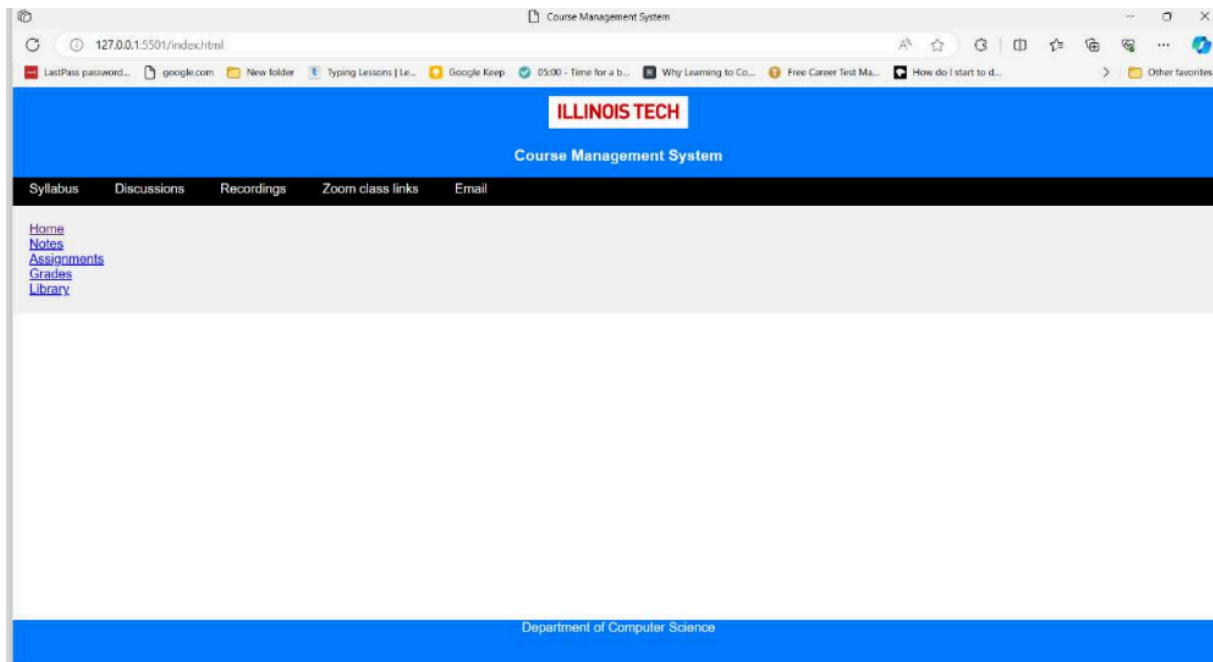
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# Innovate using top-down UX design

## 1. Develop a prototype for an innovative course management experience

### User Interface:



### *Responsive Design:*

Use any of the recent CSS frameworks, to guarantee that the interface is responsive and can be accessed with different devices thus enhancing the current basic ‘responsive’ setup.

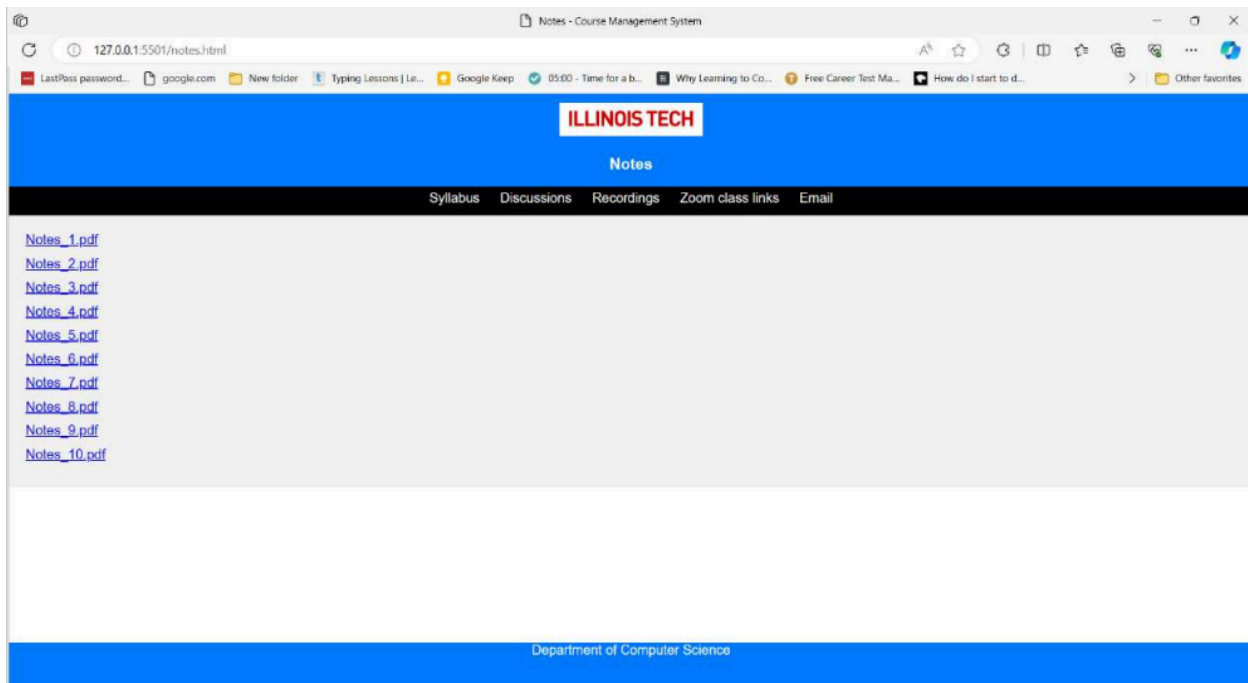
### *Interactive Part:*

Add a framework like React to enable collapsible menus for course modules, interactive tabs for different course sections (i.e., Notes, Assignments and Grades), modals among others.

### *Unified Theme and Improved Aesthetics:*

Make sure that it has less cluttered looks while ameliorating its visual appeal through color scheme streamlining. This could involve a more modern palette, refined typography, and a less cluttered layout.

## Personalized User Experience:



## ***Dashboard:***

Formulate a dashboard that can reflect personalized data like assignments Grades, most recent lecture notes and glance at marks. Employing APIs or server-side scripting, it should be able to collect relevant details pertaining to a logged-in client.

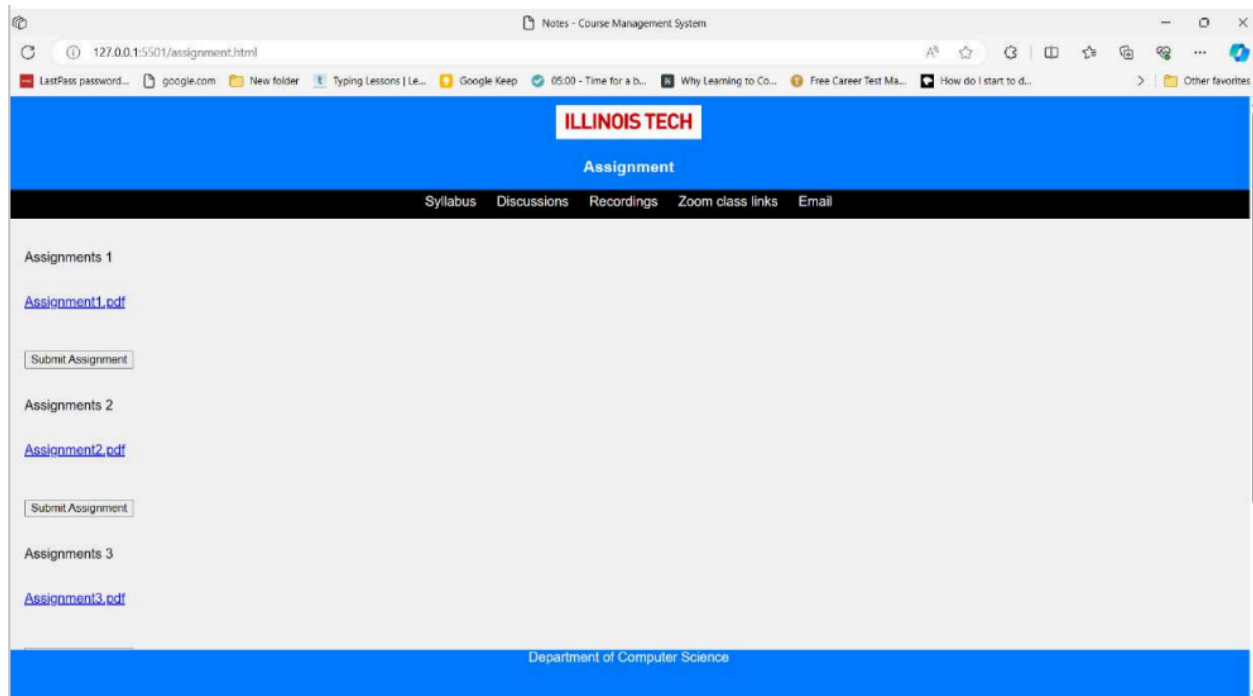
## ***Notification System:***

Notice how the notification system alerts students about new grades, questions from teachers or when course content has been updated. Such real-time elements can use WebSocket or even polling mechanisms.

## ***Progress Tracking:***

Students should have an ability to gauge this progress throughout the course. This can be realized using progress bars as well as checklists for completed tasks. Encourage the setting and tracking of goals so that students can keep track of their progress towards individual learning objectives.

## Course Management's Enhanced Features:



### ***Efficient Assignment Management:***

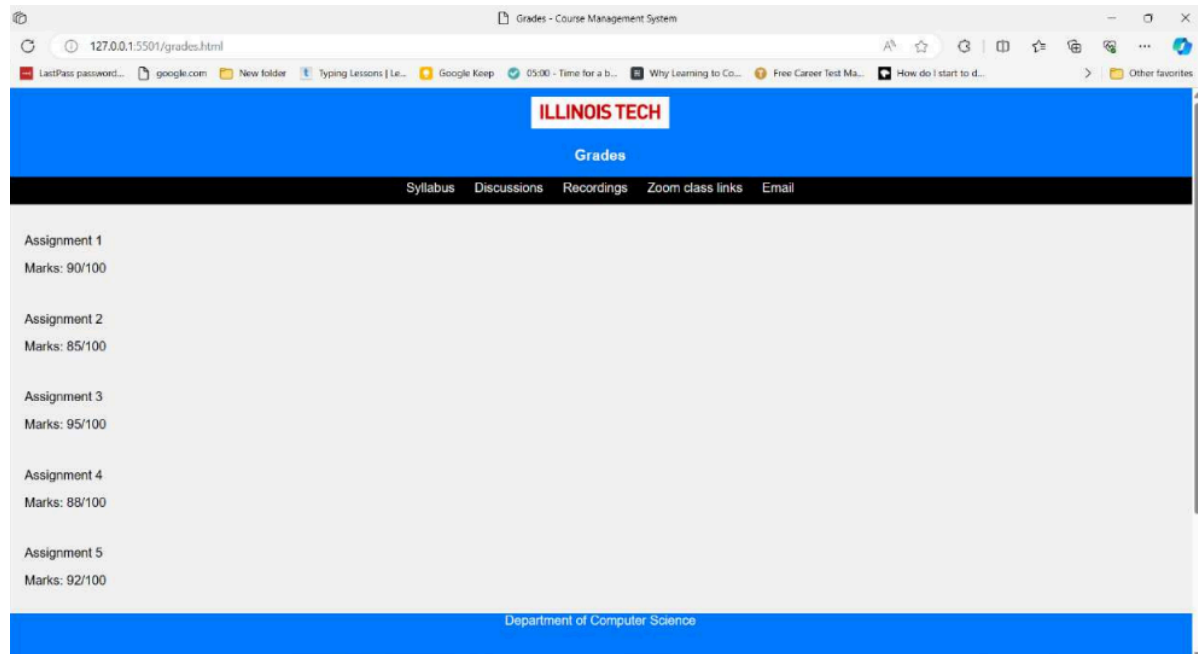
The image presents a user interface that is intended to maximize assignment tracking and submission. Students can effectively manage their assignments inside the course by having alternatives for prompt submission and clear indicators of assignment status. Students can easily remain on top of their homework and due dates thanks to this tool, which improves accountability and organization.

### ***Navigational Paths:***

Essential navigation paths or connections, such as the syllabus, Zoom class links, recordings, and comments, are displayed on the interface above the assignment section. This design makes sure that important course materials are easily accessible, allowing for a smooth transition between the various curriculum components. With ease, students may find course materials, participate in online conversations, watch lecture recordings, and join live sessions, all of which improve their overall learning experience.

### **An interactive grading system:**

In the grade area, add some functions which can make it more interactive like the ability to dispute your marks, view peer comparisons and receive automated tips for improving. By providing customized recommendations based on individual performance data and assisting students in identifying areas where they may improve their knowledge.



### ***Integrated Learning Tools:***

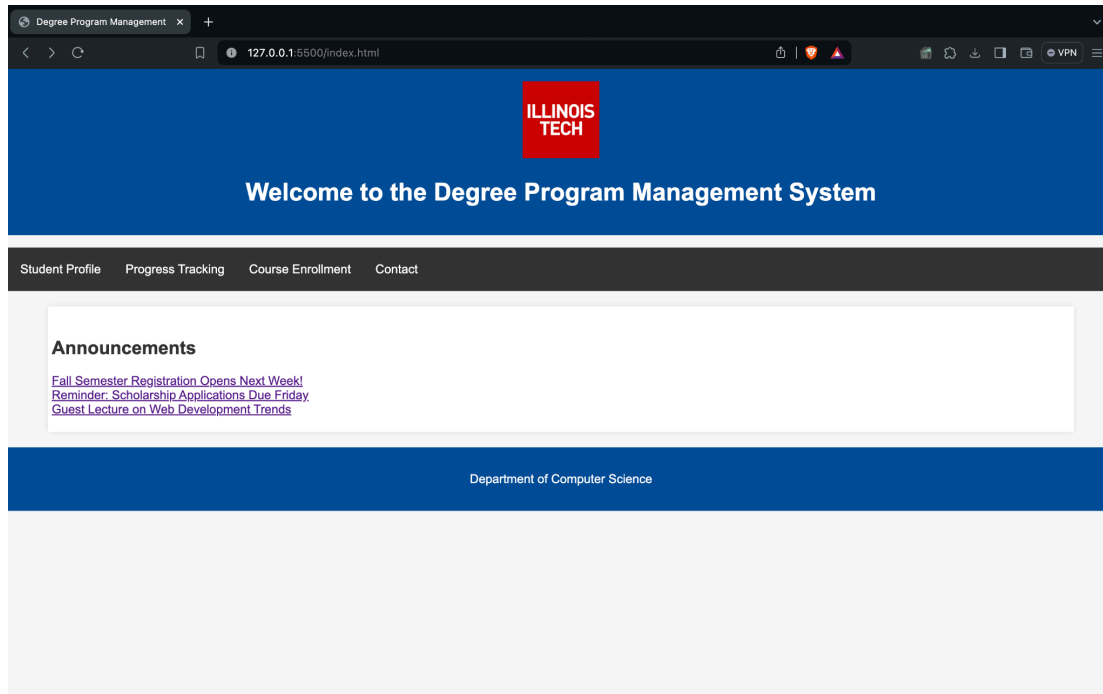
Connect to external resources directly through the course management system, such as digital libraries or external articles among others. Also this portal gives students quick access to additional sources that enhance the core curriculum by smoothly connecting to external publications, digital libraries, and other appropriate assets. Educators can also lead students to more sources that improve their awareness of course themes by curating and organizing external materials within the platform.

### ***Mobile Application:***

Given the rise in usage of mobile devices in education, developing a complementary mobile application that syncs with the web platform would greatly enhance accessibility and user engagement. A mobile app can also be used to update students about deadlines, new course materials, and significant announcements, encouraging increased involvement and engagement. This is done through the use of push alerts and other interactive elements.

## 2. Develop a prototype for an innovative degree program management experience

**College:** Illinois Institute of Technology



### **Welcome Board:**

Welcome to the Degree Program Management Dashboard!

Welcome! Easily access important tools and information to stay informed and focused.

### **Sections:**

***Student Profile:*** View and manage the student's profile, which includes contact information, academic history, and demographic data and we can contact the support team if needed.

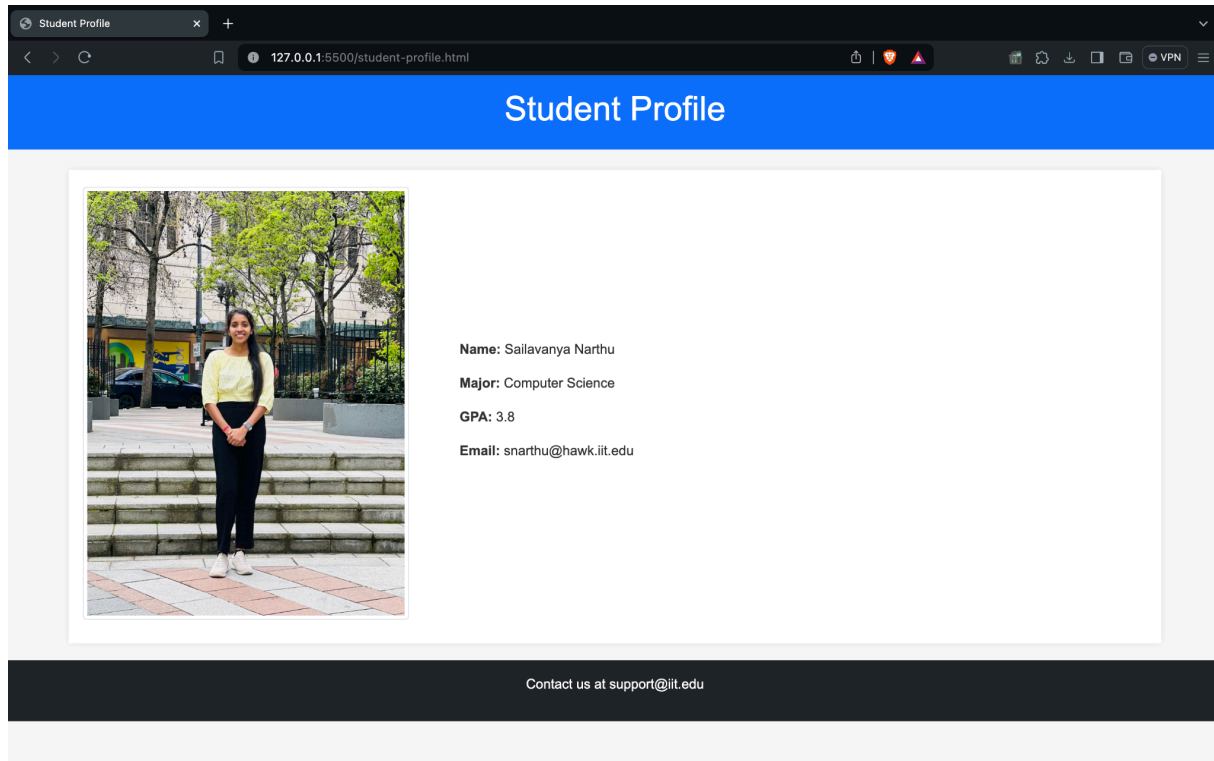
***Progress tracking:*** Monitor a student's progress towards earning a degree, taking into account their GPA, completed credits, and remaining requirements.

***Course Enrollment:*** Handle the course offerings, registrants, and waitlists. It's easy to add, remove, or change courses.

***Contact:*** Have conversations with staff, instructors, and students. Send out updates, reminders, and announcements and we can also reset our password if needed.

***Announcements:*** Keep notified on significant news, dates, and occasions. Keep up with any changes to the academic calendar, happenings on campus, and course schedules.

## Student Profile



The screenshot displays a web browser window with the address bar showing '127.0.0.1:5500/student-profile.html'. The page features a blue header with the text 'Student Profile'. Below the header, a white box contains a photograph of a woman standing outdoors. To the right of the photo, the following information is listed:

- Name: Sailavanya Narthu
- Major: Computer Science
- GPA: 3.8
- Email: snarthu@hawk.iit.edu

At the bottom of the page, a dark footer contains the text 'Contact us at support@iit.edu'.

**Name:** The complete name of the student is shown here.

**Major:** This designates the academic major of the student, which is computer science in this instance.

**GPA:** Based on their course grades, students' academic success is represented by their GPA (Grade Point Average). It gives an overview of how well the student has done academically overall.

**Email:** This is the student's email address, so they can get in touch with each other.

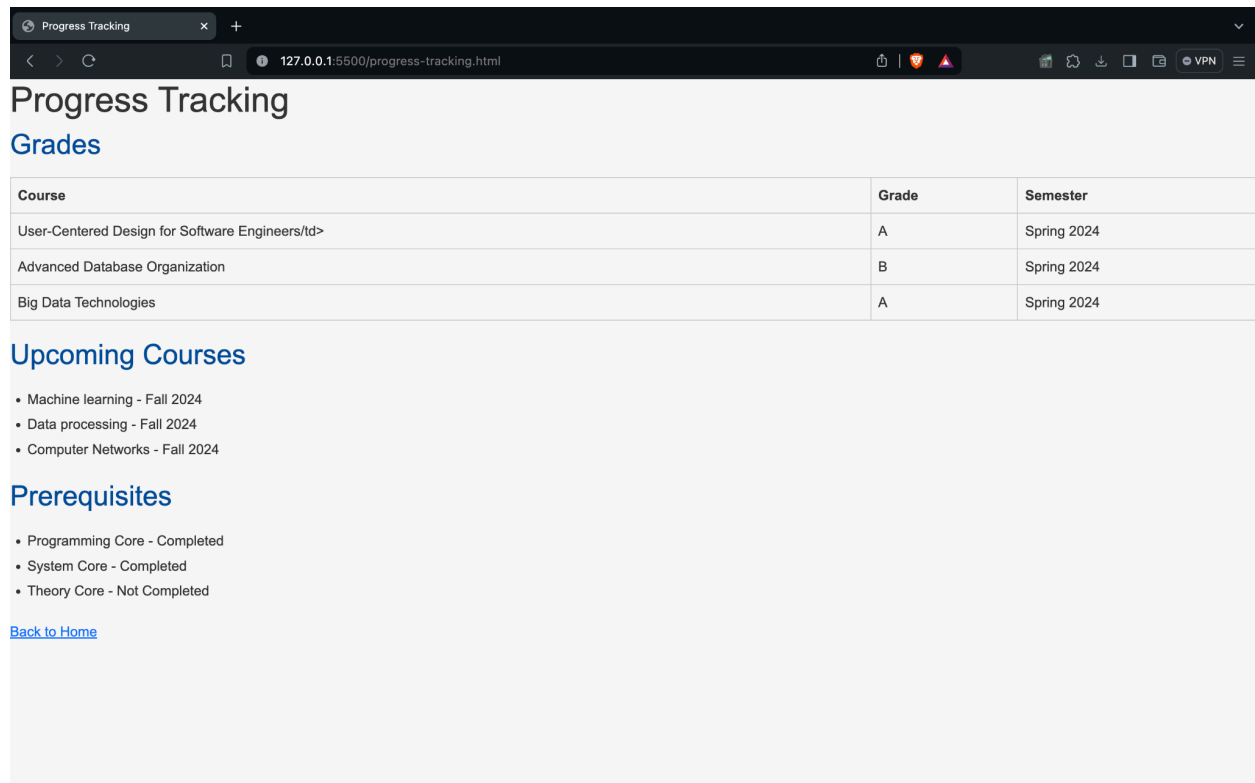
**Picture:** This is a stand-in for the student's picture. Adding a photo might help distinguish the student from other users and add personality to the profile.

**Support Team Gmail:** Please use Gmail to reach out to our support team with any questions or requests for help. We are available to assist you with any concerns or questions that you might have.

By adding these components to the Student Profile area, users may easily access vital details about the student, like their academic history, contact information, and photo. Academic advisers, teachers, and officials who need to work with and assist students on a daily basis need to know this information.

## Progress Tracking

Keep track of a student's progress for graduation by considering their GPA, number of credits earned, and number of prerequisites still to be fulfilled.



Course	Grade	Semester
User-Centered Design for Software Engineers/td>	A	Spring 2024
Advanced Database Organization	B	Spring 2024
Big Data Technologies	A	Spring 2024

**Upcoming Courses**

- Machine learning - Fall 2024
- Data processing - Fall 2024
- Computer Networks - Fall 2024

**Prerequisites**

- Programming Core - Completed
- System Core - Completed
- Theory Core - Not Completed

[Back to Home](#)

**GPA[Student's GPA]:** A student's academic performance is reflected in their GPA (Grade Point Average), which gives a general idea of their course successes.

**Credits completed [The number of Credits Completed]:** This shows how many credits the student has achieved towards their degree overall for a particular semester.

**Remaining Requirements:** List of Leftover Degree Requirements for Remaining Requirements. View the prerequisites that must still be fulfilled for the student to earn their degree.

**Prerequisite list:** Before enrolling, students can check if they meet the prerequisites by accessing the list of requirements for each course.

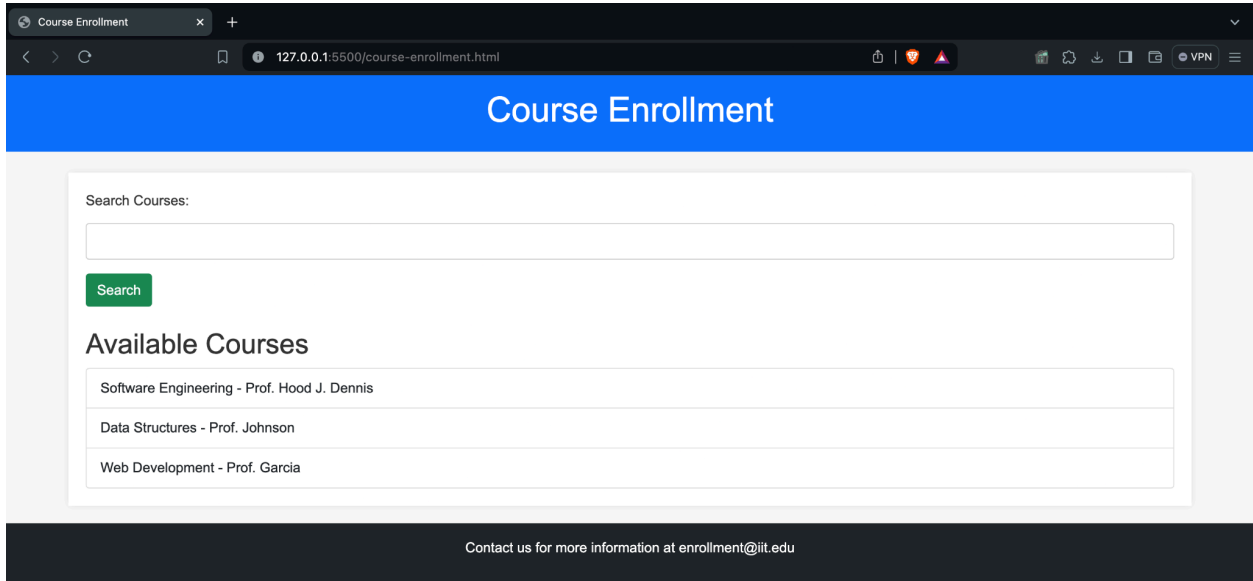
**Back to Home button:** To quickly access other features and parts of the degree program management system., simply return to the main screen.

The features and functionalities included in the "Progress Tracking" section are outlined in this description. The significance of tracking a student's progress towards a degree is recognised, and necessary data including GPA, completed credits, remaining requirements, and prerequisites for courses are made accessible.



## Course Enrollment

Handle the course offerings, registrants, and waitlists and search for the particular course. It's easy to add, remove, or change courses.



The screenshot shows a web browser window with the title "Course Enrollment". The address bar displays "127.0.0.1:5500/course-enrollment.html". The page has a blue header with the text "Course Enrollment". Below the header, there is a search section with the label "Search Courses:" and a text input field. A green "Search" button is positioned below the input field. Underneath the search section, the heading "Available Courses" is followed by a table listing three courses:

Software Engineering - Prof. Hood J. Dennis
Data Structures - Prof. Johnson
Web Development - Prof. Garcia

At the bottom of the page, a dark footer contains the text: "Contact us for more information at [enrollment@iit.edu](mailto:enrollment@iit.edu)".

**Course Search:** Quickly look up particular courses by typing in course codes, keywords, or CRN number. The process of selecting and enrolling in preferred courses is made easier by this feature.

**Courses Available:** See the list of subjects that are open for enrollment right now. The title, description, schedule, instructor, and other important information of each course are included in this section.

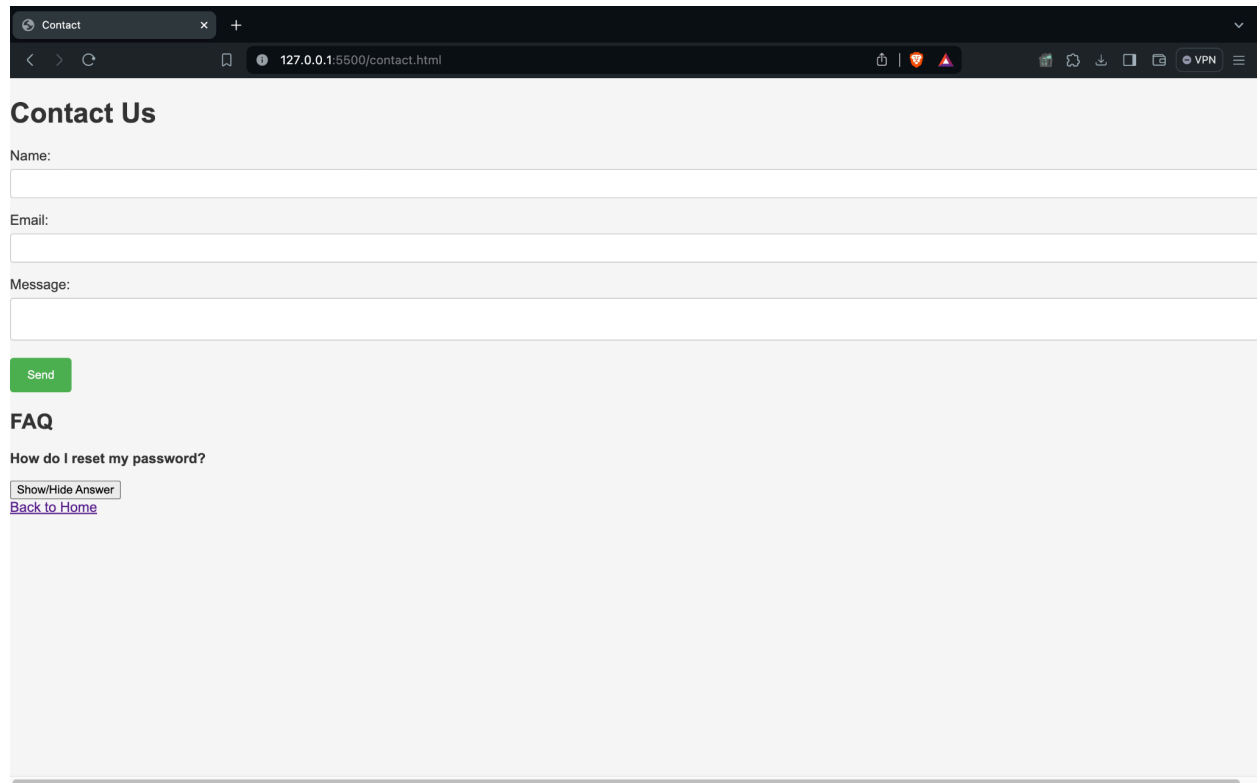
**Bottom Line:** Please Contact Us for Further Information

Do not hesitate to get in touch with us if you need further details or help enrolling in a course. You can contact our support team with any queries or conflicts you might have.

This explanation describes the functions included in the "Course Registration" section, such as searching for courses, viewing the course offerings that are currently available, and When choosing courses to enroll in, people can make well-informed decisions because of this detailed overview. Also contacting assistance if further information is needed.

## Contact Us

Have conversations with staff, instructors, and students. Send out updates, reminders, and announcements and we can also reset our password if needed.



The screenshot shows a web browser window with a dark theme. The address bar displays '127.0.0.1:5500/contact.html'. The page content includes a 'Contact Us' heading, followed by three input fields labeled 'Name:', 'Email:', and 'Message:'. A green 'Send' button is positioned below the 'Message:' field. Below the form is an 'FAQ' section with the question 'How do I reset my password?'. Underneath the question is a 'Show/Hide Answer' button and a 'Back to Home' link.

**Name:** To make your message more unique, enter your name.

**Email:** In order for us to reply to the question you have, please provide your email address.

**Message:** Type your message in this space. Please let us know if we can help, and we will respond as soon as we can.

## FAQ:

### ***Password reset:***

How can I change my password?

Use the "Reset Password" option below to change your password. An email containing instructions on how to safely reset your password will be sent to you.

### ***Back to Home button:***

To quickly access other features and parts of the degree program management system, simply go back to the home screen.

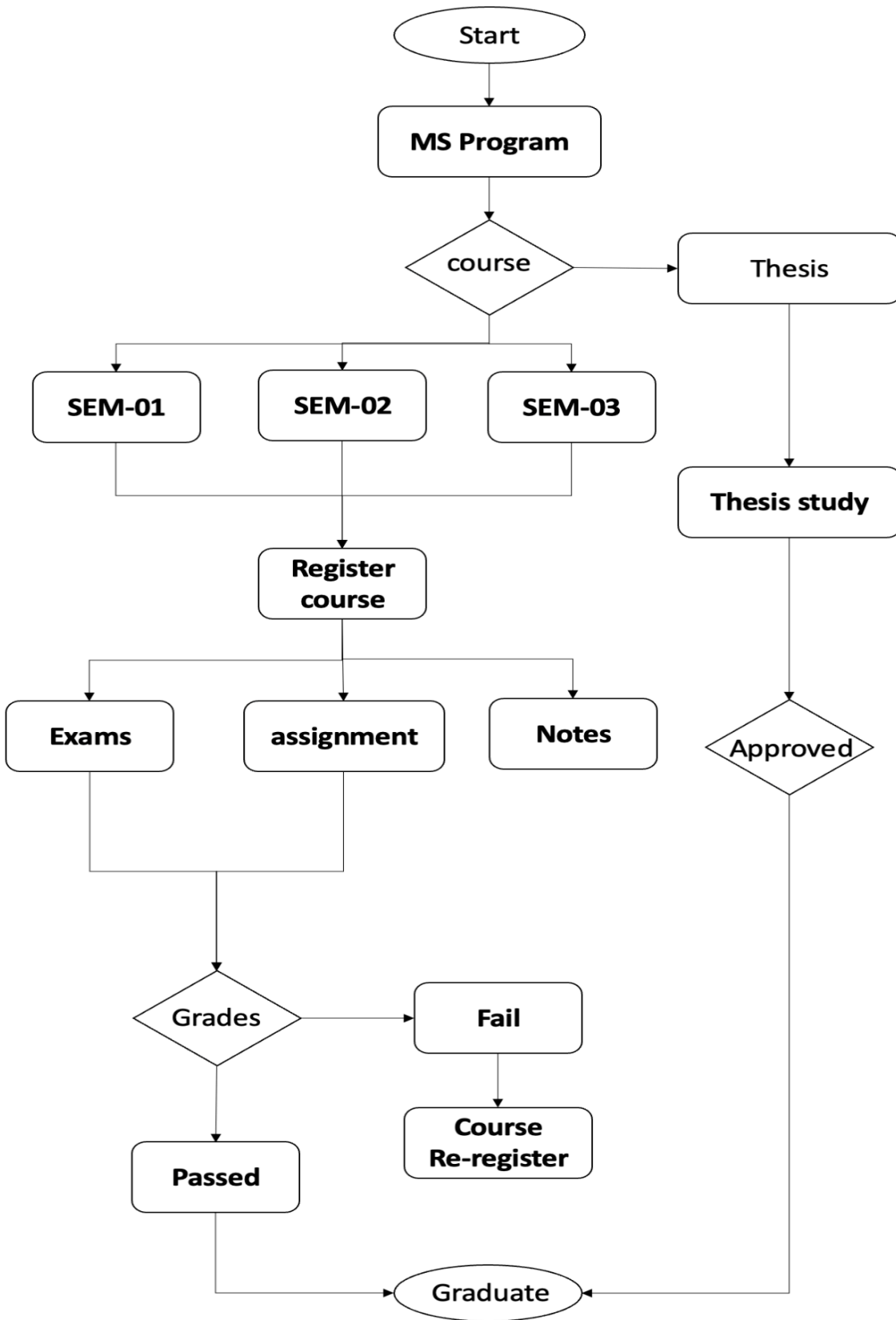
### **3. Document with storyboards, UI sketches, etc.**

A flowchart is a diagram that shows the steps in a Master of Science (MS) program starting from enrolling to graduation. It begins with “MS Program,” which tells about how academic life for a student starts. The first decision point asks if the student will take courses or go directly into thesis and this implies that it is possible for one to opt for thesis only.

For those who choose to take courses, there are three successive semesters (SEM-01, SEM-02, SEM-03) through which they must pass. In every semester, students have to enroll in course(s), Exams, Assignments and Notes implying that these are key elements found in every course. The next decision point assesses “Grades” and determines whether one has “Passed” or “Failed.” If one passes, they progress toward graduation while having failed means “Course Re-register” indicating a re-take on the failed class.

Besides, parallel to this is the Thesis track which goes straight from “MS Program” ending with “Thesis study” followed by a decision diamond asking whether or not the thesis is ‘Approved’. If it is approved then the path leads to ‘Graduate’ just like in the course track.

By flowchart either a student can go for a series of exams which are followed by coursework or they can concentrate on thesis writing. The final result in both tracks remains to be graduation as long as one succeeds with his/her path. The ability of various postgraduate education programs to accommodate this flexibility and make critical evaluation points is evident in it.



#### **4. Assess using UX metrics w.r.t. pain points and user goals**

**User Testing:** Utilize representative users to test the prototype's usability, functionality, and general user experience. Get their feedback. Record qualitative information about user experiences, problems, and opportunities for development by watching users as they connect with the prototype.

**Documentation:** Keep a copy of the UX assessment's results, including the metrics that were analyzed, the analysis that was done, and the suggestions made for more iterations and improvements. This documentation guarantees that the prototype is continuously improved and provides a guide for further design changes.

**Limited Accessibility:** If the prototype does not have the required accessibility features, including keyboard navigation assistance, screen reader compatibility, or flexible font sizes, users with impairments may face difficulties accessing and using it. This could result in bad user experiences and the exclusion of an important segment of the user group.

**Data Overload:** Giving people too much information at once can cause them to become confused and find it difficult to concentrate on important subjects. When faced with a large amount of data, users could find it difficult to draw conclusions or decide what steps to take next.

**Timely Support:** Users that run into problems or require help with the prototype appreciate timely and efficient support. When they have questions or issues, they anticipate having quick access to support tools like FAQs, live chat, help documents, and customer care channels.

**Data Security:** When using the prototype, users place the utmost importance on the security and privacy of their private information. For the purpose of preventing unauthorized access or security breaches, they anticipate strong data protection measures, reliable authentication systems, and clear privacy rules.