

COMP 266

Unit 1 – Site Design

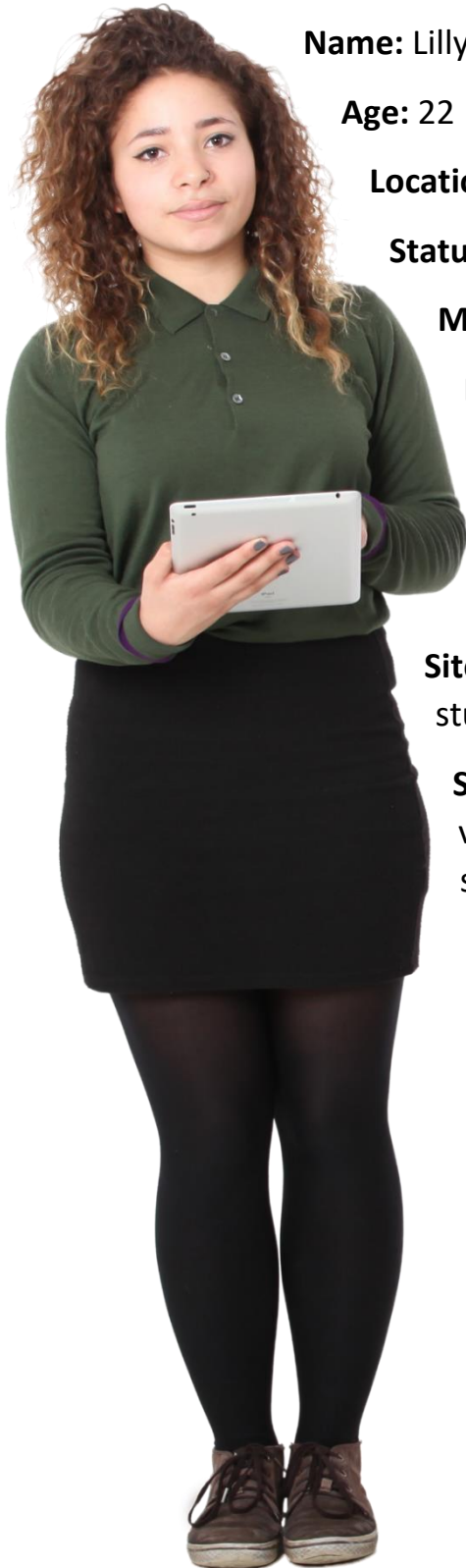
Joel Conley - 3494789

Theme and Purpose

The purpose of this website will be to create an all-in-one tool for post-secondary students to do their course planning. The system at my current school (not AU) is such that it requires three or four different windows, each from not just a different web page but involving at least three unconnected websites plus a custom-designed spreadsheet in order to adequately plan both a long-term degree path or even in merely designing your course schedule for a given-semester. Most appallingly, there is no tool whatsoever that provides a birds-eye view of pre-requisite structure, which is where the custom spreadsheet comes in as this information is only available by looking at the description of each individual course. Additionally, there is no prerequisite information available at all when actually registering for courses. Though it does very unhelpfully tell you when a course you've registered for does *have* a prerequisite course, just with no links to the other website that tells you what specific course that would be. There's no reason this can't all be handled using one integrated page, which is the intention for my website using mock data.

Another problem I plan to design a correction for is for the student class schedule calendar to be better integrated with the course registration process. As it is now, it will only tell you if you have a conflict after attempting to register a new course. This can either be solved by hiding or marking class sections that have conflicts at the point of user-search, or at the very least, by providing the user with visual access to their current calendar when searching and selecting class sections.

Personas



Name: Lilly Johnson

Age: 22

Location: Calgary, AB

Status: 2nd-year student

Major: Bachelor of Arts – Literature

Preferred Device: Macbook Pro

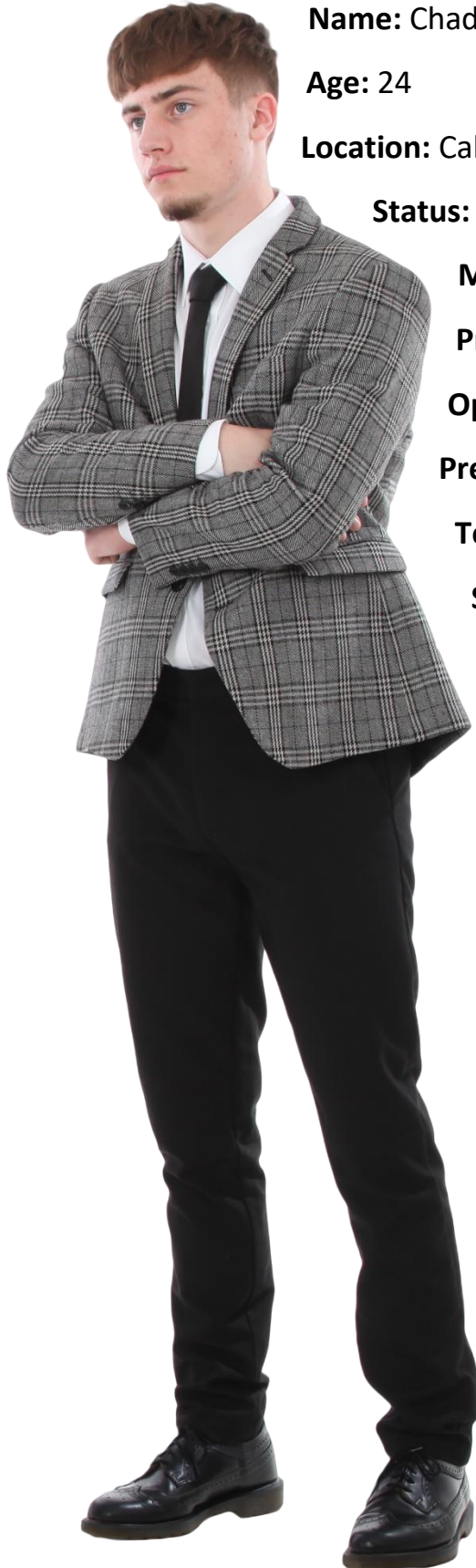
Operating System: macOS

Preferred Browser: Safari

Technological Proficiency: Average

Site Usage: Degree planning, course registration, student schedule

Scenario: Lilly uses Safari on her Macbook Pro to view her program status and prerequisite structure to decide what courses to take next



Name: Chad Carmichael

Age: 24

Location: Calgary, AB

Status: 3rd-year student

Major: Bachelor of Arts – History & Philosophy

Preferred Device: Microsoft Surface Pro Laptop

Operating System: Windows 10 Pro

Preferred Browser: Microsoft Edge

Technological Proficiency: Above Average

Site Usage: Degree planning, course registration, student schedule

Scenario: Chad uses Edge on his Microsoft Surface laptop to view and register for courses



Name: Noel Priska

Age: 31

Location: Calgary, AB

Status: School Administrative
Employee

Title: Academic Advisor

Required Device: Dell Laptop

Operating System: Windows 8

Preferred Browser: Google
Chrome

Technological Proficiency:
Above Average

Site Usage: Degree planning,
course prerequisites

Scenario: Noel uses Chrome
on her Dell laptop to show
a student the
prerequisite structure for
the Bachelor of Computer
Information Systems
degree program



Name: Noah Ruben

Age: 25

Location: Calgary, AB

Status: 4th-year student

Major: Bachelor of Science – Computer
Science

Preferred Device: Alienware Gaming Desktop PC

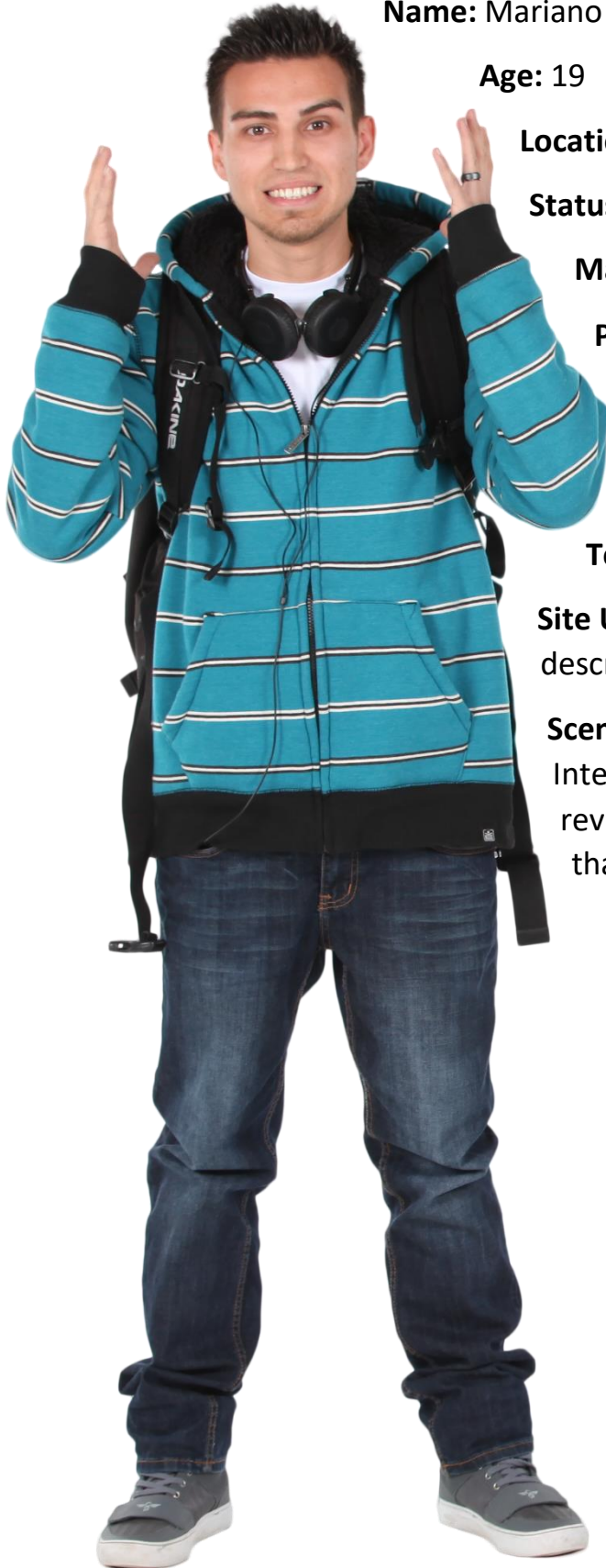
Operating System: Linux

Preferred Browser: Duck-Duck-Go

Technological Proficiency: Hacker

Site Usage: Degree planning, course registration,
student schedule, playful malice

Scenario: Noah attempts an SQL-
injection attack on the
course section/registration
search from his Alienware
Desktop using Duck-Duck-Go



Name: Mariano Santana

Age: 19

Location: Calgary, AB

Status: High School Graduate

Major: Undecided

Preferred Device: Samsung Galaxy S10

Preferred Browser: Samsung Internet

Technological Proficiency: Average

Site Usage: Programs and Course descriptions

Scenario: Mariano uses the Samsung Internet app from his Samsung S10 to review potential programs and courses that might interest him



Name: Samantha Kristensen

Age: 32

Location: Calgary, AB

Status: Part-Time Student

Program: Real Estate Certificate

Preferred Device: Apple iPad

Operating System: iOS

Preferred Browser: Google Chrome

Technological Proficiency: Average

Site Usage: Course registration, student schedule

Scenario: Samantha registers for a course using Chrome on her iPad



Name: Veronica King

Age: 30

Location: Calgary, AB

Status: Graduate Student

Major: PhD - Medicine

Preferred Device: Samsung Note

Operating System: Android

Preferred Browser: Chrome

Technological Proficiency: Average

Site Usage: Student schedule

Scenario: Veronica drops a course section and registers for a new section of the same course using Chrome on her Samsung Note



Name: Thibault Leclerc

Age: 48

Location: Calgary, AB

Status: Professor

Subject: Finance

Required Device: Dell Desktop

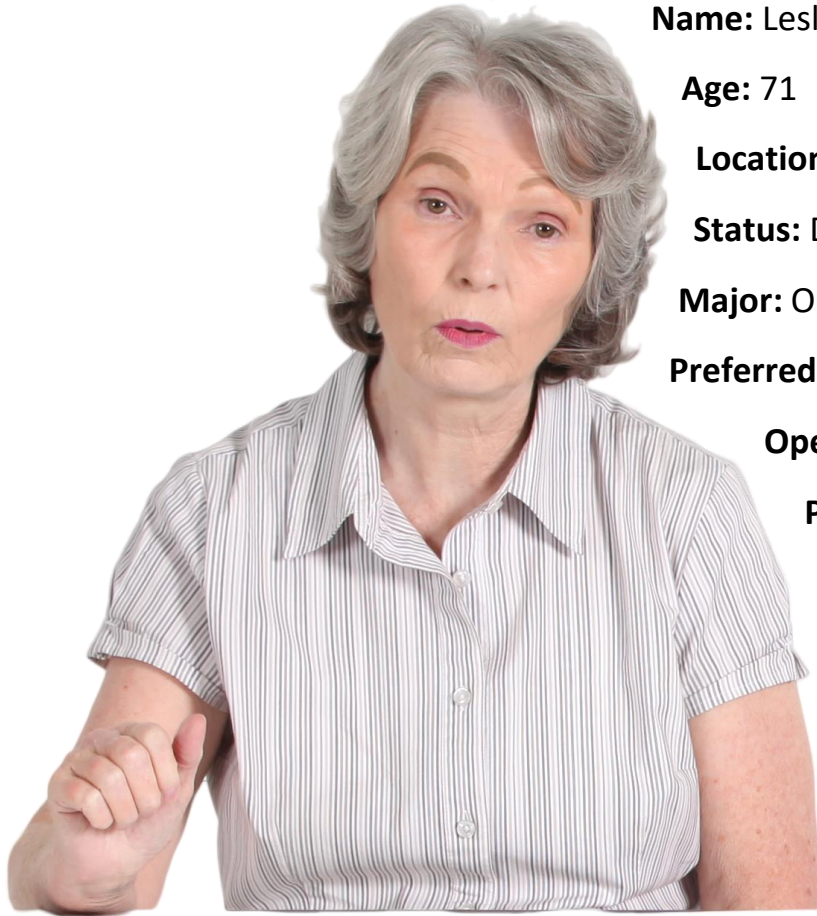
Operating System: Windows 7

Preferred Browser: Internet Explorer

Technological Proficiency: Average

Site Usage: Course Details, Lecture
Schedule, Course Prerequisites

Scenario: Thibault views the
schedule for his lectures from his
Dell desktop using an old Internet
Explorer browser



Name: Leslie Baker

Age: 71

Location: Okotoks, AB

Status: Distance Learner

Major: Open Studies

Preferred Device: Google Chromebook

Operating System: Chrome OS

Preferred Browser: Google
Chrome

Technological Proficiency:
Below Average

Site Usage: Course details,
course registration

Scenario: Leslie uses
Chrome on her

Chromebook to browse courses. She has difficulty
reading small fonts in low-contrast colour-schemes.



Name: Rama Chen

Age: 29

Location: Calgary, AB

Status: Graduate Student/Teaching Assistant

Major: PhD - Biology

Preferred Device: ASUS Laptop

Operating System: Windows 10 Pro

Preferred Browser: Firefox

Technological Proficiency: Above Average

Site Usage: Degree planning, course registration, student schedule

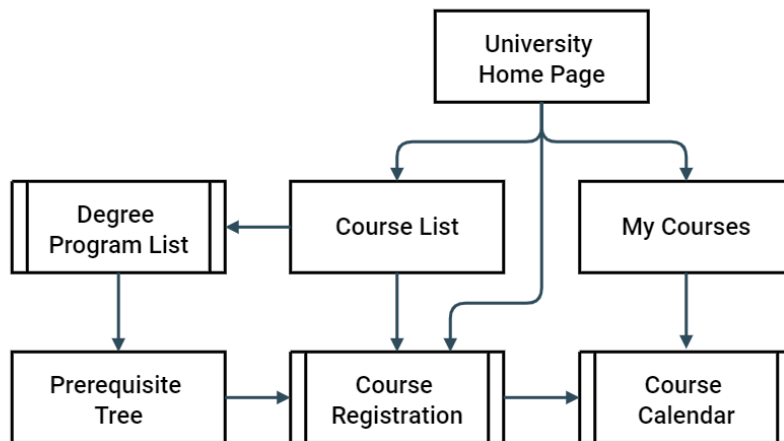
Scenario: Rama uses her ASUS laptop and the Firefox browser to admire her degree completion status in the planner

Scenarios & Functionality Tests Summary

Desktop/Laptop Web Browsers	Home Page	Course & Program List	Prerequisite Tree	My Courses	Course Registration	Schedule
Chrome						
Safari						
Edge						
Firefox						
Duck-Duck-Go						
Internet Explorer						

Mobile Web Browsers	Home Page	Course & Program List	Prerequisite Tree	My Courses	Course Registration	Schedule
Chrome						
Safari						
Samsung Internet						
Firefox						
Duck-Duck-Go						

Site Map



A student looking to register a course in their degree without knowing which that will be when they arrive would first go to the course list/program list page and select their degree. This would take them to their degree planner page where they would see the next available courses they can take. Selecting one will take them to the course registration page which includes their current schedule for reference.

Components

- Course list data structure:

{department:

{course number:

{course name, course type, number of credits, hours:

*{weekly lecture hours, weekly tutorial
 hours, weekly lab hours, total weekly
 hours},*

course description, prerequisite info (recursive data lookup), semester offered}}}

- Include direct link to registration page (i.e. view sections being offered)
- Course search
- Degree Program info/planning guide
 - o Required courses with expandable info
 - o Prerequisite structure
 - o Ability to mark as “completed” and “registered”
- Course Section offerings/Registration page data structure:

{department:

{course number:

{semester:

{schedule type [lecture, lab, tutorial]:

{days of the week:

{duration, times}}}}}

Javascript functions:

- User log-in
- Show/hide course description content
- Read-only SQL database of course information and user details
- Course search
- Degree planning guide
- Course prerequisite tree (may not need to be dynamic)
- Course registration
- Course calendar
- Persistent user-data

Mock-up

<https://app.moqups.com/rqRMHQgilp/view/page/ae973f342>