



Information School
UNIVERSITY of WASHINGTON

myPlan

YOUR DIGITAL COURSE PLANNING SOLUTION

 **2012**

INFO 360-A: DESIGN THINKING
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Problem Statement

It is a well-known fact that “Tuition and fees have skyrocketed over the past decade, making it more difficult for American families to invest in a higher education for their future. Today’s college students borrow and rack up more debt than ever before” (Higher Education, 2012). Despite the growing cost of higher education, college degrees are in no less demand. “Earning a post-secondary degree or credential is no longer just a pathway to opportunity for a talented few; rather, it is a prerequisite for the growing jobs of the new economy” (Higher Education). With the necessity of education, and the rising cost of tuition, students cannot afford to waste any time or money while earning their degrees. Unfortunately, many undergraduate students do exactly that while exploring various majors, sometimes spending years taking courses they regret investing time, as many of the students we interviewed had done.

Few students enter college with a clear direction of study in mind. Career goals and degree plans often change as students expose themselves to new areas of study. It is estimated that 80 percent of college students change majors at least once during their course of study (UNIGO, 2011). As a result, “Nearly one out of five four-year institutions in America graduate less than one-third of their first-time, full-time, degree-seeking freshmen within six years (Carey, 2004).” Through interviews with students not graduating within the expected four-year timeframe, it was discovered that a great deal of time is wasted switching majors after accumulating progress in a previous major. Students who frequently change majors revealed that they plan their course schedules no more than a quarter in advance, because they feel overpowered by all the information needed formulate a comprehensive course plan for graduation.

Colleges and universities change what they have to offer as much as students change their goals. Due to fluctuations in state funding, and the arrival and departure of faculty members, colleges tend to frequently revise course offerings and syllabi. The education institution is in the same state of flux students are in. Even for a student with fixed goals in a static institution, he or she still may add or drop courses during the first few weeks of a semester or quarter to adjust course load, or adapt to other life schedules. Colleges and universities permit a great degree of freedom for these changes, though unmanaged freedom can lead to chaos.

Kevitz and Noel stated, "Institutions that extend substantial career/life planning and academic advising services to all freshmen can expect to achieve significant improvements in retention rates" (74). Academic advising services are widely available across colleges, but currently there is no dedicated tool to keep track and plan students major and course progress in long term. The lack of such a tool in an ever-changing environment like the university discourages busy, impatient students from tracking and projecting progress in long term. This leaves them helpless when they want to make major changes in their academic path or when course offerings change. Without re-planning, they may find uncomfortable surprises along the way, and may be unable to graduate on time, thus spending thousands more on tuition. Those with limited funding may have to drop out before finishing their degree. On top of that, a poorly planned quarter can lead to subpar academic performance, which leads to a loss of funding and loss of time.

The ability to effectively plan a multiple-year schedule, and keep track of academic progress, is vital to a student's success. Currently, many college students are restricted to the archaic practice of planning with pen and paper, or desktop applications like Microsoft Excel. These methods are outdated since most of the information students need to decide which courses to take next is online. The long and arduous process of course planning should be moved to the web, which most students already spend a great deal of time on. Given a flexible tool to manage the complex and chaotic process of course planning, students will have the ability to make more informed decisions about which courses they should take in order to stay on track for graduation. By making educated decisions, students can save themselves years of unnecessary schooling, thousands of tuition dollars, and plenty of needless stress. Instead of walking blind, students should be able to take control of their academic career.

Project Scope

Inside the Project Scope

To assist students who struggle to efficiently create graduation plans spanning over multiple years, the “myPlan” online graduation planner will be developed. myPlan will digitize and optimize the process of course planning for students. The website will allow students to log in from anywhere with Internet access, create and manipulate plans, then log out.

The myPlan interface is composed of four main components. The first component is the Home Page, which introduces the user to the product after being redirected from a search engine, or the University of Washington website. The aesthetic design of the Home Page will draw users into utilizing myPlan. The second component is the MyUW Login Page, which users will be redirected to upon choosing to login at the Home page. The third component is the Saved Plans page, which will allow users to create a new plan, and view a list of all the currently saved plans. Once a user clicks on a plan from the Saved Plans page, they will be redirected to the Plan Page, the final component. At the Plan Page, the user can easily rearrange courses into a multiple-year schedule, and visually assess their progress towards graduation.

User research has revealed that flexibility and ease of use should be the focus of our design. Flexibility will appeal to students who change majors, as our data suggests many students do at least once throughout the course of their college career. Ease of use, and a smooth page flow, will save students time planning for graduation. To achieve ease of use, myPlan utilizes the predefined structures users are currently assimilated with.

The website will allow students to view a list of required courses to take for a specified major before graduation, and arrange those courses effectively and efficiently across several quarters. To begin a plan, a student can select any major currently available at the University of Washington. More majors or minors may be added to the plan, to allow for optimal flexibility. When a major is selected, all the courses necessary for that major will appear as icons in a box. The courses will be color coded to clearly distinguish between prerequisites, core classes, and general requirements. From that box, courses can be dragged and dropped onto schedules organized by year, then by quarter. Each year will consist of an autumn, winter, spring, and summer quarter.

When planning courses, students can effortlessly access the information and resources they may need for course planning. Once a major is selected, links to helpful planning resources, such as the major’s home page, or the advising center home, are displayed in a dropdown menu. When viewing the required courses for graduation upon selecting a major, students can easily access information on those courses via the graduation planning website. Upon the click of a specific class icon, a tooltip with course details will appear.

The myPlan website will be synced with MyUW, which allows it to access the university's Degree Audit Reports. With this information, the classes students have already taken will be removed from the box containing all the necessary courses needed to complete a major. The user can view their progress with any major they are interested in pursuing. The courses needed, in progress, and taken are broken into distinct categories that help the students visualize their progress with a major in a way MyUW's Degree Audit Reports cannot.

Outside the Project Scope

It is important to recognize that the website is not a registration system. It will not automatically register students for the plans they create. Although the system reads information from authenticated UWNID account, it does not handle course registration and does not register courses for the user.

The availability of the required courses listed for students to drag and drop into their plans will only be as accurate as the University of Washington's Course Descriptions page. Since the times in the year for when certain classes are offered are only released a quarter in advance, our program can only display that information a quarter in advance. The website provides a guideline to a graduation plan. With course times being changed and revised by the university constantly, there is no guarantee that the plans created by the student will actually be possible. If a course no longer offered by the university is listed on the Course Descriptions page, that course will appear as available for planning on the graduation planning website. The website will not address issues experienced by students such as Silvia, who in her interview revealed that due to inaccuracies on the Course Descriptions page, she waited two quarters for an English class which was no longer offered at the university. The website will not provide students with new information to assist with graduation planning; it will allow students to quickly and efficiently access the information already present.

Students often waste time taking classes that do not count towards progress in their intended major. From 2000 to 2004, an average of 36.1% of students were able to graduate on time (National Center for Education Statistics). The website will allow students to view which classes will count towards a specific major, but will not proactively advise students, or help them choose a major. There is no interaction and advising on the website between advisors and other students, and no way for the website to help the student form qualitative plans. The purpose of the website is to present graduation planning information efficiently. If a student has made significant progress with a major, and decides to switch to another major at a late point in college, the only thing the graduation planning website can do is allow the student to quickly plan for the next major.

Platform

myPlan will be implemented as a website easily accessible via the MyUW home page. The primary programming languages being used will be HTML, CSS, PHP, JavaScript, and any other relevant web programming languages. Users will be able to login, view saved course plans, manipulate their course plans, and log out.

Having the course planner hosted online will allow any student to access this resource in any location with Internet access. An online resource, rather than a mobile application, will not isolate students without a device to run applications. There is also the added benefit of cross-platform compatibility, which will make releasing updates an easy process. Since all University of Washington students have access to the Internet on campus, our application can be accessed by every student. Most of the resources students use in planning for graduation, including time schedules, degree audit reports, prerequisite tables, major requirements, are exclusively available online. It would make sense for the graduation planner to be hosted on the Internet as well. Online, the graduation planner would be able to easily link to and access information from other planning resources students need available by the University of Washington, and also utilize the preexisting comfort most students have with using the Internet to complete course-related planning.

Assumptions

1. Students take a long time to plan the courses they need or want to take before graduation.
2. Students primarily use online resources to plan which courses to take. These online resources are not often organized in a single, convenient place.
3. Students often need to formulate graduation plans for the several different majors they are considering.
4. All students have access to the Internet.

Target Audience

myPlan is mainly targeted towards incoming freshmen and sophomores who need to extensively plan for most of their remaining time in university. Since course information is being pulled directly from the University of Washington's course catalog, the course planner will only currently be useful for University of Washington students. The website will primarily cater to students who are willing to explore different major/minor options that they would like to pursue, and maybe those who otherwise feel it hard to do so. The website by nature does not target users who don't want to spontaneously explore their choices for a major. Students interested in several majors during their freshman and sophomore years will be able to use the website to more easily plan for each individual major of interest.

The website will be directed towards students who are currently unsatisfied with the current course planning materials provided. It will be helpful to Silvia Chang, who revealed through an interview with group member Alyssa Trinh that before entering her major, she put a great amount of time and effort into formulating detailed, long-term plans for each major she was interested in. The website will additionally be useful for students like Ashish, who struggled to make sense of all the Degree Audit Reports he had to view for his potential majors. It will make life easier for students like Gurjit, who when testing the first prototype revealed that he needed to frequently move around time schedules for registration each quarter after formulating long-term plans with an advisor every single quarter his first two years in college. Who the application may not help are students like Jerissa, who can quickly and efficiently plan her courses each quarter by looking at the course requirements page provided by her major.

Persona

The persona illustrated below portrays a typical student who would benefit from the graduation planning website.

Luigi is a sophomore at the University of Washington from Kent, Washington. During his high school years, he became friends with Mario, who introduced Luigi to the robotics club that helped him unlock his interest in technology and building things. After high school, Mario and Luigi parted ways, Luigi entering UW while Mario pursued WSU. Entering the university, Luigi came with 30 Advanced Placement credits from high school, placing him two quarters ahead of most incoming freshman. With his love of building and problem solving, Luigi aspired to gain acceptance into one of UW's fine engineering programs.

He took CSE 142 and 143 at UW, but did not do particularly well in those courses. Still holding his interest in technology and engineering, Luigi decided to talk to several advisors about which majors he could happily pursue. He learned about the HCDE and Informatics majors, and attempted to make a yearly plan for which courses he needed to take the rest of the year. He tried finding as much information he could regarding when certain courses were offered, looking at the course description page and even

venturing out to department home pages, but with no luck. He figures he would have to make appointments with several advisors to get the information he needs. He only wants to take courses related to his several majors in mind, but he's too busy to plan long ahead and conduct deeper research. Now, Luigi plans only once every quarter, taking courses he believes will be relevant to the majors he has in mind.

When he's not planning for graduation, Luigi goes to the IMA for a workout twice a week. When the weather is good, he and his roommates from McCarty Hall go kayaking up on Mount Rainier. On Tuesday and Friday mornings, Luigi works as a barista at the HUB. He misses his family's dog, Chappy, so he volunteers at the local animal shelter in Downtown Seattle every month. Every evening, Luigi Skypes with his childhood sweetheart, Daisy, who decided to attend the University of Chicago after high school graduation. He sees her summers and winter break, when she temporarily returns to Kent for a visit.

Being a technologically aware person, Luigi is always excited to try out new gadgets and services, and signing up for beta and alpha tests before new services launch to the public. He recently installed Widows 8 on his laptop, and enjoys using CyanogenMod and building applications for his Galaxy Nexus whenever he has time.

Despite his love of technology, he can't stand the current registration process at UW. Cross-referencing several websites, and contacting several advisors just to find information about a single course causes him great frustration every quarter. His roommates always hear him complain about how difficult it is for him to plan for registration for each quarter. He just discovered that he could directly access the Degree Audit Reports from the MyUW homepage after a year of clicking on at least three links to get to the same page. All the wasted time he has spent registering and aggravating over which classes to take has left Luigi wishing there was a quick and easy way to plan his courses.

Hypothetical Scenario

The hypothetical scenario described below demonstrates a common situation in which the graduation planning website would be particularly useful.

The first couple weeks into the winter quarter of his sophomore year, Luigi is not feeling the least bit optimistic. He just became aware of how much time he has wasted taking courses which do not count towards the prerequisites to his intended majors. With all the AP credits he has earned in high school, he has earned junior status as a second-year in college, and will soon be pushed to select a major.

The College of Engineering application deadline is approaching in two weeks, and Luigi is still not entirely sure of which major he would most like to pursue. To make his life slightly easier, he has decided to apply to three majors using the College of Engineering's common application. He is not looking forward to writing one overarching essay for the College of Engineering, and three more for each major.

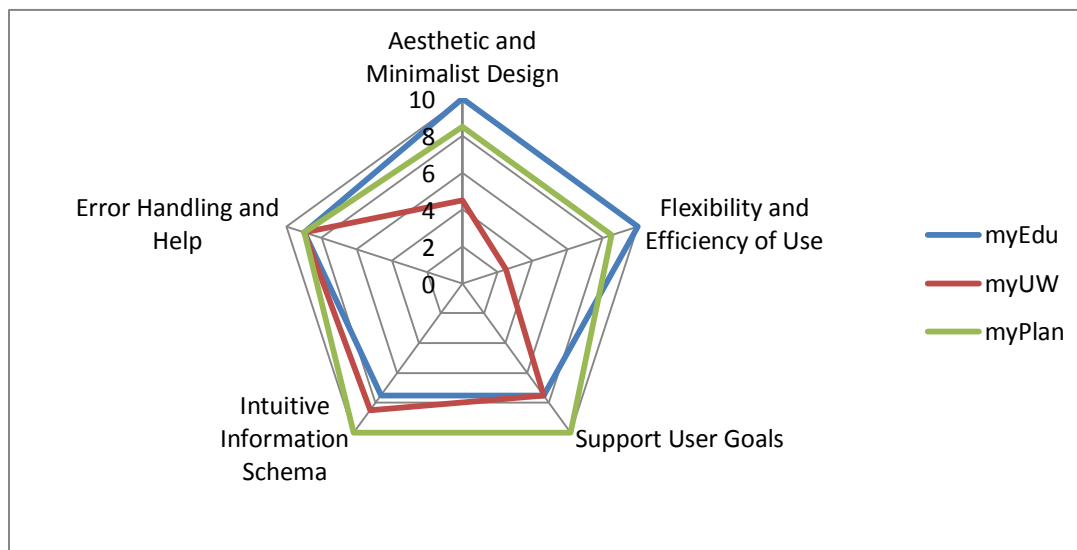
To add to Luigi's stress, he has a difficult Physics 121 midterm in one week, and is struggling to catch up with the course material. His quiz scores have not been high the entire quarter, so Luigi knows he must do well on this midterm if he wants anything above a 3.0 GPA in the class. He also needs to prepare for a statistics exam, which is approaching 2 days after he completes his midterm for physics. Although he is not worried about the difficulty of the exam, Luigi knows that the day after he completes his midterm, he will need to plan for registration.

Not knowing what his major will be has left him questioning what he should do for Spring Quarter. He has no time to research classes to take since he needs to prepare for his two midterms. If he doesn't plan accordingly now, though, Luigi knows there's a chance he may need to enroll in summer courses, which means he would not have any money left to visit his girlfriend, Daisy, who is staying in Chicago this summer for her internship. Due to his work at the HUB and his volunteering at the animal shelter, he knows that creating a schedule which will allow him to complete prerequisites, and work at the same time, will not be an easy task.

He reads from "The Daily" that the university is revising its budget for the next academic year, and he thinks it may affect course availability in coming quarters. At this point, Luigi is feeling completely stressed about how long it will take him to plan his classes, especially since he is occupied with a full work load. He tries to calm himself down by playing Mario Kart with his roommates on the weekend, but every time he does, he feels a sense of guilt and irresponsibility. Why couldn't there be a quicker, easier way for him to create a graduation plan?

Heuristic Evaluation

Two currently existing websites compete with myPlan in assisting students with course planning for graduation. To gain an understanding of myPlan's stance in relation to its competitors, a heuristic evaluation was completed based on three of Jakob Nielsen's ten heuristics, as well as some additional criteria. In this evaluation, myPlan is compared to the MyUW website, where myPlan draws most of its information and resources from, and myEdu.com, a course planning website which caters to schools around the nation. In this evaluation, it was discovered that myPlan is both stronger and weaker than its competitors in different areas.



Application Details

Overview of Main Website Screens

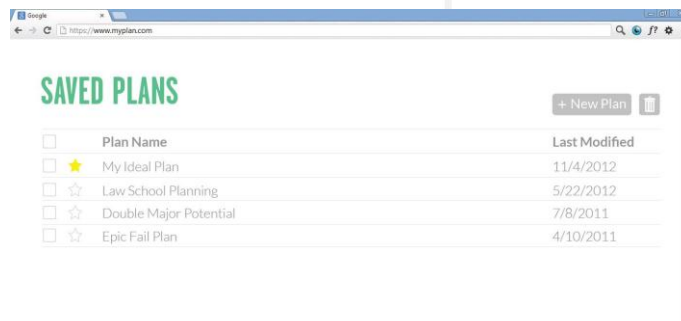


1. Home Page

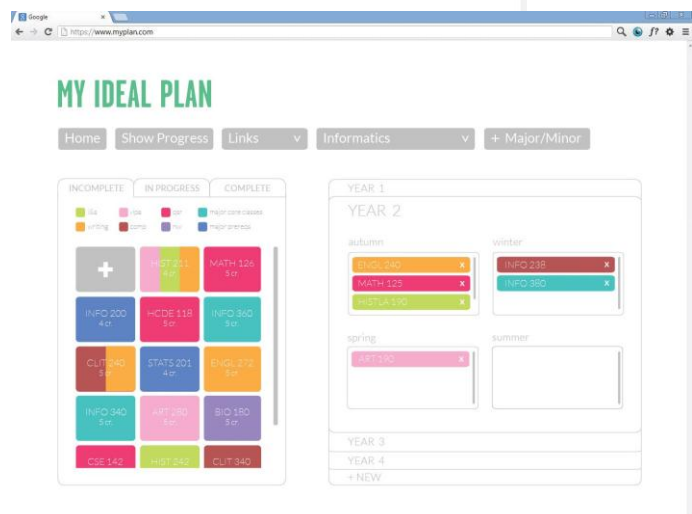


2. MyUW Login Page

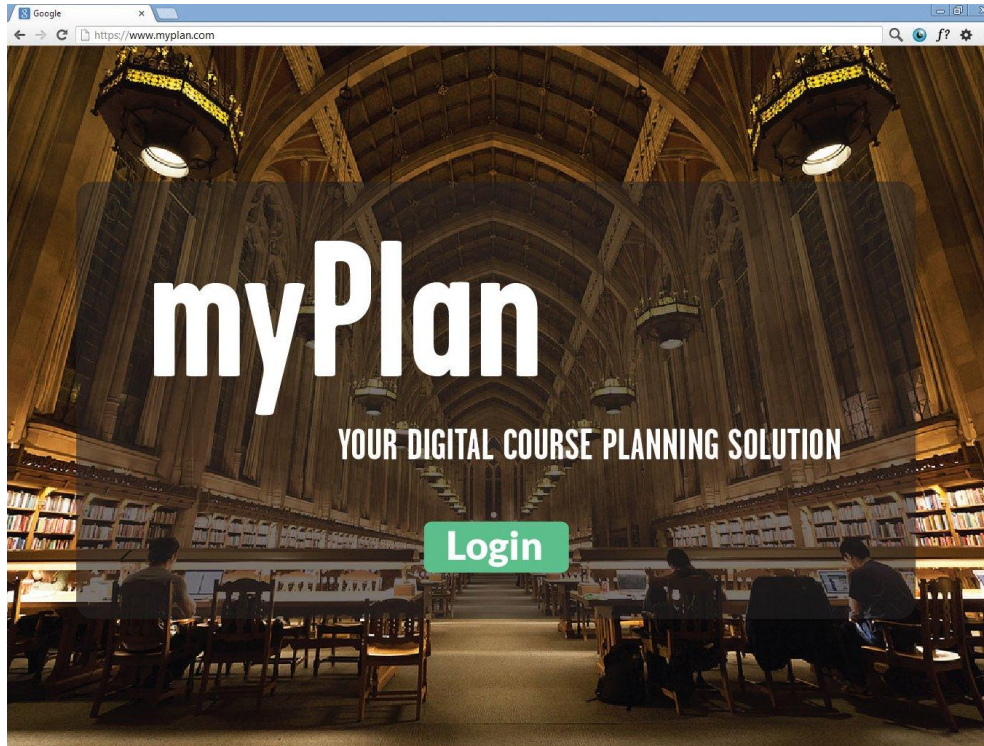
3. Saved Plans Page



4. Plan Page



Home Page



Behavioral Specifications

The Home Page maintains a clear and defined design so that the target audience, busy college students, does not have to waste their time trying to navigate an overly complicated website. For ease of use, a non-cluttered, minimalistic design was chosen.

The background, a photograph taken by Ang Li of the Suzzallo reading room, communicates directly that myPlan is oriented towards University of Washington students. The half-transparent box provides sufficient visual contrast for the overlay, where the application name and its primary function is clearly



Visual Depth

communicated in white text. The “Login” button is centered in the bottom third of the page, where visual depth is maximized due to the composition of the photo. The bright green color, often a color associated with education, will additionally draw the user’s attention. The “Login” button is additionally the only, and thus the most salient, button on the page. Upon clicking the login button, the user will be redirected to the UWNetID login page to give their credentials and authorize myPlan’s access to their course and major information.

Design Specifications

The background will take the whole page.
Picture will be located at <http://www.flickr.com/liang3404814>

Width : 85% of Page width
Height: 70% of Page Width

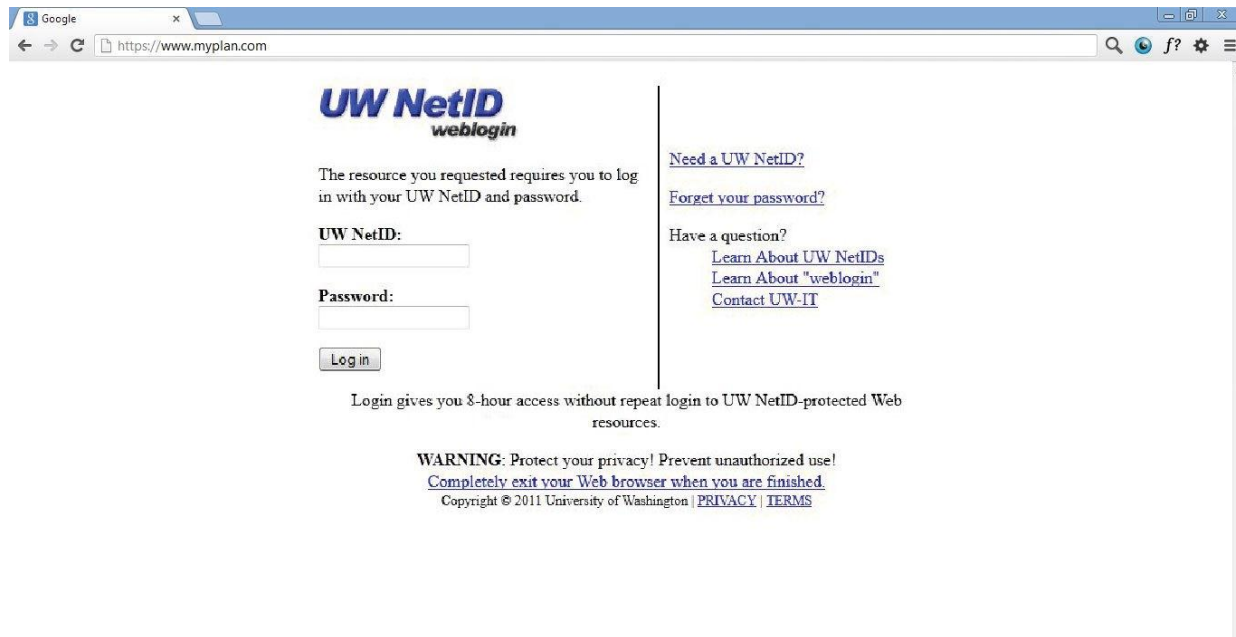
200 Pt font, GarageGothic-Bold

45 Pt font, GarageGothic-Bold



45 Pt Font, Lato-Black

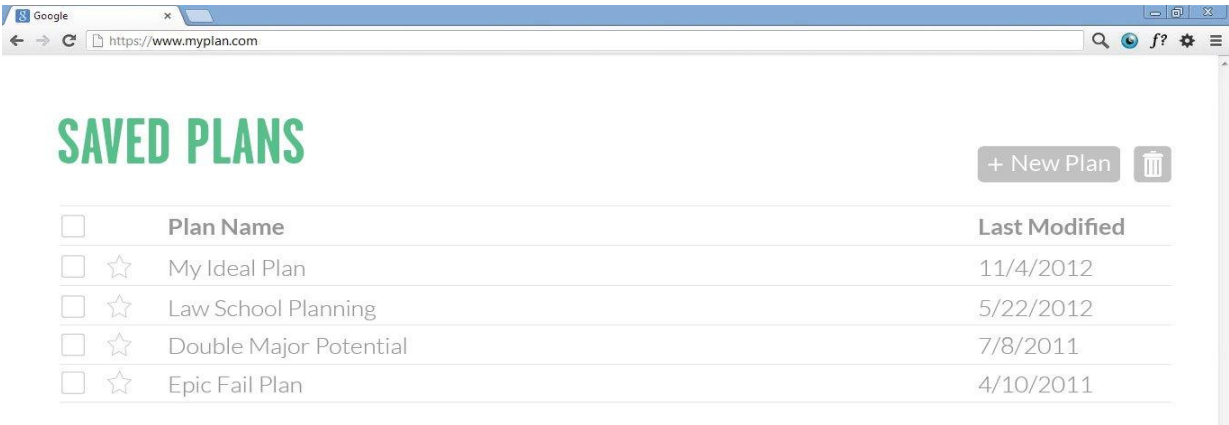
MyUW Login



The screenshot shows a web browser window with the address bar displaying "https://www.myplan.com". The page features the "UW NetID weblogin" logo. A message states: "The resource you requested requires you to log in with your UW NetID and password." Below this are input fields for "UW NetID:" and "Password:", followed by a "Login" button. To the right, there are links for "Need a UW NetID?", "Forgot your password?", "Have a question?", "Learn About UW NetIDs", "Learn About 'weblogin'", and "Contact UW-IT". At the bottom, a warning message reads: "WARNING: Protect your privacy! Prevent unauthorized use! Completely exit your Web browser when you are finished." Below the warning is the copyright notice: "Copyright © 2011 University of Washington | [PRIVACY](#) | [TERMS](#)".

Because myPlan handles a great deal of information for college planning, the focus of the application was narrowed to University of Washington students. Course information needs to be well guarded. Since all University of Washington students are required to have a secure UW NetID, it seemed intuitive for myPlan to implement the same login. With access to MyUW's database, myPlan can gather course information for each student in a secure manner. After logging in with their NetID account, the user will be redirected to the Saved Plans page.

Saved Plans



Behavioral Specifications

The Saved Plans page holds a table of all the user’s existing plans. The plan name, date last modified, and a favorite star, will be visible to the user. At the creation of a new account, no plan is contained in the list, and plans are organized by default organized by date once plans are added.

Organizing Plans

Last Modified
11/4/2012
5/8/2010

The left side will contain details as to the date modified. This is a very useful detail in modern applications which many of our online users are already familiar with through Google Docs.



The user can organize plans by clicking on “Plan Name” or “Date Modified.” As the user hovers over “Plan Name,” the background will be grayed to indicate that it is interactive, the same hover interaction occurring when the user moves over “Last Modified.” If the user



chooses to click on “Plan Name,” all plans will be alphabetically organized by name. If the user selects “Last Modified,” plans will be organized by date last modified, with most recent plans at the top, and plans created on the same day organized by name. The following two screen shots indicate how the resulting behavior should look while hovering over “Plan Name” or “Last Modified” respectively. It is

important to remember that starred items will still be brought to the top and then organized according to whatever organizational mode is currently selected.

Favoriting Plans

<input type="checkbox"/>	Plan Name
<input type="checkbox"/> ★	My Ideal Plan
<input type="checkbox"/> ☆	Law School Planning
<input type="checkbox"/> ☆	Double Major Potential

The screen to the left has an example account of a returning user. When the user clicks on the unfilled star next to a plan, the star should become highlighted, and it should be moved automatically to the top of the list. This functionality will allow the user to separate his or her current, or most preferred plan, from all the other potential plans created.

The following two screens demonstrate a user favoriting “My Ideal Plan,” which is dynamically moved to the top of the list. If multiple plans are favorited, they will be organized by whatever organizational setting the user has selected.

SAVED PLANS

[+ New Plan](#)


<input type="checkbox"/>	Plan Name	Last Modified
<input type="checkbox"/> ☆	Double Major Potential	7/8/2011
<input type="checkbox"/> ☆	Epic Fail Plan	4/10/2011
<input type="checkbox"/> ☆	Law School Planning	5/22/2011
<input type="checkbox"/> ★	My Ideal Plan	11/4/2012

SAVED PLANS

[+ New Plan](#)


<input type="checkbox"/>	Plan Name	Last Modified
<input type="checkbox"/> ★	My Ideal Plan	11/4/2012
<input type="checkbox"/> ☆	Law School Planning	5/22/2012
<input type="checkbox"/> ☆	Double Major Potential	7/8/2011
<input type="checkbox"/> ☆	Epic Fail Plan	4/10/2011

Deleting Plans

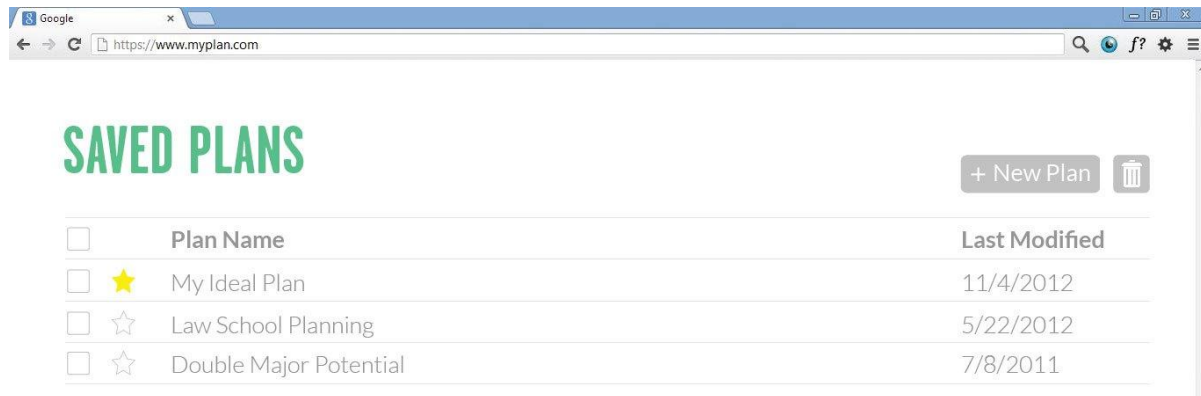
<input type="checkbox"/> ☆	Law School Planning
<input type="checkbox"/> ☆	Double Major Potential
<input checked="" type="checkbox"/> ☆	Epic Fail Plan

The user can select specific plans they would like to delete by clicking on the check box to the left of the specific plan, or select all plans by clicking on the check box to the left of the “Plan Name” title.



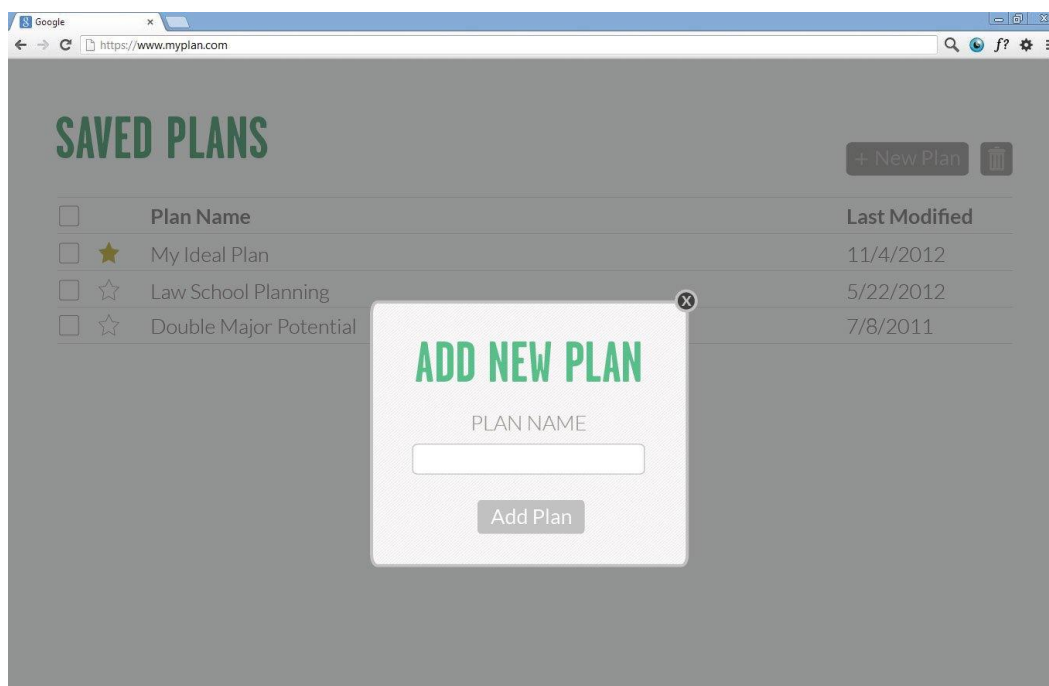
If at least one plan is selected, the user may delete that plan by clicking on the trashcan icon found at the top of the page. Plans deleted may not be recovered in any way.

The example account we've been using has a list with an "Epic Fail Plan" after checking on the checkbox next to the plan and clicking on the trashcan icon the list updated and the list item is gone the result should look like the following screenshot.



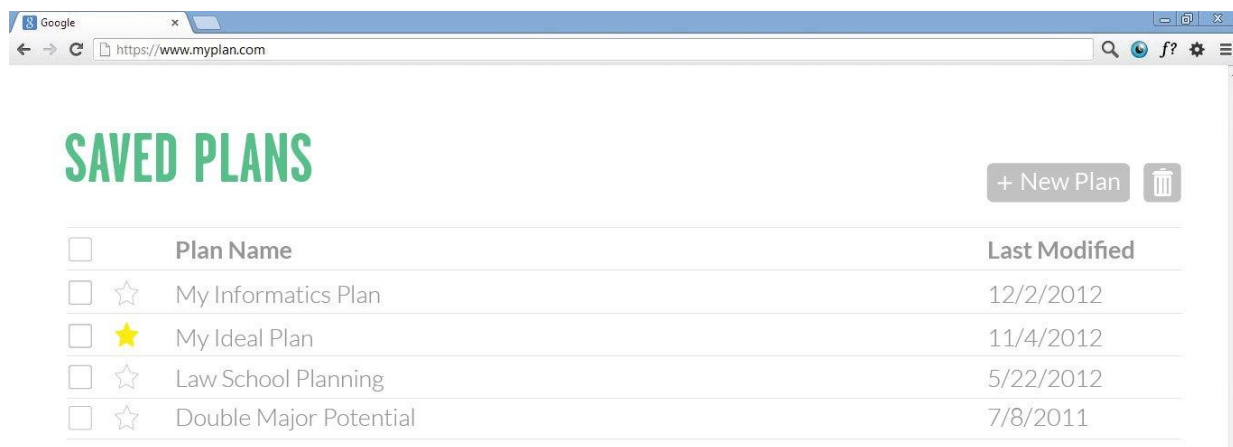
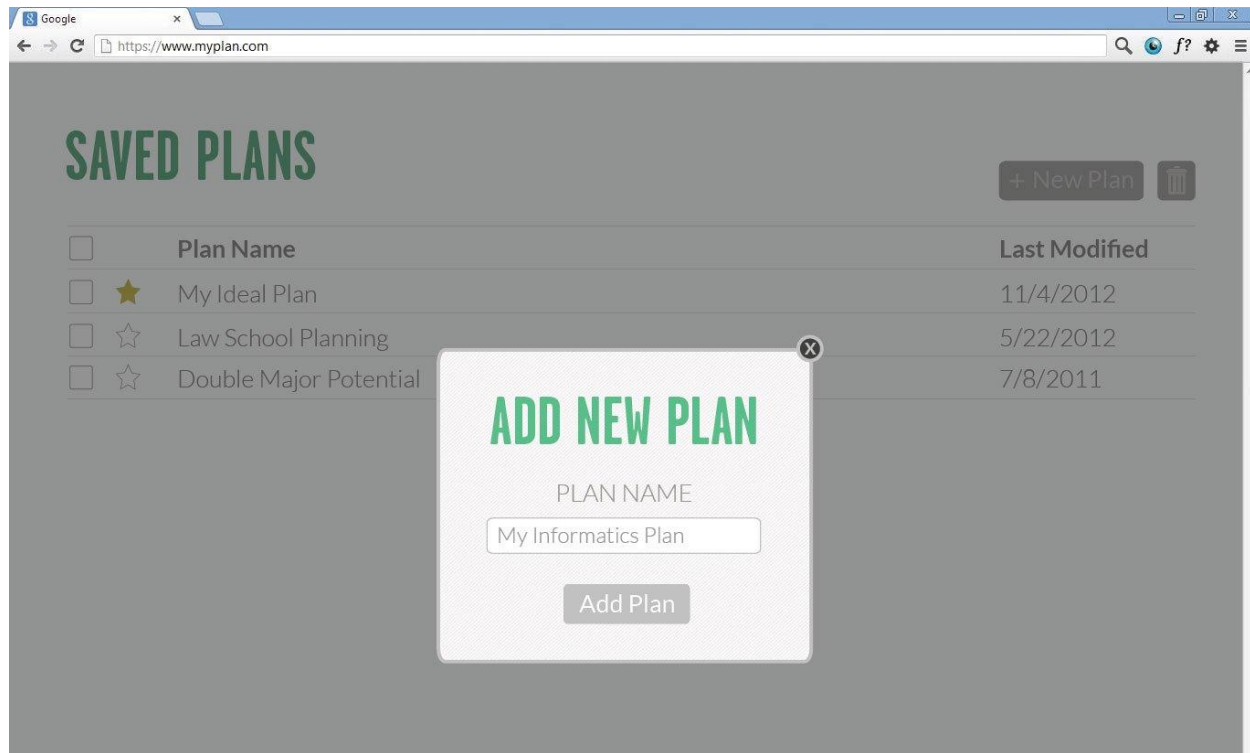
Adding Plans

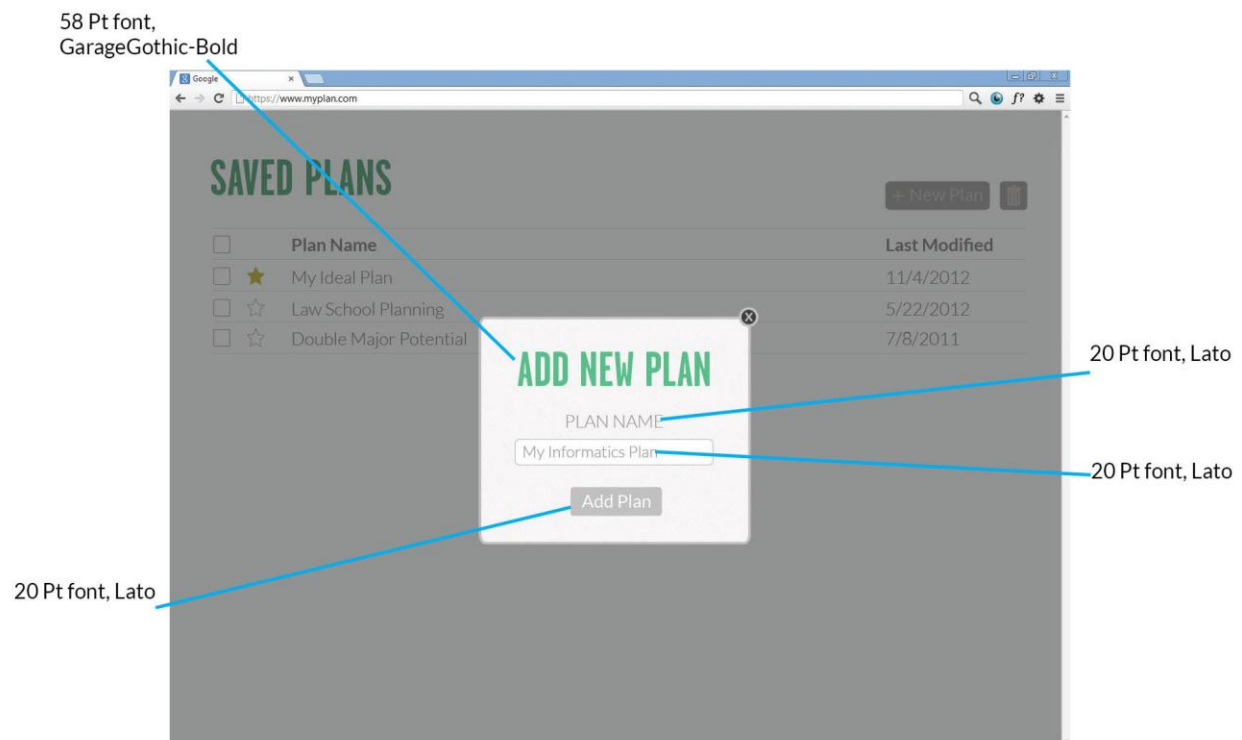
New + The user can add new plans by clicking on the "New +" button. When clicking on this box, the user is prompted by a modal to name the plan he is adding to the collection. The following screenshot displays the result after clicking on new plan. In case the user wanted to remain on the same page to organize plans or edit an existing plan, the modal method was chosen instead of a redirection to page for that plan. With an add feature implemented with modals, the user will have the flexibility of adding multiple plans at once while remaining on the same page. Having this functionality will be useful for students who want to quickly create multiple plans for multiple majors.



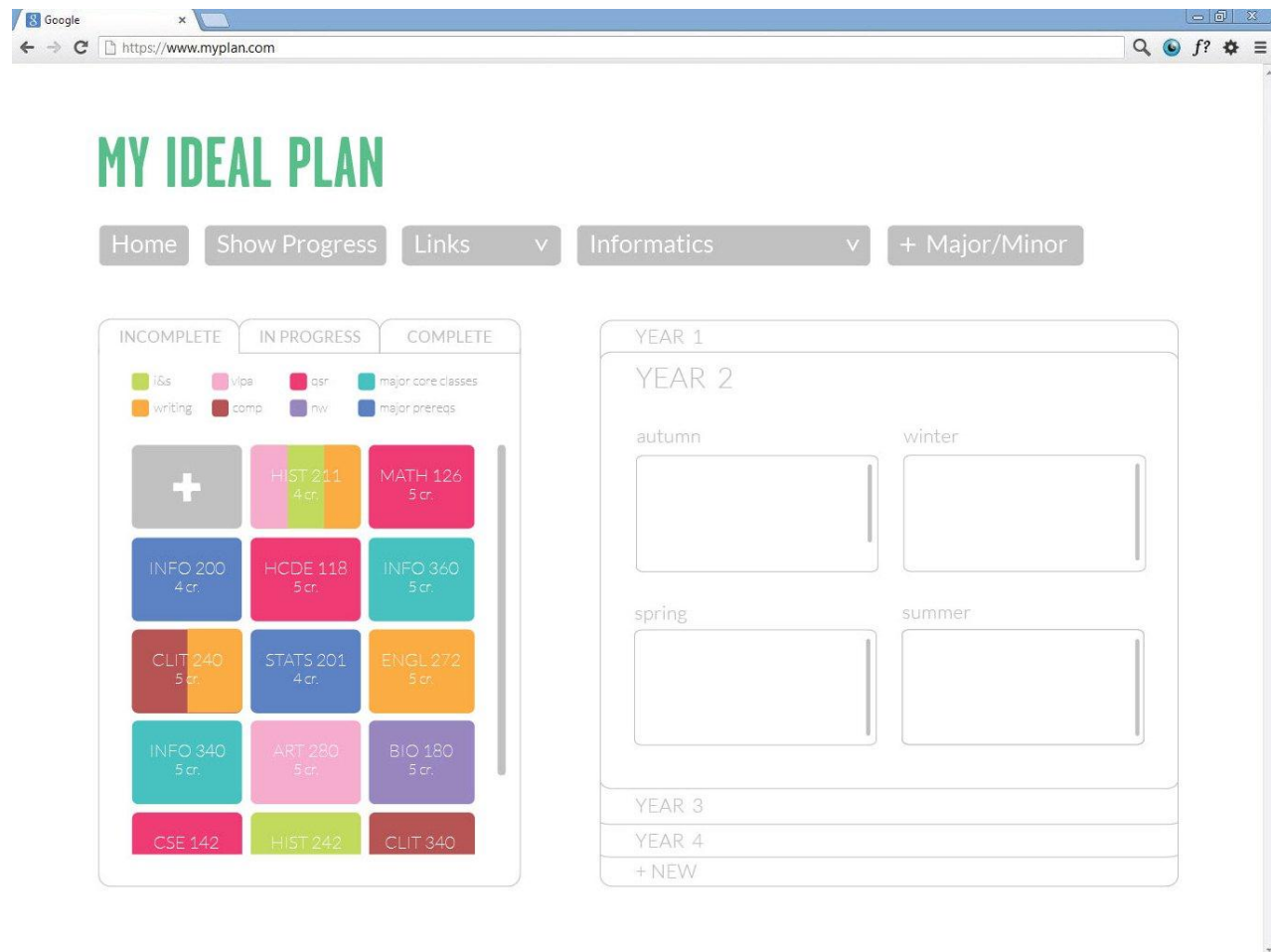
The user has two choices at the modal screen. They can either close the modal by clicking on the circled “X” on the top right hand corner of the modal box, or they can type in a new name for the plan, and add it to the list. The user must click on the “Add Plan” button in the modal box to add his newly created plan to his “Saved Plans” list. For a newly created plan, the “Last Modified” date will be defaulted to the date created.

The following two screen shots show the a user typing “My Informatics Plan” in the modal text input box and the resulting list after clicking on the “Add Plan” button.





Plan Page



Behavioral Specifications

The user can reach the 4th screen by clicking on a plan in the list on the Saved Plans page. On the Plan Page, the user will be able to modify or edit their selected plan. The main header on the page will be the name of the plan, and the courses will be based on the major(s) selected for the selected plan. The page will collect information about the student's progress with the major(s) using information from the student's "Degree Audit Report," and organize the courses already taken or in progress into the quarters which are populated in the chart on the left. The user can then add any courses to the rest of his plan by dragging courses from the tabbed section on the left to the yearly plans on the right. The screenshot above shows an unpopulated "Year 2" chart of a selected informatics major.

Exiting the Plan

Home

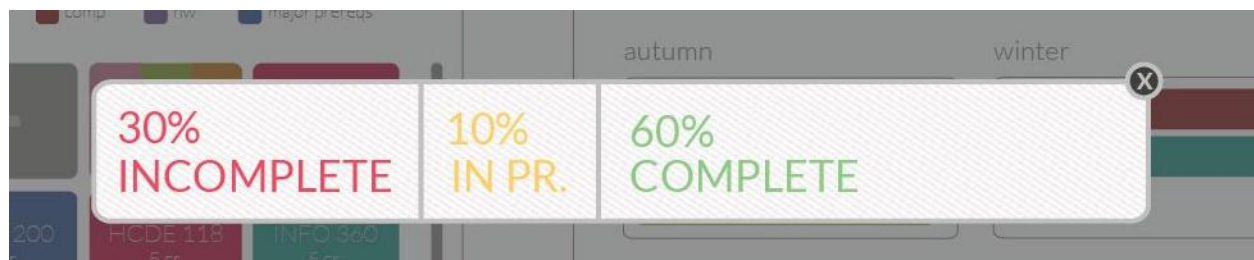
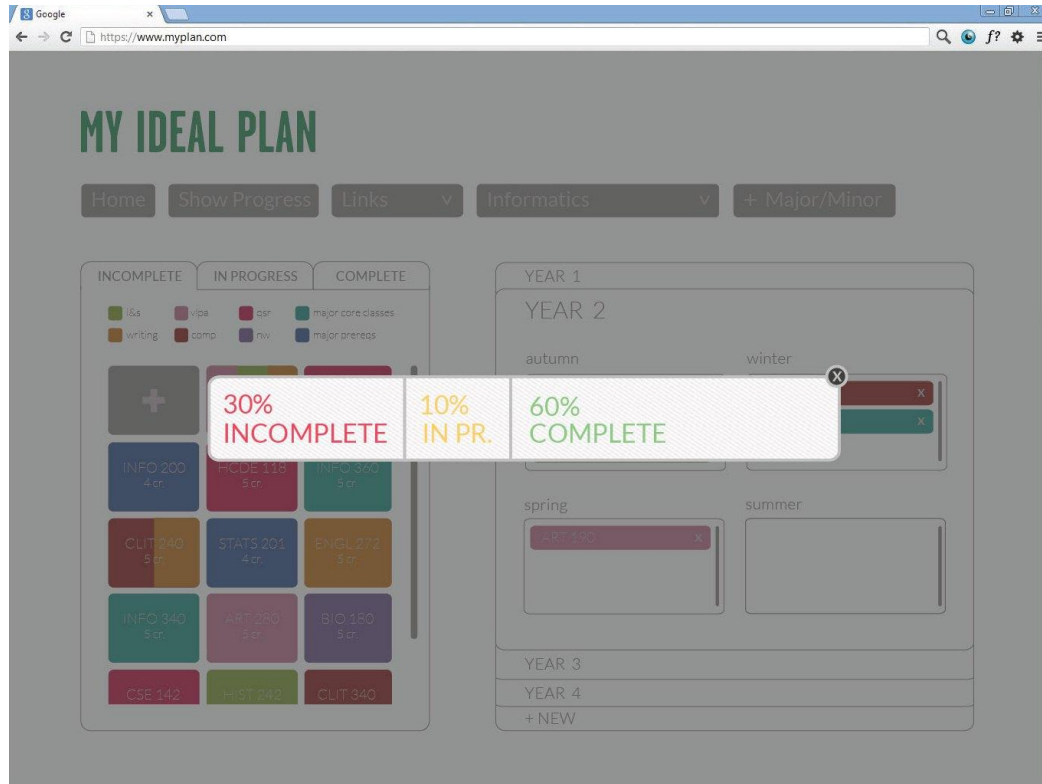
The Home Button will allow the user to return back to the home screen. According to general principles of user interface design, the user should always have a direct route for exiting.

Viewing Graduation Progress

Show Progress

This tool will allow the user to track their graduation plan progress based on information collected from the user's Degree Audit Reports. The program will total the amount of courses the user has ever completed or are enrolled in, and calculate the percentage of courses completed, not completed, and in progress. The data will be visually represented in a "Progress Bar" shown to the user as a modal which pops up when the Show Progress Button is clicked. As the student progresses towards completing more courses contained within the plan, the progress bar will update its percentages, and the width of its categories. A modal was chosen for the popup bar to appeal to the principal of minimalistic design. Since students only need to check their progress occasionally, the Progress Bar should not always be shown. To return to the plan page, the user can click on the "X" in the top right corner of the Progress Bar.

The following screen shot shows the modal displayed after a click on the "Show Progress" button.



Visiting Helpful Links



The “Links” button on the page produces a dropdown menu for helpful links for graduation course planning. Since not all information necessary for a student’s course planning needs to be placed on the planning page without destroying the usability of the Planning Page, these links have been included to assist the student. Helpful links include a link for home page of the selected majors or minors, the University of Washington Course Catalog, the Undergraduate Advising home page, and the University of Washington academic calendar. The screenshot to the left shows how the dropdown looks when the mouse is hovering over “Advising Home.” As the mouse hovers over a link in the dropdown menu, the colors should inverse to highlight the current item the mouse is on as selected.

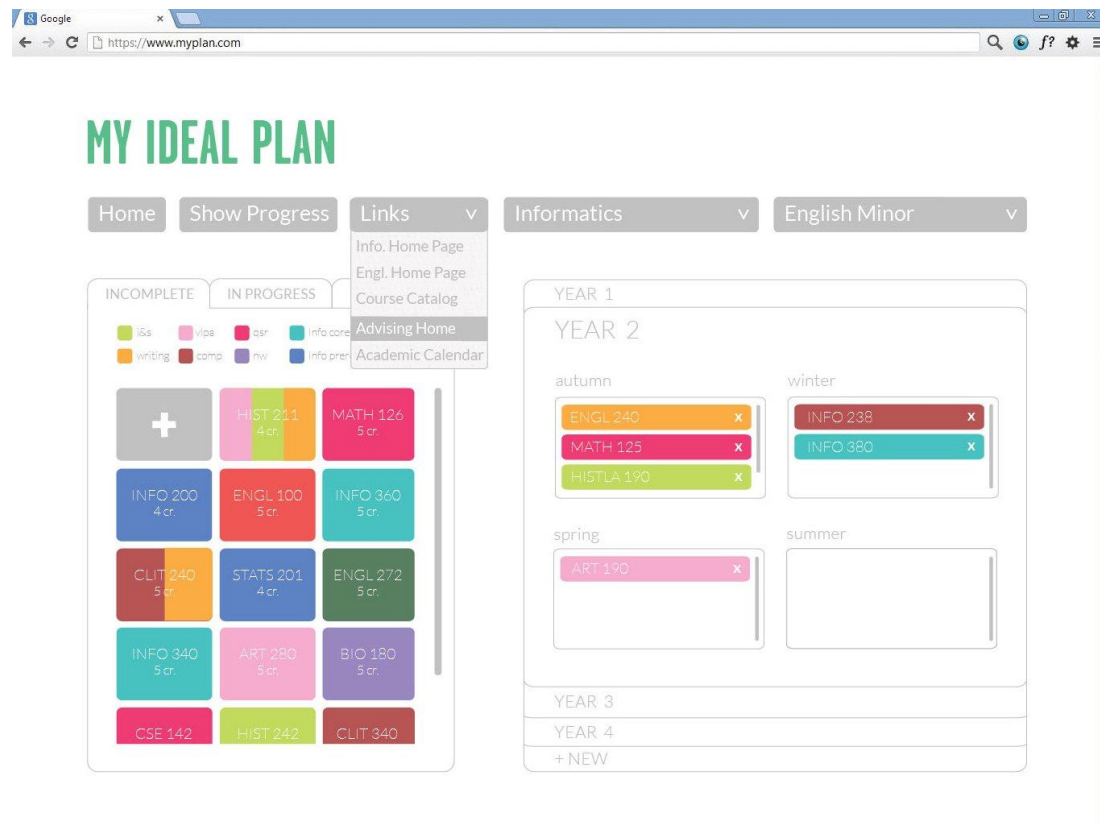
Major Home Page: These links are specific to each individual major at UW.

UW Course Catalog: <http://www.washington.edu/students/crscat/>

Undergraduate Advising Home: <http://www.washington.edu/uaa/advising/>

UW Academic Calendar: <http://www.washington.edu/students/reg/1213cal.html>

The following screen shot shows how the dropdown looks in the context of the entire page.

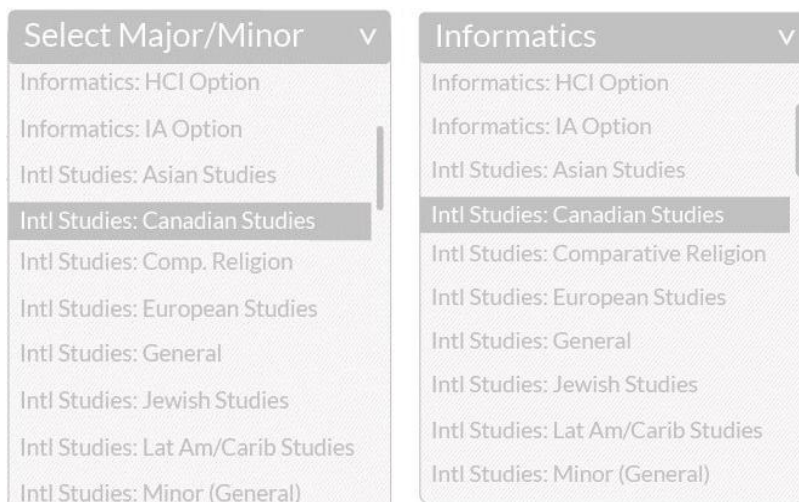


Adding Another Major/Minor

+ Major/Minor When the “+ Major/Minor” button is clicked, a dropdown menu with all the possible major and minors offered by the University of Washington. The dropdown menu will then look like the following screenshot, and the “+ Major/Minor” button will move to the right. The page size will expand accordingly, and the user will have to scroll to the right if the size of all the buttons exceeds the page width. When additional majors or minors are added, the key is updated to include the prerequisites for that major or minor, as well as the core classes for that major or minor. If there is more than one major, the label for core classes and prerequisites will change from the generic “major core classes” and “major prerequisites” to more specific labels, as shown below. If more than one additional major or minor is added, the box containing the courses and keys will size accordingly, with all padding preserved. The screenshot below illustrates how the key will update once another major is added.



Select Major/Minor After the “+ Major/Minor” button is clicked, the user can then use the dropdown menu to select a major or minor by clicking on the “Select Major/Minor” menu. The following two screenshots are examples of how it the dropdown would be displayed for a menu. The first displays a user selecting a new major or minor where none were previously selected, and the other where the user is changing an existing, previously selected major or minor dropdown menu. In order to delete the major or minor, the user can select the “Select Major/Minor” category from the top dropdown menu, causing the major/minor, and all its relevant courses, to be eliminated from the current plan.



Both of the menus have a scroll bar to reduce the size of the menu while still keeping all the categories in the list. The organization is alphabetical and based entirely on the course catalog already provided on MyUW for the university of Washington students.

The dropdown menu allows the user to choose a major of all existing undergraduate majors at UW. The current major selected is shown to be the Informatics major. Basing the graduation planner off a selected major is a design decision based on interviews conducted with students Silvia Chang, Ashish Chandwini, and Gurjit Saini. During the planning process, all three students admitted that they created different graduation plans for each track or major they were planning to possibly pursue. We have designed our website around students' need to design graduation plans based on their selected major.

The following screenshot shows what the page would look like with a preselected Informatics major.

MY IDEAL PLAN

[Home](#)
[Show Progress](#)
[Links](#)
[Informatics](#)
[+ Major/Minor](#)

INCOMPLETE
IN PROGRESS
COMPLETE

+

HIST 211
4 cr.

MATH 126
5 cr.

YEAR 1
YEAR 2

autumn
winter

ENGL 240 x
MATH 125 x

INFO 238 x
INFO 380 x

The following screenshot shows how the page would display after clicking on the “+ Major/Minor” and before selecting a Major/Minor.

MY IDEAL PLAN

[Home](#)
[Show Progress](#)
[Links](#)
[Informatics](#)
[Select Major/Minor](#)

INCOMPLETE
IN PROGRESS
COMPLETE

+

HIST 211
4 cr.

MATH 126
5 cr.

INFO 200
4 cr.

HCDE 118
5 cr.

INFO 360
5 cr.

CLIT 240
5 cr.

STATS 201
4 cr.

ENGL 272
5 cr.

INFO 340
5 cr.

ART 280
5 cr.

BIO 180
5 cr.

CSE 142

HIST 242

CLIT 340

YEAR 1
YEAR 2

autumn
winter

ENGL 240 x
MATH 125 x
HISTLA 190 x

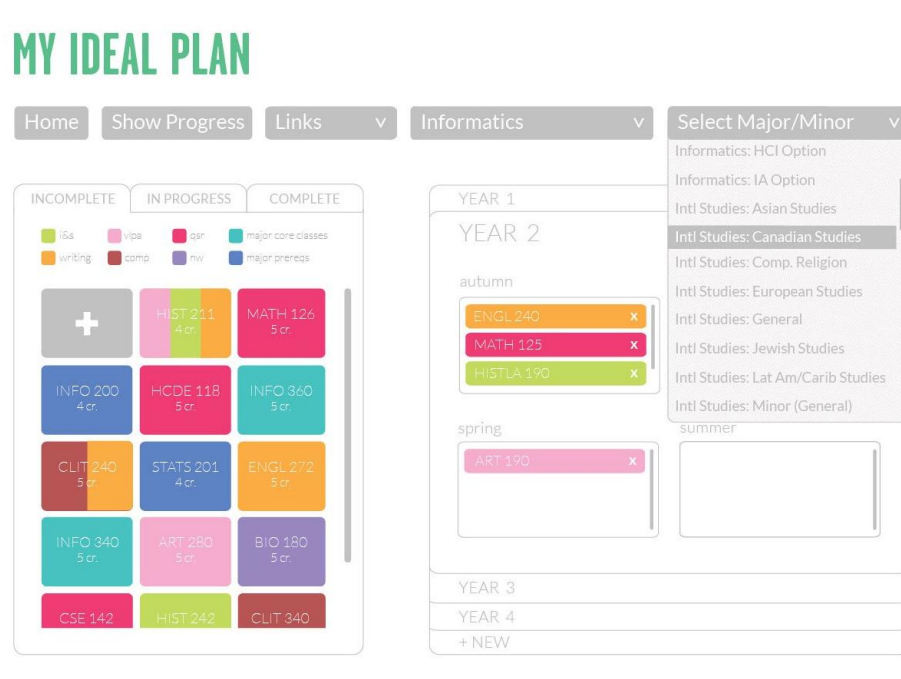
INFO 238 x
INFO 380 x

spring
summer

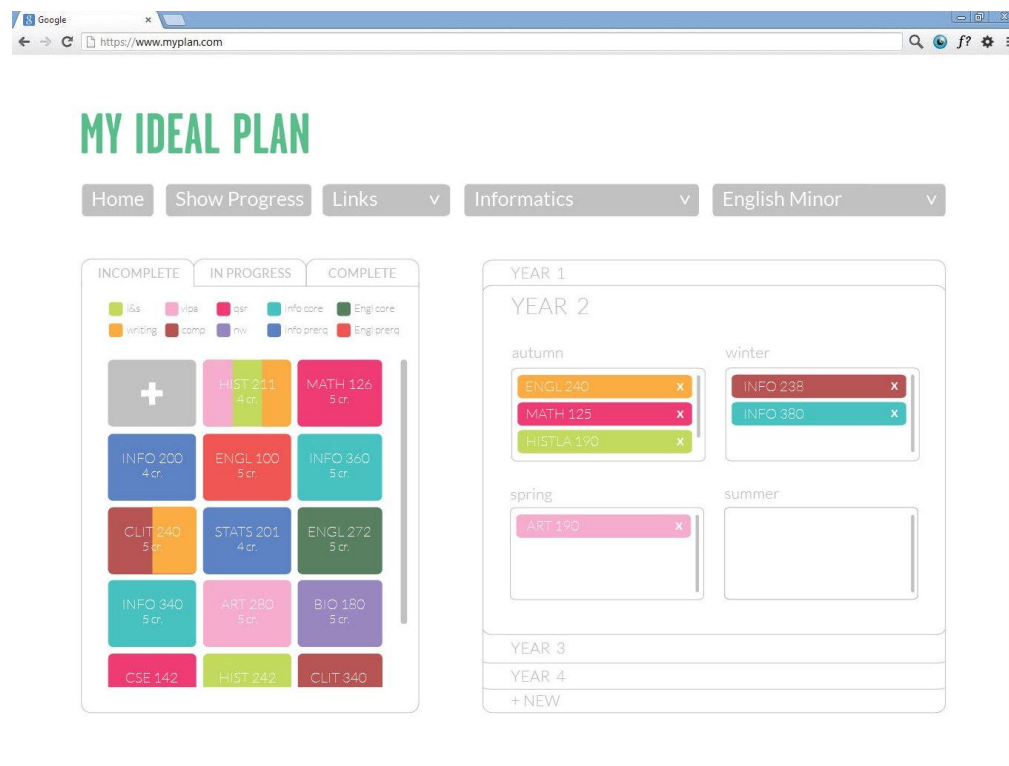
ART 190 x

YEAR 3
YEAR 4
+ NEW

The following is a screenshot of the page while scrolling through the newly created dropdown menu.



The following is a screenshot of the page after user selects an English Minor for his added major/minor.

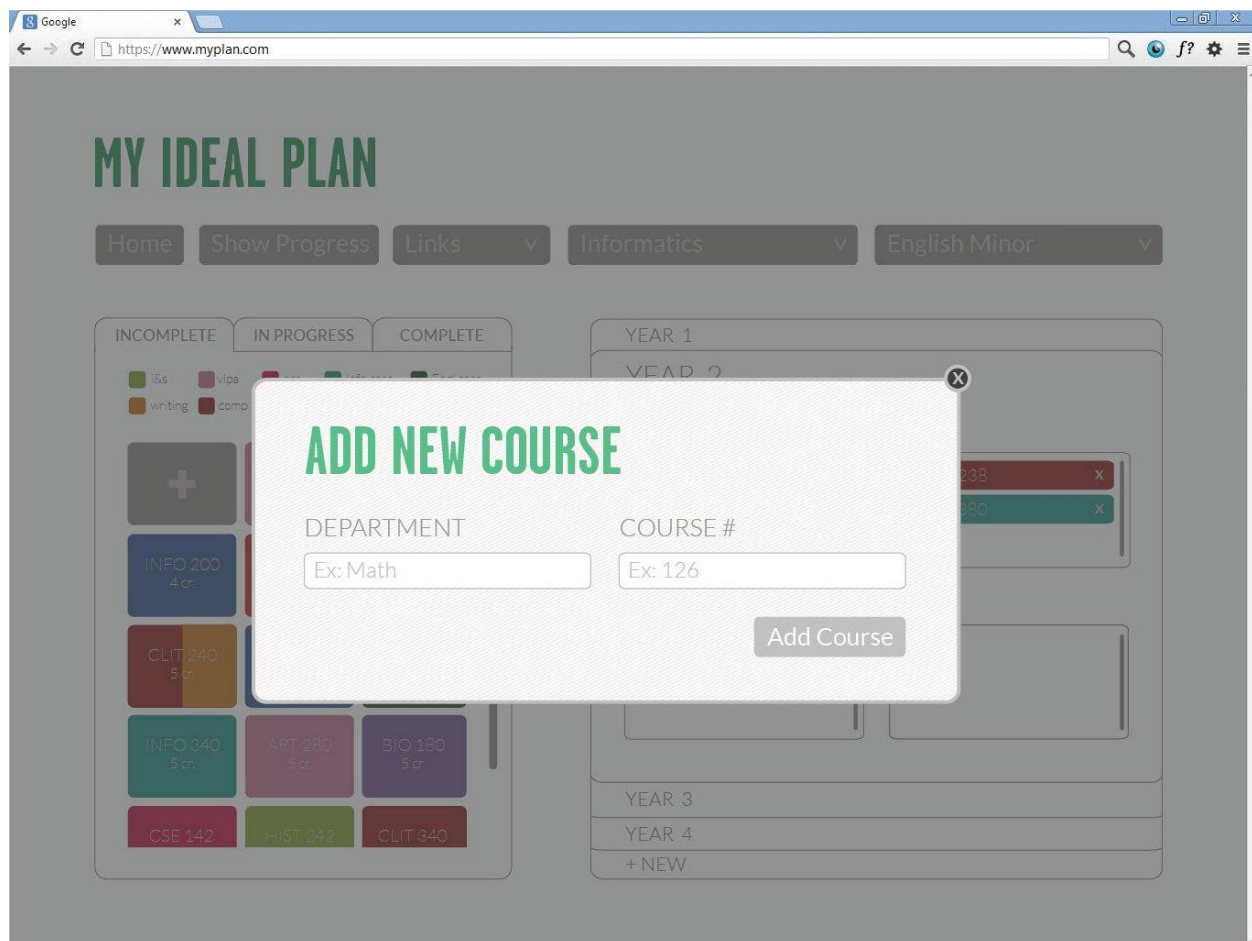


Adding a New Course

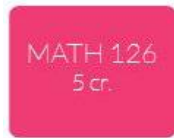


To add a class that is not a part of the Degree Audit Reports, the user may click on the gray box containing the “+” symbol contained in the tabbed section. This functionality was added knowing many students enjoy taking classes outside requirements for their major, as is the case with Informatics student, Alyssa Trinh. This adds flexibility to any plan the student may have. When this button is pressed, a modal appears prompting the user to input a new course. The user can input the department of the course, and course number, and click “Add Course.” The website will scour the UW course catalog to find the correct course type and then add the new course to the box of incomplete courses. This functionality is helpful when the user wishes to pursue courses beyond his area of concentration or outside of his or her major.

The following is a screenshot of the display page after clicking on the “+” button.

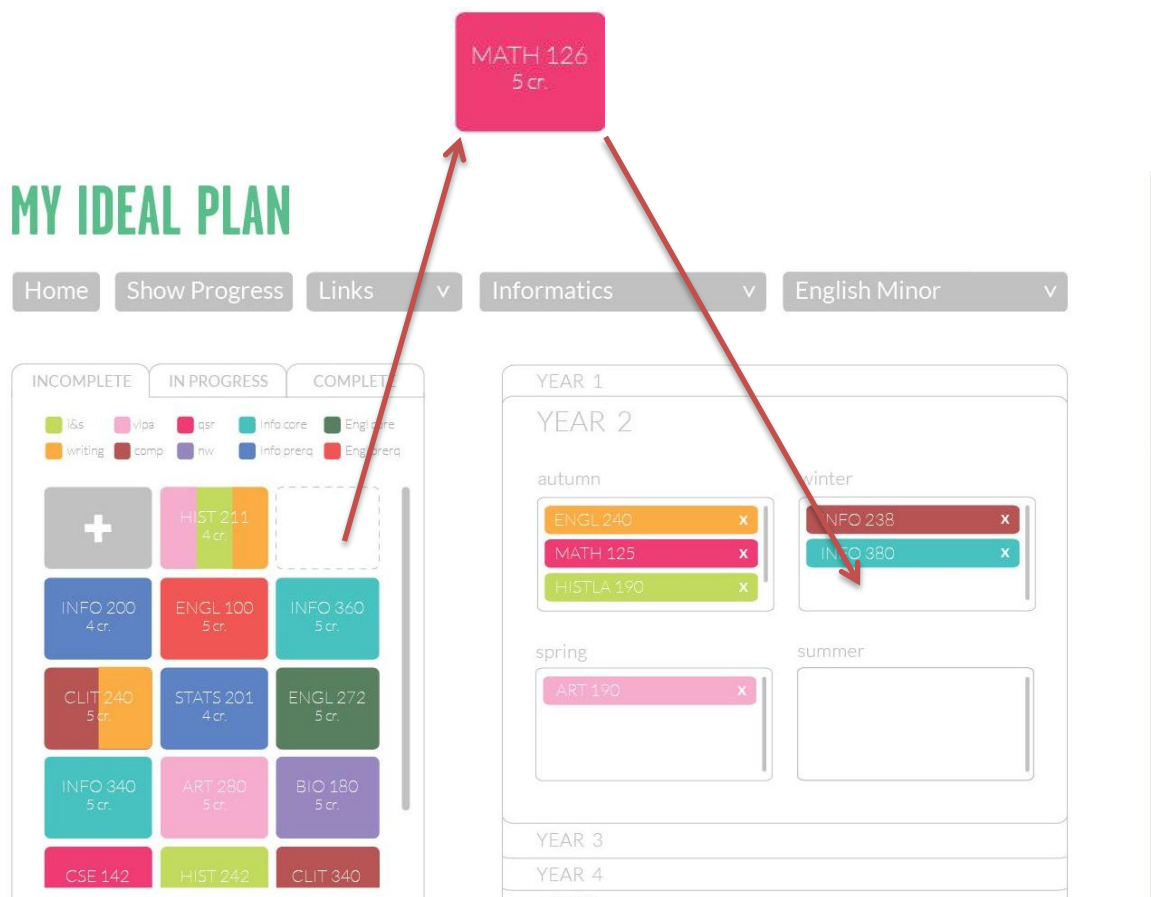


Moving Courses Into the Plan



Each course box contains the name of the course, and the amount of credits that specific course is worth. The course box can be dragged from out of the left tabbed section to the plans at the right of the page. Every action made by the user is automatically saved by the website, similar to the constant auto-save function of Google Docs. Allowing the courses to be dragged allows the user to easily and intuitively rearrange course plans. If all of the courses in a section do not fit in a category window, a scrollbar appears to allow the user to scroll down through the courses.

The following is screenshot is the background page display as the mouse is dragging and holding selected MATH 126 course.



The following is a screenshot of the page after the Math 126 was added to the Winter Quarter box.

MY IDEAL PLAN

The interface shows a navigation bar with 'Home', 'Show Progress', 'Links', 'Informatics', and 'English Minor'. Below is a grid of course buttons categorized by status: INCOMPLETE, IN PROGRESS, and COMPLETE. A legend identifies course types by color: i&s (green), vpa (pink), qsr (red), info core (teal), engl core (dark green), writing (orange), comp (dark red), nw (purple), info prereq (blue), and engl prereq (dark red). The grid includes courses like HIST 211, INFO 360, INFO 200, ENGL 100, ENGL 272, CLIT 240, STATS 201, BIO 180, INFO 340, ART 280, CLIT 340, CSE 142, HIST 242, and ENGL 270. To the right, a 'YEAR 1' and 'YEAR 2' plan is shown. Year 2 is divided into autumn, winter, spring, and summer semesters. The autumn semester includes ENGL 240, MATH 125, and HISTLA 190. The winter semester includes INFO 238, INFO 380, and MATH 126. The spring semester includes ART 190. The summer semester is currently empty.

Viewing Course Information

Another Interaction the user can have with courses is to get more detailed information about a course this was a detail that our user interviews with Sean and Ashish revealed would be useful when planning for courses.

The following screenshot is a page display after the user clicks on the “Math 126” course button. The modal has only one interaction user interaction to read or close the modal. The modal displays detailed information about a courses credit(s), availability, prerequisite and description.

MY IDEAL PLAN

The interface is similar to the previous screenshot, but with a modal open for 'MATH 126: CALCULUS WITH ANALYTIC GEOMETRY III'. The modal displays the following information:

- Credits:** 5
- Availability:** Autumn, Winter, Spring, Summer
- Prerequisite:** Either 2.0 in MATH 125, 2.0 in MATH 145, 2.0 in MATH 146, score of 5 on AB advanced placement test, or score of 4 on BC advanced placement test.
- Description:** Third quarter in calculus sequence. Introduction to Taylor polynomials and Taylor series, vector geometry in three dimensions, introduction to multivariable differential calculus, double integrals in Cartesian and polar coordinates.

The modal has a close button (X) in the top right corner. The background shows the 'MY IDEAL PLAN' interface with the 'MATH 126' button highlighted in the 'IN PROGRESS' category.

Course Box Description

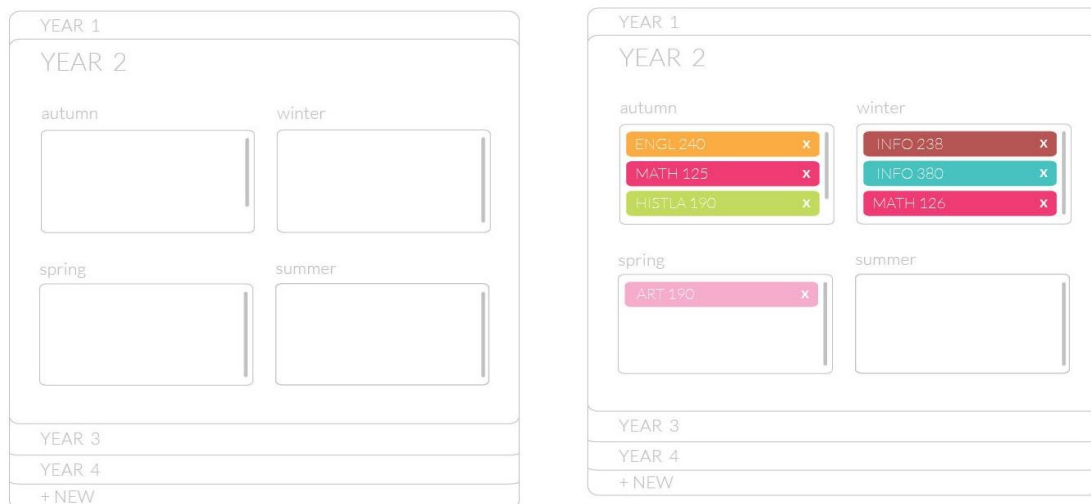


When the student selects the desired major, each course the student is currently taking, or has ever taken, are organized into three categories: Incomplete (for courses or requirements that are required to graduate according to the Degree Audit Report), In Progress (courses the student is currently taking), and Completed (courses the student has already completed). We chose this approach because the interviews we performed for Sean and Jonathan indicated that they enjoyed this aspect of the application. Their familiarity with the separation in the Degree Audit Reporting System will provide the consistency and make for an easy transition to our application. The tabs provide the separation and focus that our users requested when planning for courses in the current MyUW system.



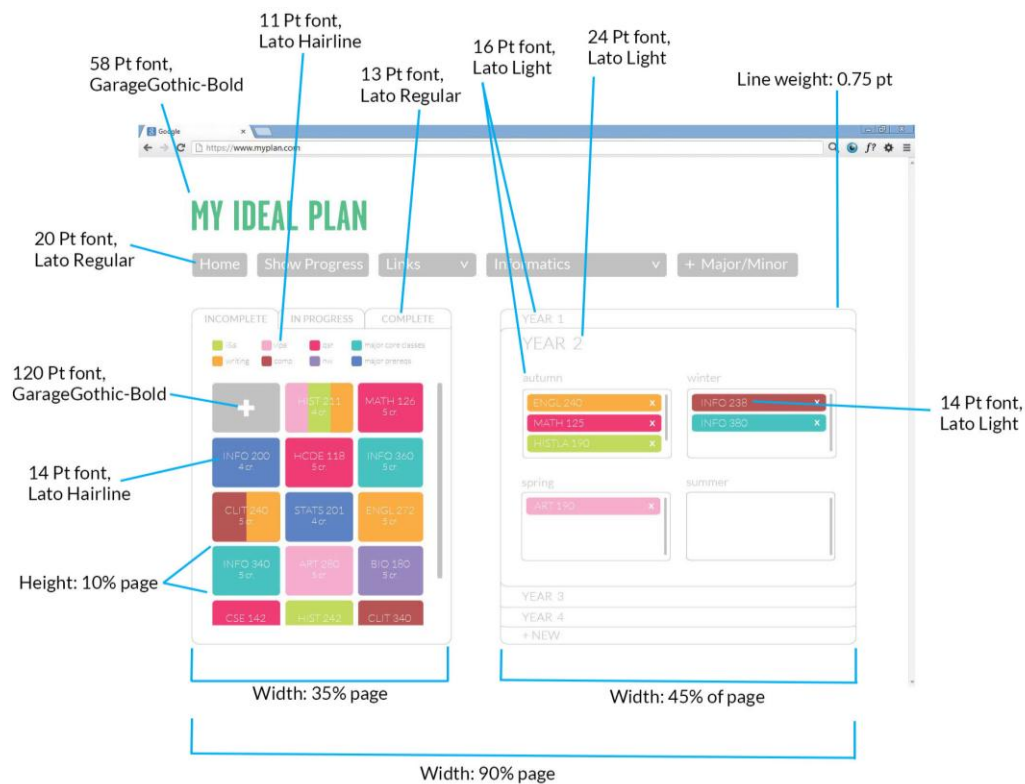
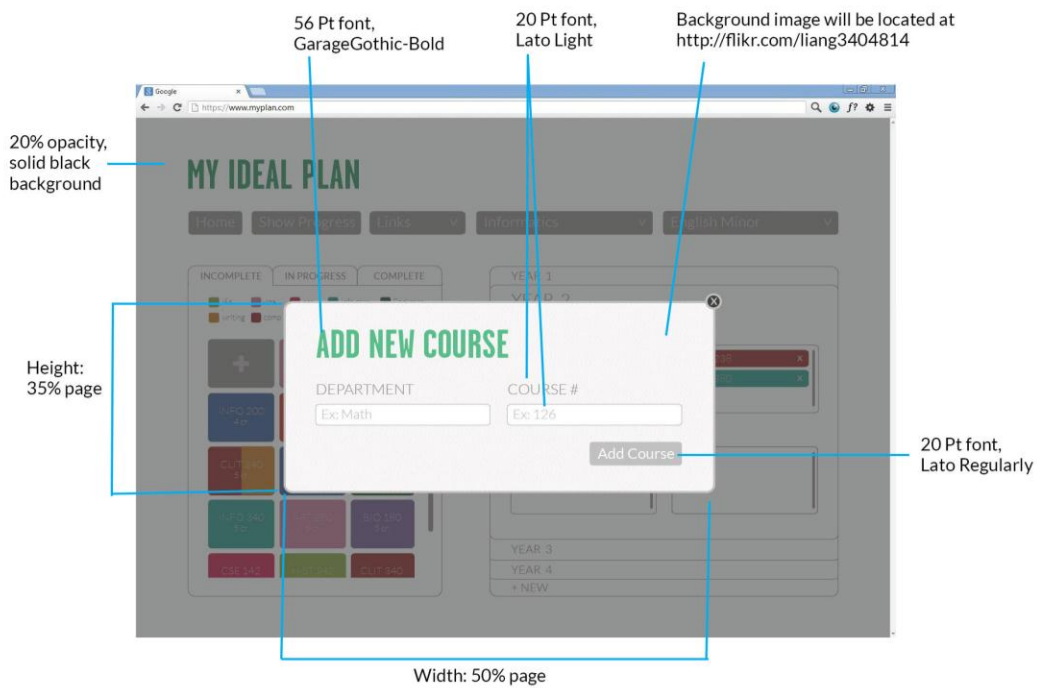
Each course organized into the categories is colored according to the requirement the course fulfills. By allowing the user to visually see the distribution of different requirement areas, the user can balance their schedule accordingly. The rounded corners serve to connect the key boxes visually to the course boxes.

Year Organizer Description



This year organizer allows the user to drag courses into the desired quarter. Each year is presented as tab. Different tabs can be clicked in order to expand the information for a separate year. Only one year can be expanded at once. The user can drag courses up or down the list for each quarter freely, and remove courses by clicking on the right "X" on each course box in a list. If "+ New" is clicked, another year is automatically created, and an nth year tab will appear. The tabbed system was chosen because it can clearly display all quarters for all years in an organized and understandable way. When the div that the name of the last year is hovered over, it will turn gray, and a small "-" will appear to the far right of the year. When the user clicks on the "-", the tab for that year can be deleted. For error prevention, only the last year can be deleted so the user may not delete years in the middle of their graduation plan.

Design Specifications



Color Scheme

#e1e1e1 Text Lines	#48c1bc Key	#c4da5e Key	#55c088 Titles	#faed12 Star	#f6accf Key	#ef5458 Key
#c1c1c1 Buttons	#9885bc Key	#617dc6 Key	#5b7d64 Key	#f8ac4a Key	#f63874 Key	#b25550 Key

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