

COURSE PLANNER

System Requirement Specification Document

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Introduction

In present day scenario, maintaining a plan of study has become a tedious task for both the students and advisors since it leads to redundancy, confusion and inconsistency, because the existing system uses trivial methods (like the use of spread sheets) to maintain the study plan. In order to avoid this redundancy, a system has been proposed as a solution which effectively manages all the inconsistencies of the current system.

Purpose of the system

The purpose of the system is to reduce redundancy in generating course plans for students and provide hazard free operation. The system provides various features like maintaining a course plan (tentative plan of study), enrolment / dropping of a course, CGPA calculator, Degree works and generates unofficial transcripts etc. which will help students to keep track of their progress. Since the system is completely online, the student / advisor can interact with the system fulfil their tasks.

Scope of the system

This system comes into action when the student is admitted to the university and issued an I-20 form. An account will be created for the student to access services provided by the university. The Graduate advisor then adds the student to the system once admit status is confirmed, an initial plan of study with possible pre-requisite courses is created by the advisor and sent to the student. The student logs into the system by using the credentials generated by the university and can look up his initial plan of study. If the student wishes to have a change in the initial plan of study, may do so by updating the course plan based on his preference and available courses for the current semester and notify the changes to the advisor. The advisor then reviews the modified course plan and may advice possible changes or approve the course plan and notifies the student for enrolment.

At the end of the term, the grades for enrolled courses are updated in the course plan and the unofficial transcripts are generated. The degree works shows the progress of the student towards completion of degree by showing the completed courses, enrolled courses for the upcoming semester along with total credit hours remaining based on the exit requirements chosen by the student.

For the system to be deployed, it has to have access to user information from university database. The system operates only within the restricted environment of particular disciplines offered by the university. And this system performs specific operations restricted to their respective disciplines.

Objectives and Success criteria of the project

The objective of the Course Planner is to maintain a course plan for each student as a tentative plan of study using which he can enroll for courses. This eliminates the redundancy of maintaining multiple course plans by the student and the advisor whenever there is a change in the course plan.

The system also helps in maintaining of the plan of study for the students, where in the student as well as the advisors can modify the course plan and have the latest one available at all time which helps the advisor to better advice students and keep track of student's progress towards their completion of degree.

Definitions and Abbreviations

Terms	Descriptions
Student	Stakeholder of the system
Advisor	Stakeholder of the system
Course Plan	Program of study which includes the student's concentrations, and courses which he can enroll.
Degree works	Shows the progress of student towards completion of degree
CGPA / GPA	Cumulative Grade Point Average
Pre-requisites Courses	Foundation courses required to be completed by the student, if he does not meet the requirements for the program.

Overview

The system is designed as a web based application which supports the following tasks:

- It can be used to maintain a tentative plan of study created by the advisor for the students.
- Using this the student can decide whether to enroll for a course or to withdraw it any time before the actual enrollment happens.
- Using this system, one can easily track their progress towards completion of degree
- The system generates CGPA for the courses enrolled and finished by the student.
- This system allows a student to drop any ongoing course.
- This system also generates unofficial transcripts.

System Context

Usage facets

Requirement sources

- Direct Users: The direct users for the online course planner are students who are admitted to the university and the advisors.

- Indirect Users: The indirect users for the online course planner is the administrator who will be creating new users for the system and maintaining the system.
- Existing System: The existing system for the course planner consists of multiple systems which does different tasks, one for registration of course and course progress and another system for designing the course plan for the students. But, there is no unified system which integrates all the tasks into one system.

Context Objects

- User Groups: The user groups for online course planner are Students and Advisor.
- Input modality of user interface: The user has to enter nuid and password to login to their account. The user should have a valid email address. Upon changing the password for their account, a notification mail has to be sent. Upon receiving any notification, an email has to be sent to the user.
- Usage workflow:
 - Review course plan
 - Add courses to the course plan
 - Seek approval from advisor
 - Register for courses
 - Track term progress
 - Calculate the course credit hours to be finished
 - Track graduation requirement progress

Properties and Relationships

- The advisor should be able to view all the student who are currently enrolled
- The advisor should be able to edit course schedule
- The student should be able to edit course plan by adding or removing courses
- The student should be able to register for courses added to the course plan
- The student or advisor should be able to view the academic progress

Subject Facets

Requirement Sources

- Domain Experts: System architect
- Stakeholders: Students, Advisor
- Rules of the system:
 - A graduate full time student should enroll for 9 credit hours or more.
 - A graduate part time student should enroll for at least 3 credit hours or more.
 - An international student is always enrolled as a full time student.
 - Local students can be part time students if and only if they are employed as full time employees.
 - All grades are assigned based on University's grading policies.
 - For a Master's student to graduate a minimum of CGPA of grade B (3.0) is required.
 - Total credit hours required for a Computer Science Master's student to complete graduation based on his exit requirements are:
 - Capstone: 33 credit hours

- Project / Thesis: 30 credit hours
- If a full time student is employed as an intern for 3 credit hours, then he can waive a course of 3 credit hours.
- A student can get a minimum grade of one B- in the core courses.
- A student should get a minimum grade of B in the pre-requisites courses.
- *Existing system:*
 - Mavlink is the existing system which is used for enrolment of courses, display grades and to calculate progress towards graduations.
 - But this system does not have functionality to store the course plan for student to access and update.
 - The advisor uses Microsoft Excel to store each student's course plan.

Context objects

- Persons whose data is stored: Students and advisor
- Immaterial Objects: User's data from the university like "nuid", "netid", "concentration" and "pre-requisite courses" for students along with their personal details.
- Process: The system should be provided with user information from the university to access and assign logins for each student and advisor.
 - The advisor will assign logins for new students and keep track of existing students in the program.
 - The students will access the system for updating their course plan and for enrolment of courses.
 - The advisor will be able to update course schedule and keep track of each student's progress towards graduation.

Properties and Relationships

- Relevant properties of the identified context objects are:
 - Each user (student / advisor) will have "netid", "nuid" and their personal information.
 - Each student is assigned an advisor
 - Each student has a concentration and may have set of pre-requisite courses

Proposed System

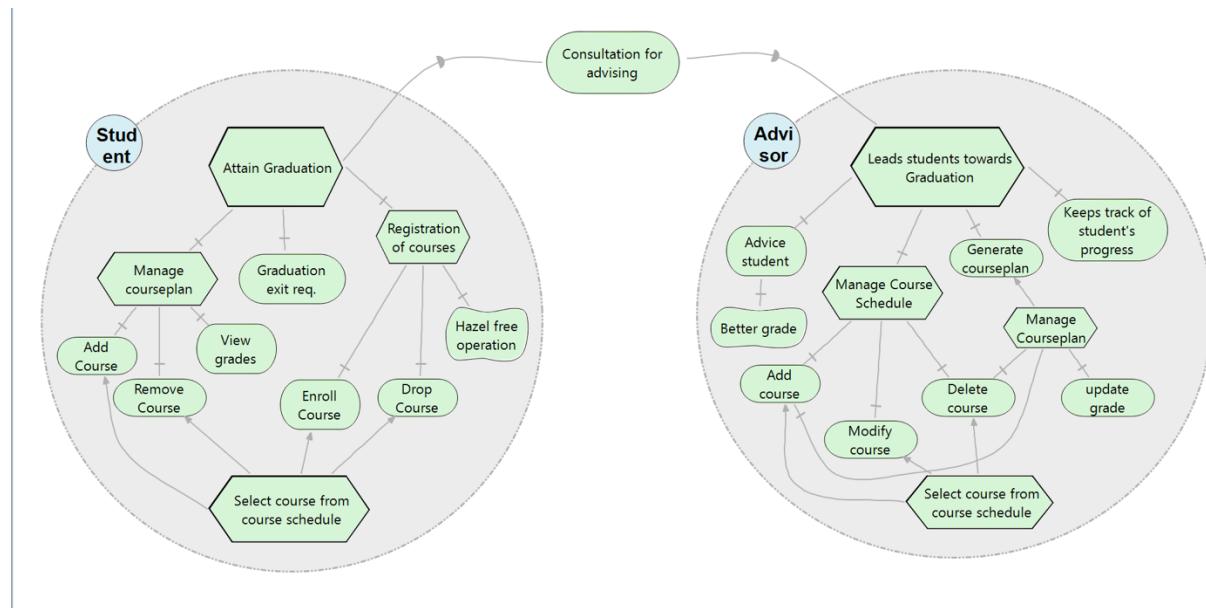
The system is designed as a web application which is capable of performing functionalities which are not supported by the currently existing system. The web interface is designed to provide a smooth interaction with the system.

The proposed system has the following functionalities:

- The system can maintain a tentative plan of study (course plan) for each student.
- The student can modify the course plan based on the availability of courses.
- The student can enroll / drop any course based on the tentative plan of study.
- The Student can also keep track of progress towards completion of degree based on the remaining credit hours and his CGPA.
- The advisor can modify the course plan according to the concentration chosen by the student.
- The advisor can update the grades for the completed courses in the course plan, to keep the student updated.
- The system can generate reports for each student.

Goal Model

Strategic Rationale Model



Goals

- Stakeholders:
 - Student
 - Advisor
- **Student:** The major task of the student is to graduate from the program. The other tasks associated with this involves registration of courses with goals being enrollment of a course and dropping of course with hazel free operation. The task managing course plan (Plan of study) involves adding / removing the course from the course plan which allows the student

to view his / her grades on successful completion of the course at the end of the semester, which decides the standings of the student (Good standings or probation). For a student to graduate successfully from the program he / she need to keep track of No. of credits completed using the Grad exit requirement.

- Advisor: the major task of the advisor is to lead the students towards graduation. The goals associated with the task is to advise students, generate course plan for the student and keeps track of student's progress. Due to good advising a soft goal of a student getting better grade is achieved. The other tasks of the advisor involve managing the course schedule which involves adding / removing / updating the course schedule which allows the students to enroll for the courses for the semester and to manage the course plan of the student (plan of study). The advisor also updates the student's course plan with grades obtained for that course at the end of the semester which helps him / her to keep track of student's progress and lead them to graduate from program.

Functional Requirements

Student

- [1] As a student, in order to view my profile, I want to login
- [2] As a student, in order to enroll for new courses, I want to add the course to the course plan
- [3] As a student, in order to enroll for the current semester, I want to enroll for course.
- [4] As a student, in order to delete a course from the course plan, I want to remove the course from course plan.
- [5] As a student, in order to audit the course for current semester, I want to drop course.
- [6] As a student, in order to check my results, I want to view my grades.
- [7] As a student, in order to plan my course work, I want to view the course information.
- [8] As a student, in order to plan my course work, I want to manage my course plan.
- [9] As a student, in order to notify the advisor regarding change in the course plan, I want to email the course plan to my advisor.
- [10] As a student, in order to manage my course plan, I want to calculate the number of credits required based on the exit plan for graduation (Thesis, Capstone or Project).
- [11] As a student, in order to view my course progress, I want to generate a progress report.
- [12] As a student, in order to end the session, I want to logout.

Advisor

- [1] As an advisor, in order to view the homepage, I want to login.
- [2] As an advisor, in order to view all the students admitted to the university, I want to view all students.
- [3] As an advisor, in order to view students who are currently enrolled, I want to view currently enrolled students.
- [4] As an advisor, in order to access student's academic information, I want to view student's information.

- [5] As an advisor, in order to approve the courses for registration for the students, I want to approve courses for enrollment.
- [6] As an advisor, in order to update the course schedule for every semester, I want to edit course information.
- [7] As an advisor, in order to keep track of a student's course work, I want to generate a course plan for students.
- [8] As an advisor, in order to view the course plan for a particular student, I want to view the course plan of a given student
- [9] As an advisor, in order to make changes to the existing course plan, I want to edit the course plan of a given student.
- [10] As an advisor, in order to notify student on modification of course plan, I want to email the course plan to the student.
- [11] As an advisor, in order to keep track of student's progress, I want to view student's progress towards graduation.
- [12] As an advisor, in order to view or update a student's grade if there is a change, I want to manage students grades on approval of the respective professor of the course.
- [13] As an advisor, in order to end the session, I want to logout.

Non-functional Requirements

- Usability: The software is designed for a website to make it as usable as possible. The website is also made up of a series of simple buttons to keep it simple and easy to understand by users with different levels of experience
- Reliability: The prototype of the application has been developed. The probability of failure-free software operation on a designed test suite proved reliable. The software reliability will be mainly determined by how reactive the website is to user input. Edge-case errors when posting data could be a major source of software reliability problems. This could be determined by the database structure and the queries to the database upon the post request.
- Performance: The software is designed in such a way that the use of sophisticated api's guarantee optimal performance at any given time. The software is flexible enough to add new modules which increases its functionality. The performance of the software depends on the type of the database suite used and the load on the software because certain database suites does not perform synchronous read/write operations when subjected to a maximum load.
- Supportability: it's a cost effective product, easily scalable and can be maintained easily.
- Interface: The system uses a web interface which is easy to navigate by the user which is visually appealing.
- Legal: Personal information of the user is secured. The product will provide intellectual property rights.

Scenarios

Feature: Course planner system

As a new student of the university, I want to enroll for the courses based on the courses available for that particular semester

As an advisor, I want to update the information regarding courses as well as specific student's course plan information and also to view student's progress towards graduation.

Student

[1] Scenario: Student login.

When I choose the student login option.

And I login using my credentials provided by the university

Then I will be directed to my homepage which will prompt me to change my password.

[2] Scenario: Adding the course into the course plan

When I login to my home page using my login credentials,

And I choose view course schedule

And I choose the term of semester

Then I will be directed to the page which displays the available courses for that particular semester.

And when I choose the option add-course

Then that course should be added on to my course plan as one of the subject

Based on the previous courses enrolled and completed, the system should not allow adding more than two six ending courses, and also adding internship for more than 3 credits is not allowed

When I try to add Capstone / Thesis / Project as the exit requirement to the course plan, Then the system should add the exit requirements to the course plan only if I have successfully completed required core courses (with grade better than B or above).

[3] Scenario: Enrolling for the course

When I login to my home page using my login credentials,

And I choose view course plan option

And I receive approval from the advisor

And I choose enroll option

Then the system should register my courses.

When I try to register for other courses

And I choose register option

Then the system should register the courses which are newly added

[4] Scenario: Removing the course from the course plan

When I login to my home page using my login credentials,

And I choose the option view course plan

And I choose the option remove course from the current semester.

Then that course should be removed from my course plan

When I try to remove a course from the previous semester

Then I get a message warning me that I cannot perform this action.

When I try to remove a course from the current semester after registering for the courses

Then I get a message warning me that I cannot perform this action.

[5] Scenario: Dropping a course

Given: I have already registered for courses.

When I login to my home page using my login credentials,

And I choose view course plan option

And I choose drop course option

Then the system should allow me to choose a course to be dropped

And I choose the drop option next to the course

Then the course should be removed from my course plan.

[6] Scenario: View Grades.

When I login to my home page using my login credentials,

And I choose course plan option.

Then I will be able to view my grades for the courses which are completed.

[7] Scenario: View Course Information.

When I login to my home page using my login credentials,

And I choose Course schedule option.

Then I will be able to view the complete course offered for the next semester along with other details regarding the course and the instructors who are offering the course.

[8] Scenario: View course plan.

When I login to my home page using my login credentials,

And I choose course plan option.

Then I will be directed to my course plan page which displays the plan layout designed by the advisor for each semester, which includes number of credit hours to be taken for each semester and also based on the criteria for selecting a course based on concentration.

[9] Scenario: Notifying the course plan to the advisor

When I login to my home page using my login credentials,

And I choose view course plan option

And I choose email course plan to advisor

Then I will be provided with options to choose to which of the advisor's to send to.

And when I choose send option

Then the system should email the course plan to the selected advisor

[10] Scenario: Graduate exit requirements

When I login to my home page using my login credentials,

And I choose Exit requirements

And I choose the Exit requirements as one of the options (Thesis, Capstone or Project)

Then the system should display the information about the course credit hours take, with the remaining credit hours to be completed in a tabular form. It should also display the progress using a progress bar with appropriate value in percentage form.

- [11] Scenario: Generate reports for graduation

Given: I have already registered for courses.

When I login to my home page using my login credentials,

And I choose reports option

Then the system should be able to display my grades for each semester course wise and also display the calculate CGPA.

- [12] Scenario: Logging out.

When I choose the logout option.

Then, session for that student should be deleted and should be redirected to the logged out page which displays an appropriate message.

Advisors

- [1] Scenario: View home page.

And I choose login option

And When I login to my home page using my login credentials,

Then display home page

- [2] Scenario: View students

Given: students are admitted to university

When I login to my home page using my login credentials,

And I choose an option student's info

And I choose an option from a dropdown list for all students

Then, display a list of are students who are yet to graduate.

- [3] Scenario: View currently enrolled students

Given: Students register for the courses

When I login to my home page using my login credentials,

And I choose the option student's info

And I choose an option from the dropdown list for currently enrolled students.

Then the system displays all the students who are enrolled currently for the semester.

- [4] Scenario: View a student's information

When I login to my home page using my login credentials,

And I choose the option search student

Then the system opens a page where it prompts for NUID to be entered

Then after entering the NUID, the system displays the student's record which includes his grades for all the courses.

- [5] Scenario: Approving the courses for registration
When I login to my home page using my login credentials,
And I choose the notification of a particular student from the notification list
And that student's course plan is displayed
And next to the courses for current semester choose approve or disapprove option
And choose send option
Then the system notifies the student about the courses in the course plan
- [6] Scenario: Edit course information
When I login to my home page using my login credentials,
And I choose the option edit course information
Then the system displays a popup to add a new course or update existing course information or remove course.
When I choose add new course option
Then a form is displayed where the information about the new course are added
When I choose update option
Then a form with dropdown is displayed where the form is filled with the dropdown for the course and the section number is displayed and the respective fields are updated accordingly.
When I choose the remove option
Then a form is displayed which prompts the advisor to enter the course number and section number to be deleted.
- [7] Scenario: Generate a course plan
When I login to my home page using my login credentials,
And I choose the option Add student,
Then the system opens a page which prompts for creation of course plan which will create a course plan and lets me add pre-requisites if they are required by the student.
- [8] Scenario: To view course plan
When I login to my home page using my login credentials,
And I choose the option search student
Then the system opens a page where it prompts for NUID to be entered
Then after entering the NUID, the system displays the student's info
And I choose course plan option
Then the system displays the course plan for that student.
- [9] Scenario: To update course plan
When I login to my home page using my login credentials,
And I choose the option search student
Then the system opens a page where it prompts for NUID to be entered
Then after entering the NUID, the system displays the student's info
And I choose course plan option

Then he system displays the course plan for that student
And I choose edit option
Then the system allows the advisor to add/remove courses to the course plan

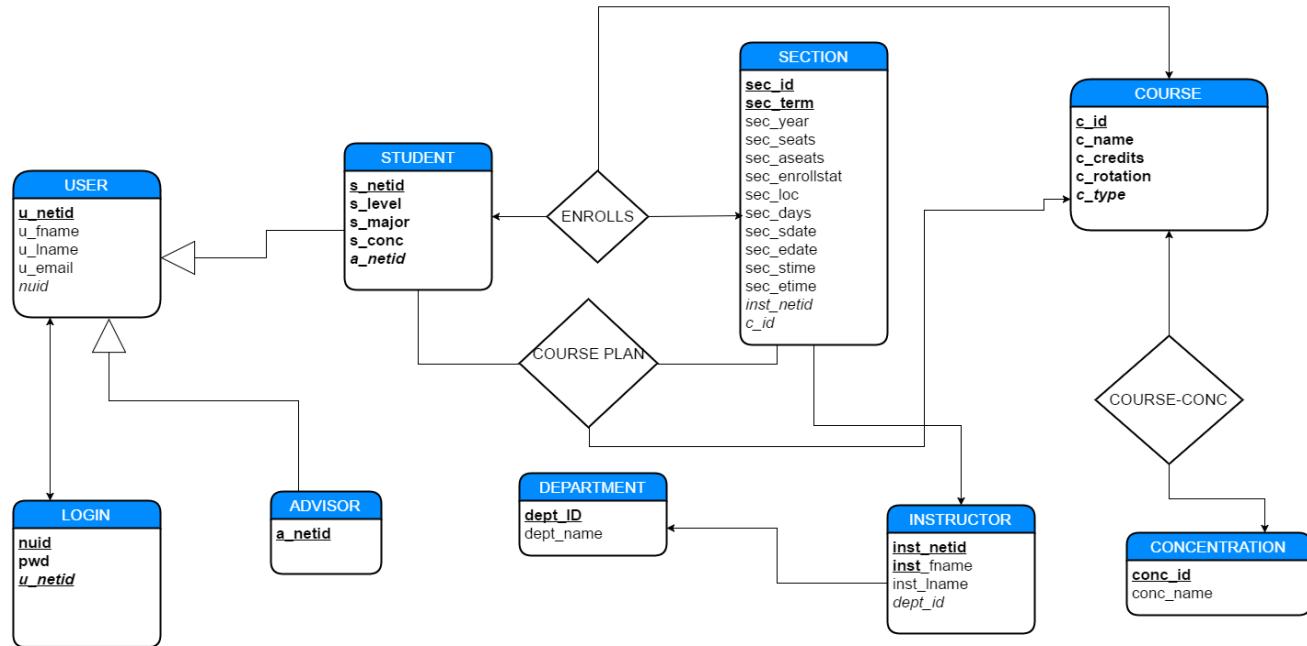
[10] Scenario: Notification from students about course plan
When I login to my home page using my login credentials,
And I choose notification option from the home page
Then a dropdown list is generated, showing all the notifications from the students.
And I choose a student's notification
Then the system should display that student's information page for course plan.

[11] Scenario: To view student's progress towards graduation
When I login to my home page using my login credentials,
And I choose the option search student
Then the system opens a page where it prompts for NUID to be entered to display
student's info
And I choose degree works option
Then the system displays a page which show the student's progress towards his / her
degree completion in the form of progress bar and along with an unofficial transcript of
grades for each course completed.

[12] Scenario: Update student's grade
When I login to my home page using my login credentials,
And I choose the option search student
Then the system opens a page where it prompts for NUID to be entered to display
student's info
And I choose update grades form the student's info page.
Then the system prompts to enter a new grade.

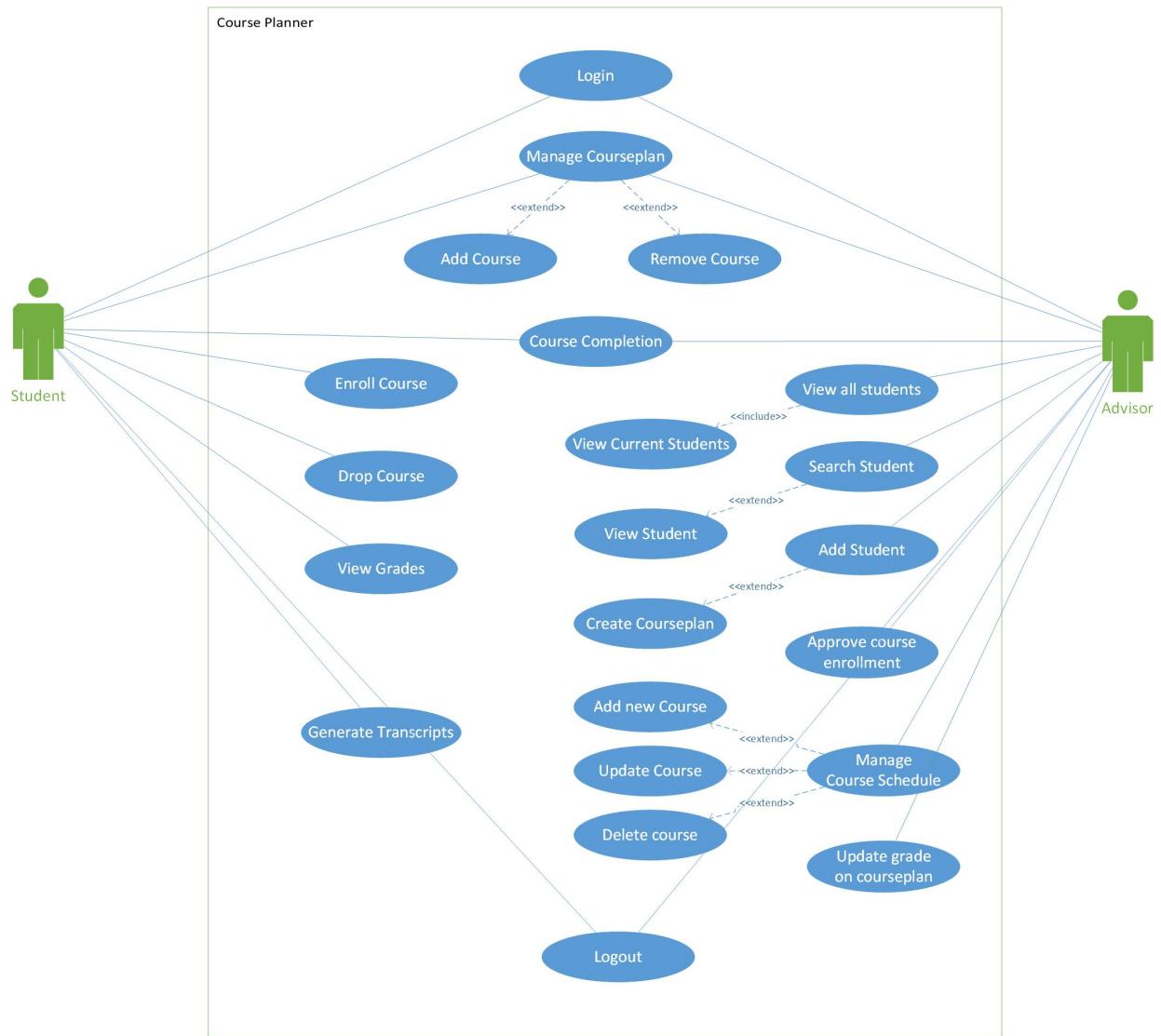
[13] Scenario: Logging out.
When I choose the logout option.
Then, session for that advisor should be deleted and should be redirected to the logged
out page which displays an appropriate message.

Data model

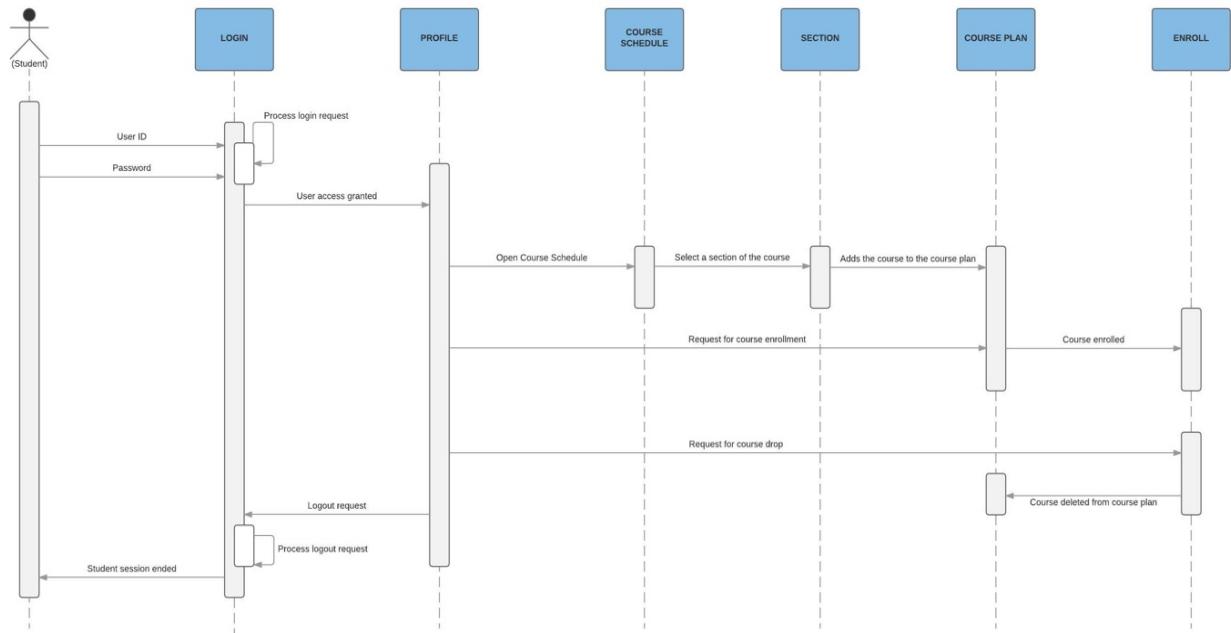


Dynamic model

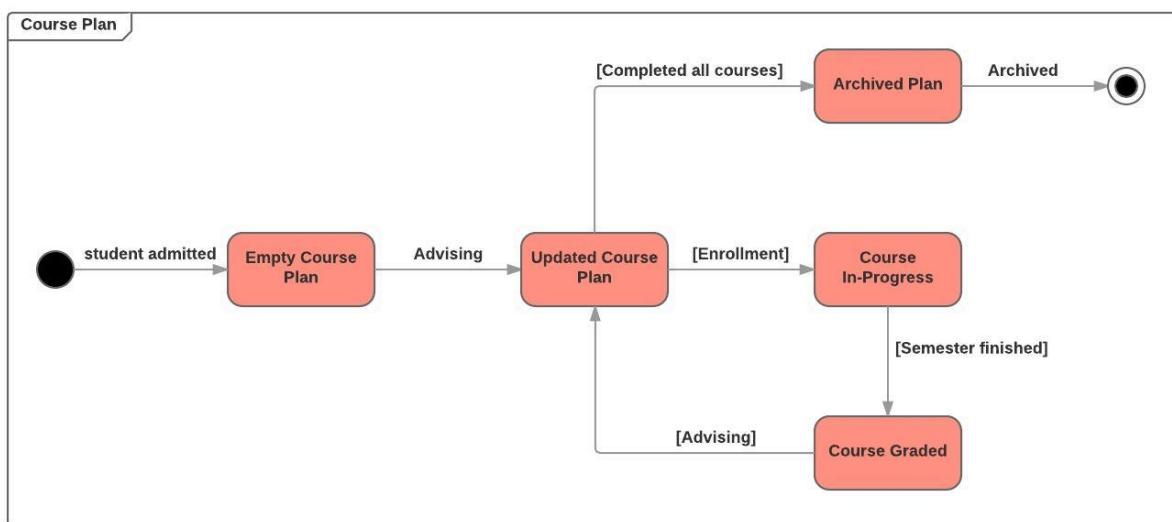
Use case Diagram

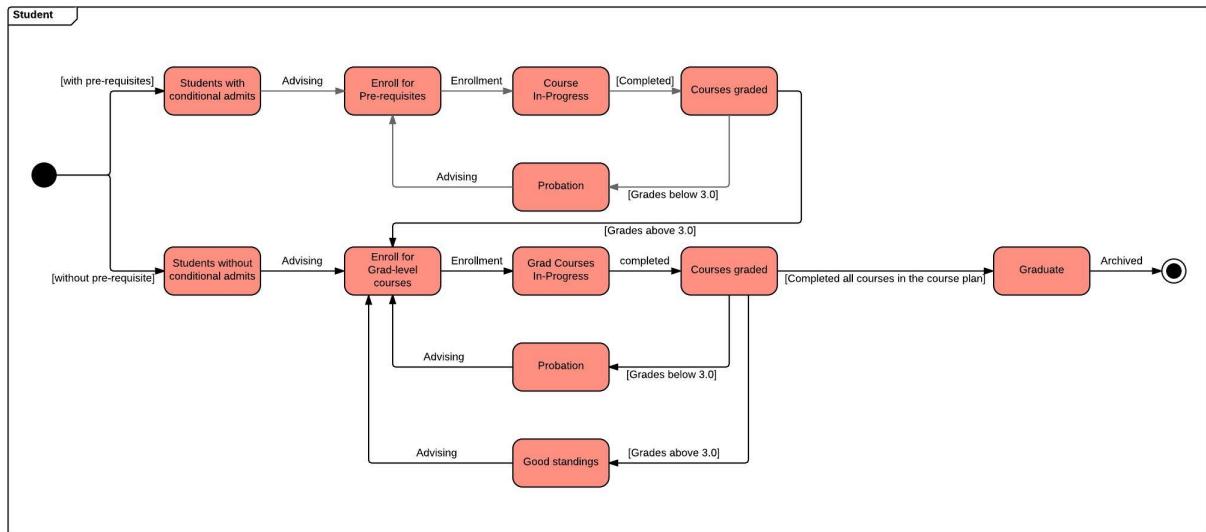


Sequence diagram

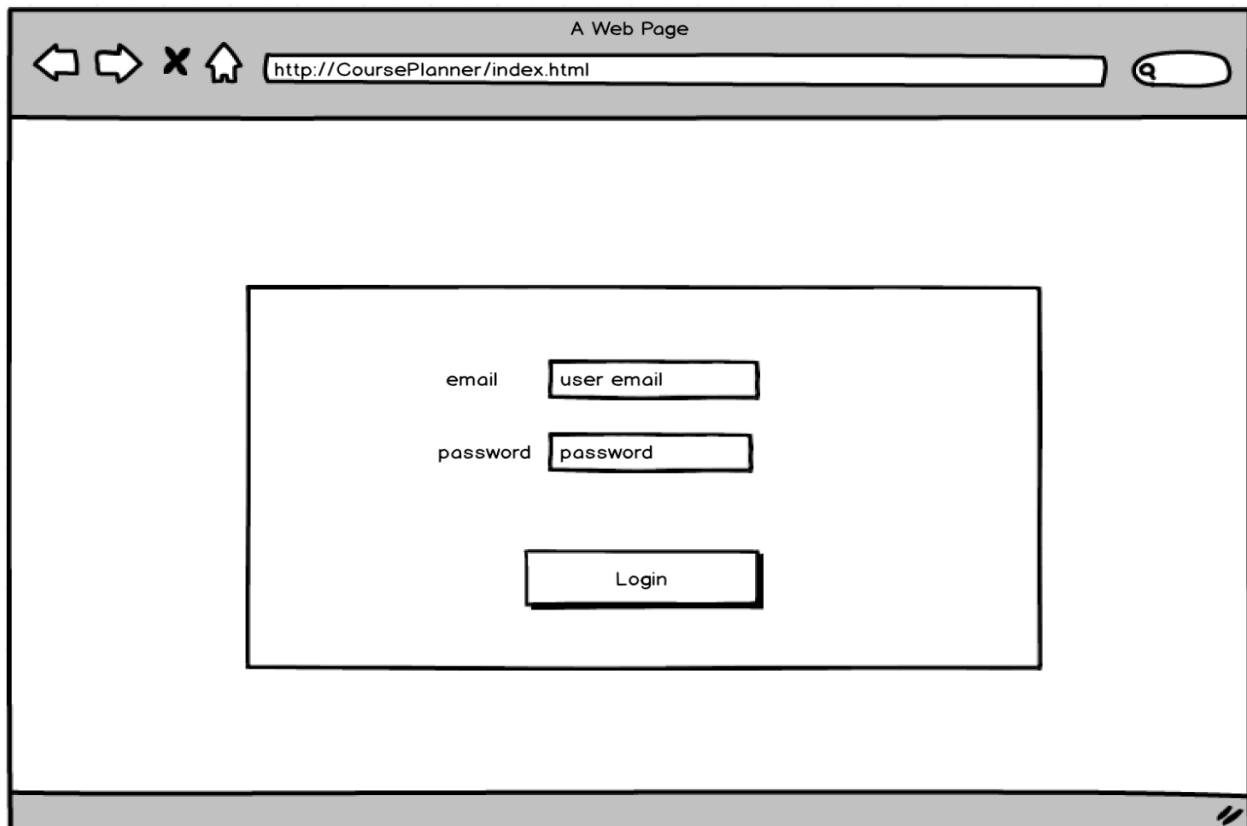


State chart diagram





Screen mockups



A Web Page

http://CoursePlanner/Username/Home.html

Profile

Course Plan

Course Schedule

Graduate Exit Requirements

Degree Works

Transcripts

A double-click to copy the text

Email

Student's permanent address

Student's temporary address

Phone

Name

Change Password

A Web Page

http://CoursePlanner/Username/Home.html

Profile

Course Plan

Course Schedule

Graduate Exit Requirements

Degree Works

Transcripts

Pre-Requisites

Course No	Course Name	GPA	Credit hours	Term
		Add		
		Add		
		Add		

Graduate Courses

Course No	Course Name	GPA	Credit hours	Term
		Add / Remove		
		Add / Remove		
		Add / Remove		

A Web Page

http://CoursePlanner/Username/Home.html

double-click to copy the text

Profile
Course Plan
Course Schedule
Graduate Exit Requirements
Degree Works
Transcripts

Course No	Section No	Course Name	Instructor	Sessions	Start time	End time	Select

A Web Page

http://CoursePlanner/Username/Home.html

Profile
Course Plan
Course Schedule
Graduate Exit Requirements
Degree Works
Transcripts

Exit Conditions

Thesis ▾
Capstone Project

Internship

3 ↕

Calculate

A Web Page

http://CoursePlanner/Username/Home.html

Profile

Course Plan

Course Schedule

Graduate Exit Requirements

Degree Works

Transcripts

Course No	Course Name	Grade	GPA	Credit Hours

Degree Progress

A Web Page

double-click to copy the text http://CoursePlanner/Username/Home.html

Profile

Course Plan

Course Schedule

Graduate Exit Requirements

Degree Works

Transcripts

Semester	Course No	Course Name	Grade	Credits

Cumulative GPA 4.0

A Web Page

[Profile](#) [Course Schedule](#) [Students Enrolled](#)

Name [Change](#)

Email [Change](#)

Advisor's Name

Phone [Change](#)

Phone Number

[Change Password](#)

http://CoursePlanner/Username/Home.html

A Web Page

[Profile](#) [Course Schedule](#) [Students Enrolled](#)

[View Courses](#) [Add Course](#) [Remove Course](#) [Update Course](#) [Search Course](#)

Course No	Section No	Course Name	Instructor	Sessions	Start time	End time

http://CoursePlanner/Username/Home.html

A Web Page

http://CoursePlanner/Username/Home.html

Profile Course Schedule Students Enrolled

[View Courses](#) | [Add Course](#) | [Remove Course](#) | [Update Course](#) | [Search Course](#)

Course Number

Section Number

Course Name

Instructor

Session

Start Time

End Time

A Web Page

double-click to copy the text http://CoursePlanner/Username/Home.html

Profile Course Schedule Students Enrolled

[View Courses](#) | [Add Course](#) | [Remove Course](#) | [Update Course](#) | [Search Course](#)

Coures Number ▾

Section Number ▾

A Web Page

[View Courses](#) | [Add Course](#) | [Remove Course](#) | [Update Course](#) | [Search Course](#)

Course Number	Section	Course Name
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Profile
Course Schedule
Students Enrolled

http://CoursePlanner/Username/Home.html

A Web Page

[View Courses](#) | [Add Course](#) | [Remove Course](#) | [Update Course](#) | [Search Course](#)

search Course Number

Course No	Section No	Course Name	Instructor	Sessions	Start time	End time

Profile
Course Schedule
Students Enrolled

http://CoursePlanner/Username/Home.html

double-click

A Web Page

http://CoursePlanner/Username/Home.html

Profile Course Schedule Students Enrolled

[Course Plan](#) | [Update Grade](#) | [Exit Requirements](#) | [Degree Works](#)

NUID	First Name	Last Name	Course Number	Course Name	Grade	GPA	Select
							<input type="button" value="Update"/>
							<input type="button" value="Update"/>
							<input type="button" value="Update"/>

A Web Page

http://CoursePlanner/Username/Home.html

Profile Course Schedule Students Enrolled

[Course Plan](#) | [Update Grade](#) | [Exit Requirements](#) | [Degree Works](#)

Course No	Course Name	Grade	GPA	Credit Hours

Degree Progress

double-click to copy the text

Screenshots and User Acceptance cases



The highlighted area corresponds to the login form shown in the previous screenshot, which includes fields for Email and Password, and a Login button.



Welcome Girish Srinivas

Profile	First Name :	Girish
Course Schedule	Last Name :	Srinivas
Course Plan	Major :	Computer Science
Drop Course	Level :	Masters
Graduate Exit Requirement	Concentration :	Artificial Intelligence
Degree Works	Email :	gsrinivas@unomaha.edu
Transcripts	NETID :	gsrinivas
Logout		



Course table for Girish Srinivas

Profile	Course ID	Section ID	Course Name	Term	Year	Total Seats	Seats Available	Status	Location	Days	Start Time	End Time	Start Date	End Date	Instructor	Select
Course Schedule	CSCI8610	CSCI8610-001	FAULT TOLERANT DISTRIBUTED SYSTEMS	Spring	2017	25	25	Open	PKIEWIT269	M	05:30pm	08:10pm	9-Jan	5-May	Azad Azadmanesh	Add
Course Plan	CSCI8780	CSCI8780-001	FORMAL METHODS & HIGH ASSURANCE S/W ENGINEERING	Spring	2017	25	25	Open	PKIEWIT274	TR	04:00pm	05:15pm	9-Jan	5-May	Mahadevan Subramaniam	Add
Drop Course	CSCI8480	CSCI8480-001	MULTI-AGENT SYSTEMS & GAME THEORY	Spring	2017	15	15	Open	PKIEWIT269	F	09:30am	12:00pm	9-Jan	5-May	Prithviraj Dasgupta	Add
Graduate Exit Requirement	CSCI8040	CSCI8040-001	LARGE SCALE NETWORK ANALYSIS	Spring	2017	25	25	Open	PKIEWIT270	MW	05:30pm	06:45pm	9-Jan	5-May	Sanjukta Bhownick	Add
Degree Works	CIST1400	CIST1400-009	INTRO TO COMPUTER PROGRAMMING	Spring	2017	25	25	Open	PKIEWIT155	MW	07:00pm	08:15pm	9-Jan	5-May	Ashwathy Ashokan	Add
Transcripts	CSCI1620	CSCI1620-006	INTRO TO COMPUTER SCIENCE II	Spring	2017	25	25	Open	PKIEWIT252	W	04:00pm	06:45pm	9-Jan	5-May	Ashwathy Ashokan	Add
Logout	CSCI1620	CSCI1620-007	INTRO TO COMPUTER SCIENCE II	Spring	2017	25	25	Open	PKIEWIT260	MW	10:00am	11:15am	9-Jan	5-May	Ashwathy Ashokan	Add
Transcripts	CSCI8316	CSCI8316-001	PROBABILISTIC OPS RSCH MODELS	Spring	2017	25	25	Open	DURHAM110	TR	04:00pm	05:15pm	9-Jan	5-May	Andrew Swift	Add
Logout	CSCI4350	CSCI4350-001	COMPUTER ARCHITECTURE	Spring	2017	25	25	Open	PKIEWIT161	MW	12:00pm	01:15pm	9-Jan	5-May	Azad Azadmanesh	Add
Transcripts	CSCI8555	CSCI8555-001	COMMUNICATION NETWORKS	Spring	2017	25	25	Open	PKIEWIT263	MW	04:00pm	05:15pm	9-Jan	5-May	Azad Azadmanesh	Add
Logout	CSCI8266	CSCI8266-001	USER INTERFACE DSGN & DEVL	Spring	2017	25	25	Open	PKIEWIT256	TR	10:30am	11:45am	9-Jan	5-May	Brian Dorn	Add
Logout	CSCI1620	CSCI1620-002	INTRO TO COMPUTER SCIENCE II	Spring	2017	25	25	Open	PKIEWIT269	TR	12:00pm	01:15pm	9-Jan	5-May	Brian Ricks	Add

Course Plan for Girish Srinivas

Profile	Course ID	Section ID	Course Name	Term	Year	Grade	Select
Course Schedule	CSCI1620	CSCI1620-006	INTRO TO COMPUTER SCIENCE II	Spring	2017	NA	Enroll Remove
Course Plan	CSCI8040	CSCI8040-001	LARGE SCALE NETWORK ANALYSIS	Spring	2017	NA	Enroll Remove
Drop Course	CSCI8480	CSCI8480-001	MULTI-AGENT SYSTEMS & GAME THEORY	Spring	2017	NA	Enroll Remove
Graduate Exit Requirement	CSCI8555	CSCI8555-001	COMMUNICATION NETWORKS	Spring	2017	NA	Enroll Remove
Degree Works							
Transcripts							
Logout							

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Girish Srinivas

localhost:8080/CoursePlanner/jsp/dropcrs.jsp

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Enrollment details of Girish Srinivas

Profile	Course ID	Section ID	Course Name	Term	Year	GPA	Grade	Status	Select
Course Schedule	CSCI8040	CSCI8040-001	LARGE SCALE NETWORK ANALYSIS	Spring	2017	0.0	NA	Enrolled	Drop Course
Course Plan	CSCI8480	CSCI8480-001	MULTI-AGENT SYSTEMS & GAME THEORY	Spring	2017	0.0	NA	Enrolled	Drop Course
Drop Course	CSCI8555	CSCI8555-001	COMMUNICATION NETWORKS	Spring	2017	0.0	NA	Enrolled	Drop Course

[Graduate Exit Requirement](#)

[Degree Works](#)

[Transcripts](#)

[Logout](#)

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Girish Srinivas

localhost:8080/CoursePlanner/jsp/transcript.jsp

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Transcripts of Girish Srinivas

Profile	Course ID	Section ID	Course Name	Term	Year	GPA	Grade
Course Schedule	CSCI8040	CSCI8040-001	LARGE SCALE NETWORK ANALYSIS	Spring	2017	0.0	NA
Course Plan	CSCI8480	CSCI8480-001	MULTI-AGENT SYSTEMS & GAME THEORY	Spring	2017	0.0	NA
Drop Course	CSCI8555	CSCI8555-001	COMMUNICATION NETWORKS	Spring	2017	0.0	NA

[Graduate Exit Requirement](#)

[Degree Works](#)

[Transcripts](#)

[Logout](#)

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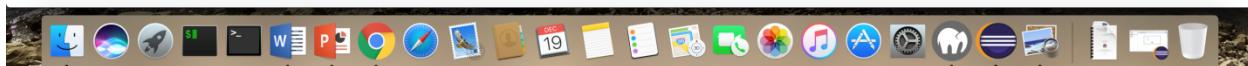
localhost:8080/CoursePlanner/jsp/login.jsp

Leslie Planos Girish

SAP NetWeaver Portal CSCL Tutoring HTML Android Programming AI APL/PPL Algorithms ANLU DBMS(Oracle) AOS SSD Watches DSNS Creating S.M.A.R.T...

Welcome Leslie Planos

Profile	First Name :	Leslie
Course Schedule	Last Name :	Planos
Students Enrolled	Email :	iplanos@unomaha.edu
	NETID :	iplanos
Logout	Role :	Advisor



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localhost:8080/CoursePlanner/jsp/crsform.jsp

Leslie Planos Girish

SAP NetWeaver Portal CSCL Tutoring HTML Android Programming AI APL/PPL Algorithms ANLU DBMS(Oracle) AOS SSD Watches DSNS Creating S.M.A.R.T...

Course table for the Current Academic year

Profile	View Course	Add New Course	Search Course	Course ID	Section ID	Course Name	Term	Year	Total Seats	Seats Available	Status	Location	Days	Start Time	End Time	Start Date	End Date	Instructor	Select	
Course Schedule				CSCI8610	CSCI8610-001	FAULT TOLERANT DISTRIBUTED SYSTEMS	Spring	2017	25	25	Open	PKIEWIT269	M	05:30pm	08:10pm	9-Jan	5-May	Azad Azadmanesh	<button>Update</button>	<button>Remove</button>
Students Enrolled				CSCI8760	CSCI8760-001	FORMAL METHODS & HIGH ASSURANCE S/W ENGINEERING	Spring	2017	25	25	Open	PKIEWIT274	TR	04:00pm	05:15pm	9-Jan	5-May	Mahadevan Subramaniam	<button>Update</button>	<button>Remove</button>
Logout				CSCI8480	CSCI8480-001	MULTI-AGENT SYSTEMS & GAME THEORY	Spring	2017	15	15	Open	PKIEWIT269	F	09:30am	12:00pm	9-Jan	5-May	Pritivraj Dasgupta	<button>Update</button>	<button>Remove</button>
CSCI8040 CSCI8040-001 LARGE SCALE NETWORK ANALYSIS Spring 2017 25 25 Open PKIEWIT270 MW 05:30pm 06:45pm 9-Jan 5-May Sanjukta Bhowmick <button>Update</button> <button>Remove</button>																				
CIST1400 CIST1400-009 INTRO TO COMPUTER PROGRAMMING Spring 2017 25 25 Open PKIEWIT155 MW 07:00pm 08:15pm 9-Jan 5-May Ashwathy Ashokan <button>Update</button> <button>Remove</button>																				
CSCI1620 CSCI1620-006 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT252 W 04:00pm 06:45pm 9-Jan 5-May Ashwathy Ashokan <button>Update</button> <button>Remove</button>																				
CSCI1620 CSCI1620-007 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT260 MW 10:00am 11:15am 9-Jan 5-May Ashwathy Ashokan <button>Update</button> <button>Remove</button>																				
CSCI8316 CSCI8316-001 PROBABILISTIC OPS RSCH MODELS Spring 2017 25 25 Open DURHAM110 TR 04:00pm 05:15pm 9-Jan 5-May Andrew Swift <button>Update</button> <button>Remove</button>																				
CSCI4350 CSCI4350-001 COMPUTER ARCHITECTURE Spring 2017 25 25 Open PKIEWIT161 MW 12:00pm 01:15pm 9-Jan 5-May Azad Azadmanesh <button>Update</button> <button>Remove</button>																				
CSCI8555 CSCI8555-001 COMMUNICATION NETWORKS Spring 2017 25 25 Open PKIEWIT263 MW 04:00pm 05:15pm 9-Jan 5-May Azad Azadmanesh <button>Update</button> <button>Remove</button>																				
CSCI8266 CSCI8266-001 USER INTERFACE DSGN & Spring 2017 25 25 Open PKIEWIT256 TR 10:30am 11:45am 9-Jan 5-May Brian Dorn <button>Update</button> <button>Remove</button>																				



Course table for the Current Academic year

Profile View Course Add New Course Search Course

Course Schedule Students Enrolled Logout

Course ID:

Section ID:

Year:

Term:

Total Seats:

Seats Available:

Status:



Course table for the Current Academic year

Profile View Course Add New Course Search Course

Course Schedule Students Enrolled Logout

Course ID:

Term:

Year:



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localhost:8080/CoursePlanner/jsp/findcrs.jsp

Leslie Planos Girish

SAP NetWeaver Portal CSCL Tutoring HTML Android Programming AI APL/PPL Algorithms ANLU DBMS(Oracle) AOS SSD Watches DSNS Creating S.M.A.R.T...

Course table for the Current Academic year

Profile	View Course	Add New Course	Search Course	Course Schedule														Select
CSCI1620 CSC1620-001 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT274 MW 10:30am 11:45am 9-Jan 5-May Patrick Cavanaugh		Update	Remove															
CSCI1620 CSC1620-002 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT269 TR 12:00pm 01:15pm 9-Jan 5-May Brian Ricks		Update	Remove															
CSCI1620 CSC1620-003 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT153 MW 01:30pm 02:45pm 9-Jan 5-May Mark Pauley		Update	Remove															
CSCI1620 CSC1620-004 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT164 MW 04:00pm 05:15pm 9-Jan 5-May Ren Mei		Update	Remove															
CSCI1620 CSC1620-005 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT276 TR 01:30pm 02:45pm 9-Jan 5-May Brian Ricks		Update	Remove															
CSCI1620 CSC1620-006 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT252 W 04:00pm 06:45pm 9-Jan 5-May Ashwathy Ashokan		Update	Remove															
CSCI1620 CSC1620-007 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open PKIEWIT260 MW 10:00am 11:15am 9-Jan 5-May Ashwathy Ashokan		Update	Remove															
CSCI1620 CSC1620-850 INTRO TO COMPUTER SCIENCE II Spring 2017 25 25 Open TOTLONLINE TBA TBA TBA 9-Jan 5-May Patrick Cavanaugh		Update	Remove															



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localhost:8080/CoursePlanner/jsp/viewwall.jsp

Leslie Planos Girish

SAP NetWeaver Portal CSCL Tutoring HTML Android Programming AI APL/PPL Algorithms ANLU DBMS(Oracle) AOS SSD Watches DSNS Creating S.M.A.R.T...

Course table for the Current Academic year

Profile	View All Enrolled Students	View Currently Enrolled Students	Search Student	Course Schedule							Select
		gsrinivas	Girish	Srinivas	Computer Science	Masters	Artificial Intelligence	gsrinivas@unomaha.edu	Select		
		pyalala	Pooja	Yalala	Computer Science	Masters	Software Engineering	pyalala@unomaha.edu	Select		



A screenshot of a Chrome browser window. The address bar shows "localhost:8080/CoursePlanner/jsp/studsrch.jsp". The page title is "Course table for the Current Academic year". There are several buttons: "Profile" (blue), "View All Enrolled Students" (light blue), "View Currently Enrolled Students" (light blue), "Search Student" (light blue), "Logout" (red), and "Course Schedule" (green). A search input field labeled "Student's netid:" contains "netid".

Course table for the Current Academic year

Profile

[View All Enrolled Students](#)

[View Currently Enrolled Students](#)

[Search Student](#)

[Course Schedule](#)

Student's netid:

netid

[Students Enrolled](#)

[Search Student](#)

[Logout](#)



A screenshot of a Chrome browser window. The address bar shows "localhost:8080/CoursePlanner/jsp/srchstud.jsp". The page title is "Course table for the Current Academic year". There are several buttons: "Profile" (blue), "View All Enrolled Students" (light blue), "View Currently Enrolled Students" (light blue), "Search Student" (light blue), "Logout" (red), and "Course Schedule" (green). A table displays student information: NETID (gsrinivas), First Name (Girish), Last Name (Srinivas), Major (Computer Science), Level (Masters), Concentration (Artificial Intelligence), and Email ID (gsrinivas@unomaha.edu). A "Select" button is next to the email ID.

Course table for the Current Academic year

Profile

[View All Enrolled Students](#)

[View Currently Enrolled Students](#)

[Search Student](#)

[Course Schedule](#)

NETID

First Name

Last Name

Major

Level

Concentration

Email ID

Select

gsrinivas

Girish

Srinivas

Computer Science

Masters

Artificial Intelligence

gsrinivas@unomaha.edu

[Select](#)

[Students Enrolled](#)

[Logout](#)



Summary

A prototype for the proposed system has been developed with the above specified functionalities and tested successfully.

The list of functionalities which are implemented are:

- Creation of tentative course plan
- Adding / removing courses from course plan
- Enrolling / dropping courses.
- Calculate CGPA
- Calculate remaining credit hours based on the exit plan (Capstone or Thesis / Project)
- Generate unofficial transcripts
- Adding / deletion of courses in course schedule
- Searching of courses
- View enrolled students

The list of functionalities that are not implemented are:

- Update of course
- View progress of specific student by the advisor.
- Updating grades in course plan.