



# SOFTWARE ENGINEERING

ITERATION - 1

## Group Members:

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# **Project Module Description**

## **Module To Develop**

### **Registration (Member and Society)**

## **Introduction To Module**

This module includes the end-to-end process of registering a new society as well as member registration of an existing society.

## **Pre-requisites**

Before starting off with the implementation of this module, our team had to configure the setup of Visual Studio, make a new project and deploy it on our Git Repository. Furthermore, the team also worked on constructing a detailed database as well as Interface design. The relevant artifacts produced as a result are available in our Trello Scrum Board.

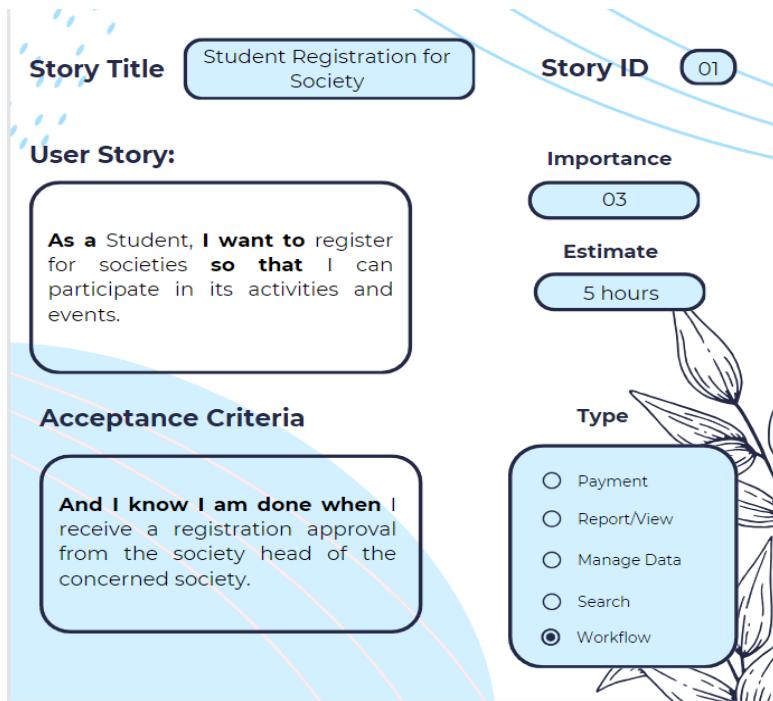
## **Basic WorkFlow**

Starting from the Log-In Screen, a student shall be validated and redirected to the CampusNex Main Interface.

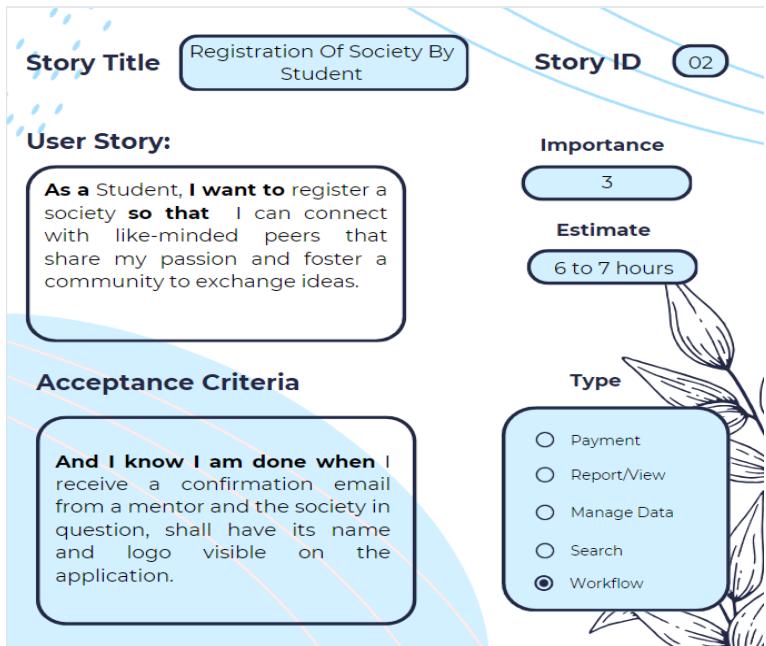
1. The student shall be able to request to register a new society by filling in a form and their request will be forwarded to the chosen mentor. The mentor can accept or reject the society registration request.
2. The student shall be able to view all societies. They can register to a society by navigating to the society's page and filling a form for member registration provided that the society is accepting member registrations.

## User Stories

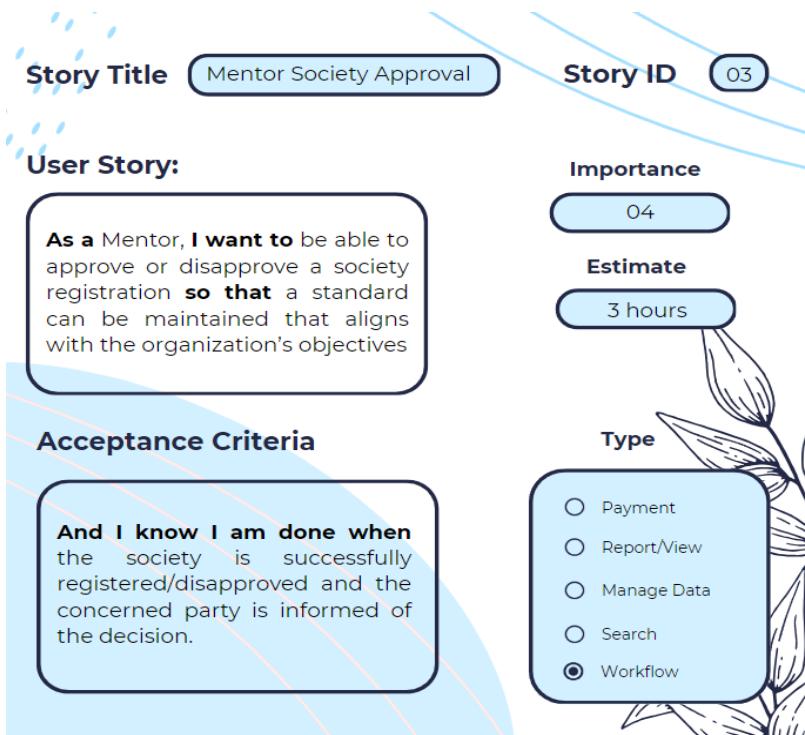
### US 1: Student Registration for Society



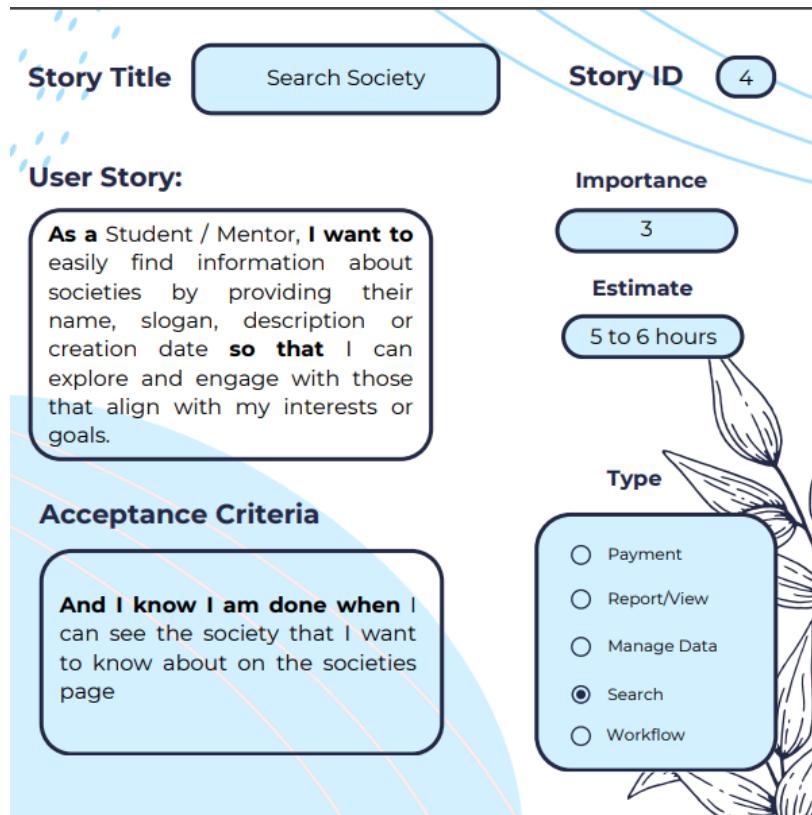
### US 2: Registration of Society by Student



## US 3: Mentor Approval of Society



## US 4: Search Society



## Structured Specification

### SS1: Student Registration for Society

	Details
Description	A streamlined method that facilitates students to register into societies of their choice
Inputs	<ul style="list-style-type: none"><li>• Society name</li><li>• Name and student id</li><li>• Phone and email</li><li>• Previously joined societies</li><li>• Statement of interest</li></ul>

	<ul style="list-style-type: none"> <li>• Position to join</li> <li>• Transcript</li> <li>• Optionally, additional requirements by the society</li> </ul>
Source	Student input via an interface
Outputs	<ul style="list-style-type: none"> <li>• Confirmation of registration into the society</li> <li>• Society dashboard</li> </ul>
Destination	Student dashboard showing the pending society registration request.
Action	<ol style="list-style-type: none"> <li>1. Student selects desired society to join from a list of available options</li> <li>2. Student provides the inputs required for the society registration</li> <li>3. System verifies the eligibility</li> <li>4. If student is eligible, system records the request</li> <li>5. System forwards the request to society head</li> <li>6. After processing the request, system sends the status of the request to the student</li> </ol>
Requirements	<ul style="list-style-type: none"> <li>• Student must be enrolled in the institution</li> <li>• Society must be registered and in active status</li> </ul>
Pre-condition	<ul style="list-style-type: none"> <li>• Valid student details</li> <li>• Student should not already be registered into the society</li> <li>• Available slots in society</li> </ul>
Post-condition	The student's membership status in the applied society is updated and recorded in the database
Side effects	None

## SS2: Registration of Society by Student

	Details
Description	Grants the ability to register a new society.
Inputs	<ul style="list-style-type: none"> <li>• Student name</li> <li>• Student Roll Number</li> <li>• Student Email</li> </ul>

	<ul style="list-style-type: none"> <li>• Student contact info</li> <li>• Student Role in society</li> <li>• New Society Name</li> <li>• Logo</li> <li>• Society Type(e.g academic, cultural etc)</li> <li>• A detailed introduction for the new society</li> <li>• List of initial members</li> <li>• Upcoming Event [Optional]</li> <li>• Mentor name</li> <li>• Mentor email</li> </ul>
<b>Source</b>	Student Input via interface
<b>Outputs</b>	<ul style="list-style-type: none"> <li>• Email received from Mentor approving/rejecting Society creation.</li> </ul>
<b>Destination</b>	Student dashboard showing the Society's Approval Pending Request.
<b>Action</b>	<ol style="list-style-type: none"> <li>1. Student shall initiate the process of creating a new society by pressing a button on the dashboard.</li> <li>2. Student shall enter the required inputs for registering a new society.</li> <li>3. Student shall confirm details and the system forwards it to the designated mentor for approval.</li> <li>4. Student waits for approval from the mentor.</li> <li>5. If society is approved, the new society shall be visible on the dashboard.</li> <li>6. In case of rejection, the student is notified with/without proper reasoning.</li> </ol>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>• Student must be enrolled in the institution.</li> <li>• Student must not be registered in another society.</li> </ul>
<b>Pre-condition</b>	<ul style="list-style-type: none"> <li>• Student enrolled in institution.</li> <li>• Valid Student details.</li> <li>• The intended society must not already exist.</li> </ul>
<b>Post-condition</b>	<ul style="list-style-type: none"> <li>• Intended society visible on the dashboard with all the necessary details.</li> <li>• The designated mentor credentials as well as Society head credentials are shown on the intended society's page.</li> </ul>

<b>Side effects</b>	<b>None</b>
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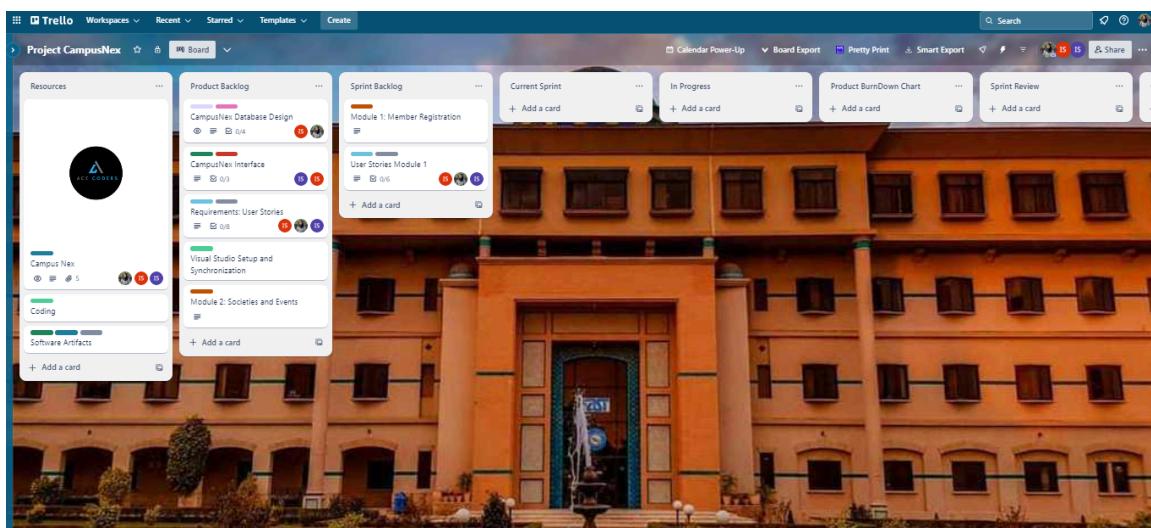
## SS3: Mentor Approval of Society

	<b>Details</b>
<b>Description</b>	<b>Responsible for approval or rejection of a requested society by a mentor.</b>
<b>Inputs</b>	<ul style="list-style-type: none"> <li>• <b>Student Information</b></li> <li>• <b>Society Information</b></li> </ul>
<b>Source</b>	<ul style="list-style-type: none"> <li>• <b>Student (form filled by student)</b></li> <li>• <b>Database (student Information)</b></li> </ul>
<b>Outputs</b>	<b>Approve Society / Reject Society</b>
<b>Destination</b>	<b>(Approval) Newly Registered Society Page</b> <b>(Rejection) Mentor Dashboard</b>
<b>Action</b>	<ol style="list-style-type: none"> <li>1. The Mentor shall be notified of any pending society's registration request.</li> <li>2. The Mentor shall navigate to the registration form of the society.</li> <li>3. After evaluating the form and related information, the mentor shall choose to accept or reject the society's registration.</li> <li>4. If the mentor approves the society, the new society's page will open and the student will be notified of approval.</li> <li>5. If the mentor rejects society, they optionally provide a reason for rejection and the student is notified.</li> </ol>
<b>Requirements</b>	<b>The mentor must not have more than 2 societies under supervision.</b>
<b>Pre-condition</b>	<ul style="list-style-type: none"> <li>• The mentor is logged into the account.</li> <li>• There is at least one pending society approval request.</li> </ul>

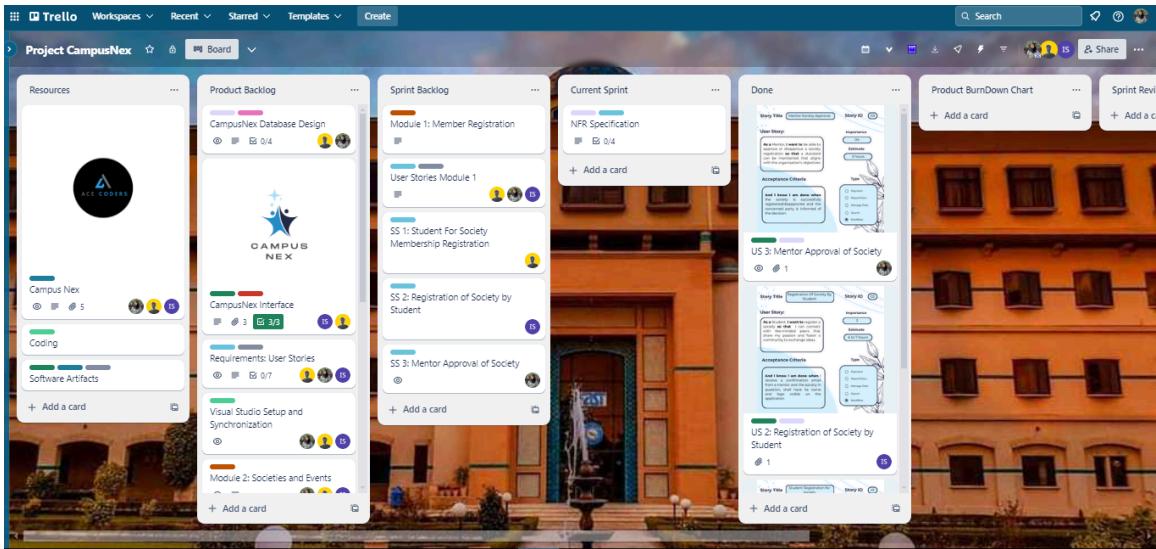
<b>Post-condition</b>	The new Society is successfully registered if approved and the relevant student(s) is notified. The database is updated with new society's details. Otherwise, no changes are made and the student is notified of rejection.
<b>Side effects</b>	None

## Scrum Board

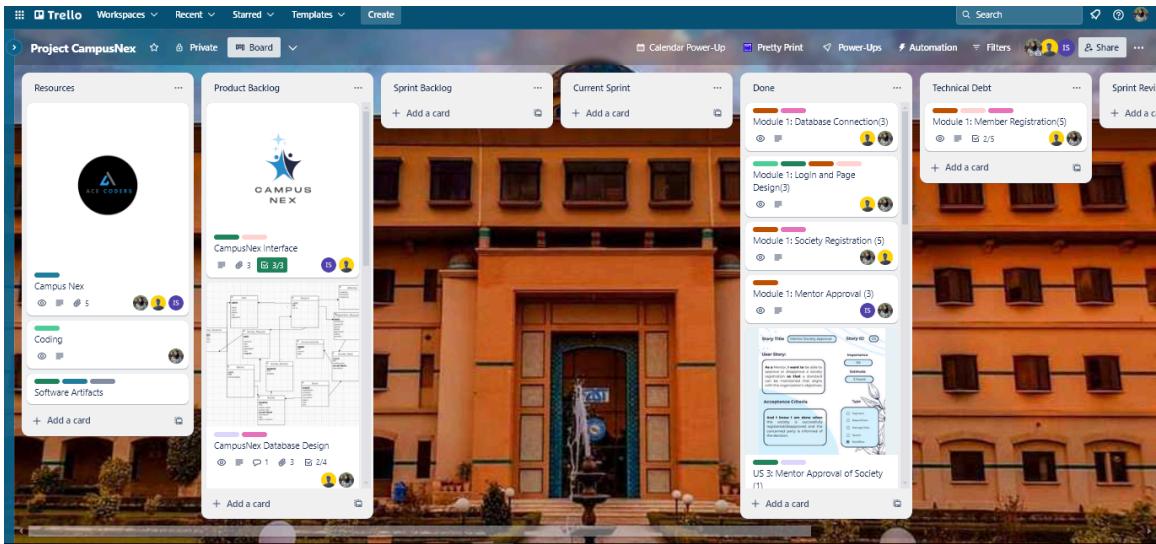
### Initial ScreenShot



## Mid ScreenShot



## Final ScreenShot



## NFR Specification

### **Reliability**

The system shall not experience critical failures more frequently than once every two months. (Critical failures are defined as those which impact the functionality or availability of the system significantly).

### **Maintainability**

Issues within the system shall be addressed and resolved within one hour of their occurrence to ensure efficient maintenance.

### **Performance**

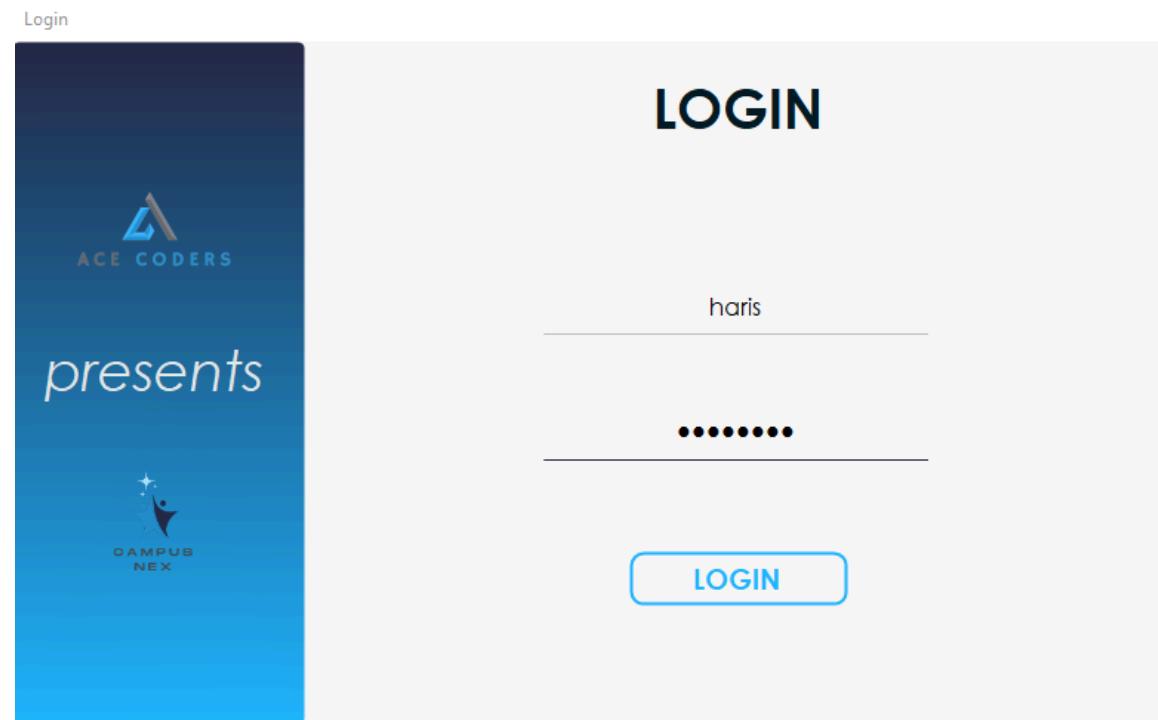
The system shall respond promptly to user interactions. The average response time for critical user actions will not be more than 1.5 seconds (critical user actions like registering a society, loading dashboard etc).

### **Usability**

The system shall be easy to navigate and will have at least 2 helping screens / pop-up windows on each page.

## Iteration 1 Implementation

## Login Page Shown



## Main Societies Page:

One Society is Currently Registered

The screenshot shows a dark-themed web application interface. At the top left is the CampusNex logo with a student icon. A search bar labeled "Search Societies" is at the top center. On the right, there's a user profile icon and the text "User Name". The main content area features a card for a society named "FCS" (Fast Computing Society). The card includes a circular logo with "ACE CODERS" and a stylized "A", the acronym "FCS", the full name "Fast Computing Society", and the tagline "Computer Computer Computer". Below the logo, it says "Mentor: haris" and "President: kalsoom". A blue "View More" button is at the bottom of the card. At the bottom right of the main area is a blue button with the text "Register a New Society !!".

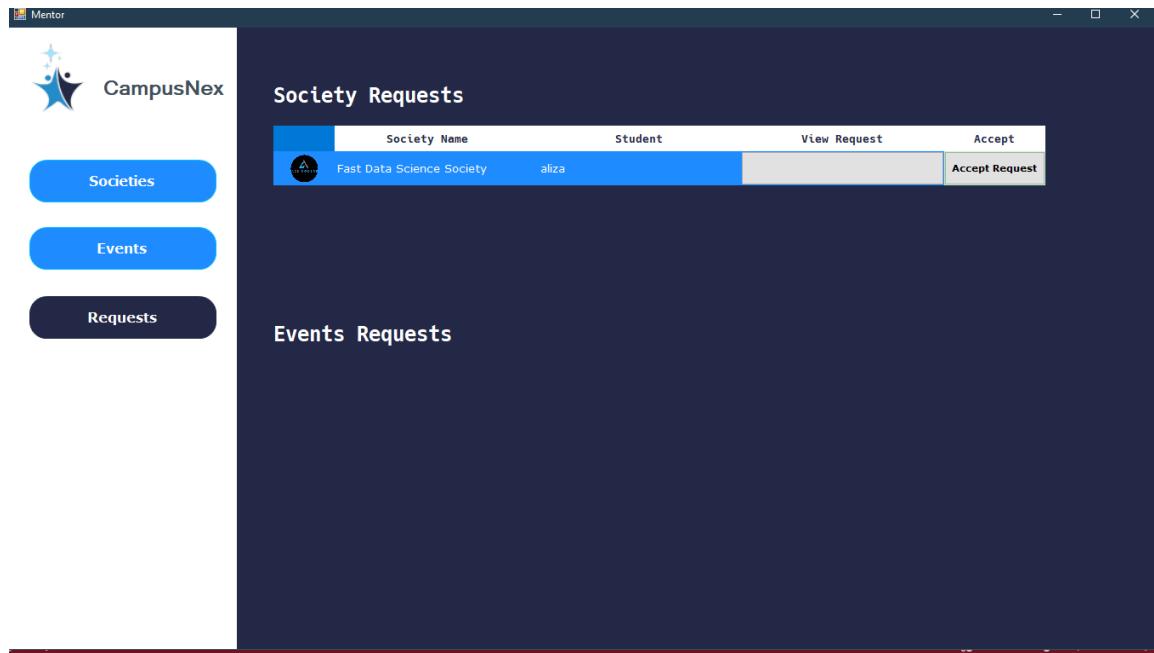
## Society Registration Form

Society Registration Form is Filled.

This screenshot shows the same dark-themed interface as the previous one, but now focused on the "Register a New Society" form. The title "Register a New Society" is centered at the top. The form fields include: "Society Name" with "Fast Data Science Society" entered; "Society Slogan" with "Data data everywhere"; "Society Description" with a detailed paragraph about FDSS; "Insert Logo" with a placeholder "Upload Image" and a preview of the "ACE CODERS" logo; and "Society Mentor" with "aiman" selected from a dropdown menu. A large blue "Register" button is at the bottom of the form.

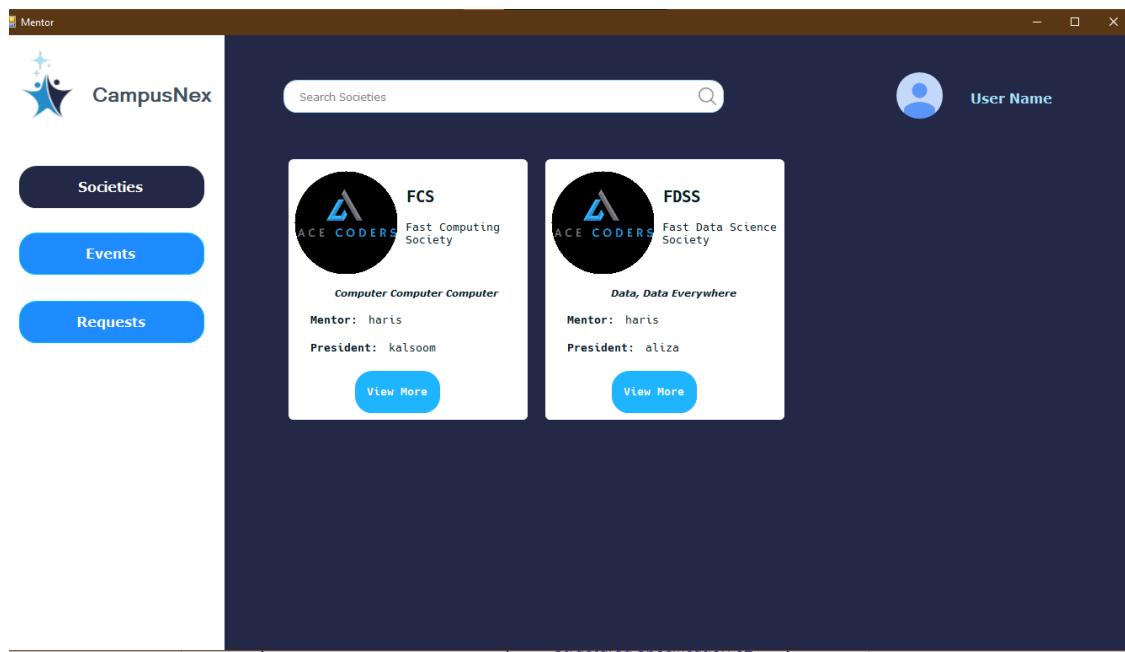
## Mentor Request Approval

Request Sent for Approval to the mentor



## New Society Registered

New Society is Successfully Registered.



## Work division

Contributors	Tasks
<b>Aiman Safdar</b>	<ul style="list-style-type: none"><li>● User Story 02</li><li>● Structured Specification 02</li><li>● Document Compilation</li><li>● NFR 01</li><li>● Module 01 Introduction</li><li>● Database ERD</li></ul>
<b>Haris Sohail</b>	<ul style="list-style-type: none"><li>● User Story 01</li><li>● Structured Specification 01</li><li>● Implementation Setup</li><li>● NFR 02 + 03</li><li>● Database ERD</li></ul>
<b>Kalsoom Tariq</b>	<ul style="list-style-type: none"><li>● User Story 03</li><li>● Structured Specification 03</li><li>● Scrum Board Design</li><li>● Burndown Chart</li><li>● NFR 04</li><li>● Database ERD and Schema</li></ul>

## Burndown Chart

