

T3: Team Assignment #3 – Design Sketches [IS 4300]

Prisca Joseph: joseph.pr@husky.neu.edu

Maria Isabel Morel: morel.m@husky.neu.edu

Erica Yee: yee.er@husky.neu.edu

Project website: <https://github.com/ericayee/hci/>

Interaction Scenarios

An upperclassman student needs to determine how many courses are left to graduate.

Jonah just arrived home from an evening shift at his on-campus job at the gym. It was a busy shift so he was on his feet the entire time. He just wants to take a shower and go to sleep, but a sticky note on his desk reminds him that course registration for his final fall semester is in a few days. He considers scheduling an appointment with his academic advisor, but doesn't feel like carving time out of his busy schedule to go to the advising office, and the advisor's slots are probably all booked anyway. Jonah remembers using a website—he thinks it's called "degree audit"—with his advisor during his freshman year. He decides to spend a little time looking through it to see how many courses he has left to graduate before going to sleep.

Sitting on his bed, he powers on his MacBook Air and navigates to myNortheastern in his browser. While the portal loads, he also pulls up the Notes app on his laptop. Jonah briefly wonders if he had a previous note or document about classes he had left, but he can't remember exactly so he just starts a blank one. Back to myNortheastern, he presses Cmd+F and finds the "degree audit" link. This takes him to a landing page with his name and two buttons, "Current audit" and "Explore audits". He clicks "current audit" because he knows he's not trying to change his major. Within a few seconds, the page loads and he sees a dashboard labeled "Summary."

Jonah's first thought is that this webpage looks a lot different from the one he vaguely remembers using freshman year. It's not just a continuous list of text that all looks the same and is hard to read, but looks overall more modern with more whitespace, distinct sections, and what looks like a menu on the left side. His eyes are initially drawn to a progress bar under the "Summary" heading. The bar, which is labeled as "Credits", seems about 80% full. Seeing this simple visual depiction of what he accomplished at Northeastern and how close he is to finishing fills Jonas with some satisfaction. Though he knows a class is usually worth four credits, he's more interested in exactly how many courses he needs to graduate. A-ha! To the right of the progress bar are text labeled "Communications requirements" and "General requirements". The first has "9/12" next to it and the second "8/10". These seem to refer to the number of required courses in his degree—exactly what he's looking for. Jonah does a simple mental calculation and determines he has five courses left to graduate.

Since he retrieved that information so quickly, he now wonders if he can see the exact courses. His experience with technology interface subconsciously nudges him to check the side menu, where he sees the text "Communications requirements". Jonah guesses that will bring him to a new section, so he clicks on the text. The page immediately scrolls down to a new section with

that label. There is a list of communications classes, each with a course number like COMM 1220. All the text is black but next to each number is a colored symbol: red, yellow or green. Jonah wonders if the red ones are the classes he hasn't taken yet, because he knows he hasn't failed any classes. He recognizes the green ones as courses he has completed and yellow ones as ones he's currently taking. As he moves the mouse around the screen, he incidentally hovers over one of the yellow symbols, causing a tooltip with the text "in progress" to popup, confirming his guess. Curious, he tries hovering over a course number, and sure enough a different tooltip pops up with the full name of that course.

Jonah opens his blank note and types "3 communications classes left:". He copies the course numbers of the ones with red symbols underneath that text, but he wishes he could easily copy the text of the course name. Seeing the name while hovering is helpful but he has to remember the name to type it out somewhere else. He then navigates to the "General requirements" section on the degree audit menu and repeats the process.

An Explore Program student creates a potential audit to when thinking about different programs.

After catching up with some friends from NU in London, Sean feels that everyone has a plan for their next steps for their degree. Sean has a general idea, but is still struggling with his final decisions. He knows that he wants to be an engineer, but does not know if he wants to go on the more Electrical Engineering or Mechanical Engineering path. He likes several aspects between the two. His friend group also is divided. When he texted his London groupchat on iMessage there were a few pursuing electrical engineering and the others that are doing mechanical and two outliers that decided to become business majors recently. He saw his friends starting to give him a hard time because he doesn't know which major he wants to be yet. He throws his iPhone on his bed and hops on his Macbook Pro.

On his laptop he starts to do a bit of research. He starts off by going to the Northeastern catalog to see which classes are needed for both majors. He has a tab open for each and he begins to toggle back and forth to compare the two majors. He stumbles on a class that is a requirement for electrical engineering and thinks that he has the AP credit to cover that course. He pulls up iMessage on his laptop to ask his friends where he can find more info on what classes he completed. After five minutes of silence one of the friends pursuing business pipes up and says that he can check the degree audit on myNortheastern. Sean opens another tab and goes to his myNortheastern Bookmark to find the degree audit link.

When he finds the link he has little to no clue how to navigate through. He Facetimes the friend who told him about the degree audit to see if he could help out. Sean tells him that he is just trying to find his AP credits. His friend tries to help him through, but he is a lot too. His friend said that he only went on it about two times with his advisor and that they were going pretty fast through the information. They managed to find the AP credits at the bottom of the degree audit. Sean asks how he came to his decision for business and the friend explained that the classes his advisor told him originally did not appeal to him. They talked and she created several options

based on his interest and it was a degree plan that was aligned with his goal of graduating in 4 years. Sean's friend ended up saying it is probably best to book an appointment to flesh out all the details.

An academic advisor shows a student what courses would count for a requirement they need to fulfill.

Ben waits in the Meserve Hall waiting room for his advising appointment with Clara. At 10:45 Clara stops by the waiting room to pick up Ben. She greets him and guides him back to her office. Clara remembers Ben mentioned needing help with course selection in his email. Course registration is two weeks away and lately most of her appointments have been helping students figure out what they need to take next semester. She confirms with Ben that he still wants to talk about course selection. He elaborates that his plan of study lists a computer interaction elective as one of the courses he should take next semester.

Clara pulls up his plan of study on her computer and tilts the screen towards him. The plan of study is an excel sheet separated by semester, each semester has a list of courses with the course name, number, and credit hours. Clara takes a moment to confirm with Ben that he has completed all the courses from the previous semesters. Ben looks through the courses, recognizing them all, he confirms. She deletes the completed courses from the plan of study for clarity. She shifts her focus to next semester. There are three specific courses listed along with "computer interaction elective". Clara confirms with Ben that these are the courses he plans on taking next semester. He confirms, but mentions he doesn't know what courses would fulfil the "computer interaction elective".

Clara asks Ben if he has used his degree audit before. Ben thinks he might have once, in a previous meeting. Clara uses her second computer screen to navigate to the degree audit landing page. She glances at the student degree information and verifies that it indeed refers to Ben. She explains to Ben that audits lists a degree's requirements. She clicks on the "Current audit" button. The button's outline changes and they wait for a moment, before they are navigated to the audit page. Clara uses the sidebar to look for the computer science section of the requirements, explaining that it's much faster than scrolling. She clicks on the words "computer science requirements", the page scrolls down to the desired section. The sidebar highlights "computer science requirements" and lists sub-requirement sections. Ben notices that the words "computer interaction" are among the sub-requirement list. Clara skims the section, and when she finds the "computer interaction" heading she directs Ben's attention to it. There are three courses listed under this section, with directions that a student is to pick one of the three. Clara hovers her mouse over the course numbers and the full course name pops up. Ben recognizes some of these from talking to other students, however he wants to know more. Clara clicks on the first course and a description from the course catalog pops up below the section, along with any necessary prerequisites. Clara recognizes the prerequisites and mentions to Ben that he's already taken them. They do this for the other courses, each click replacing the description. Ben is still unsure of which course he wants to take and decides to take some time

to think about it. Clara then goes to download a version of the audit, she clicks the pdf button above the side menu. It opens up a page with toggle options for which sections to include. Ben is surprised, and watches as Clara toggles off the “all sections button” and toggles on the “computer interaction” button. She saves the pdf and sends it in an email to Ben along with a copy of his plan of study. She asks Ben if he has anymore questions, and after he confirms he’s all set they end the meeting.

Design options

Our most important window is the degree audit itself audit with a summary and categories of completed course information. We select Option 1 with the fixed side navigation menu. The menu facilitates efficient navigation because the user is always one click away from any category. We also decided on one long scrolling page because the information across sections is all related to other parts, so distributing across separate pages would not be logical to a user. The content is mostly textual, so loading the entire page at once should not be a significant issue, though we have to consider the data retrieval process. Our other two options included expandable/collapsible sections. While this could work as a design strategy to hide sections a user doesn’t need at a given time, it also requires more clicking on the user’s part than just using the side menu. Finally, we thought the summary dashboard was important to be placed prominently at the top of the page, but it doesn’t need to stay fixed on the page while the user looks at other sections, as in the second option.


Overall design (following PDFs)

- Landing page
- Audit page

Scenario storyboards. (following PDFs)

- Scenario 1: An upperclassman student needs to determine how many courses are left to graduate.
- Scenario 2: An Explore Program student creates a potential audit to when thinking about different programs.
- Scenario 3: An academic advisor shows a student what courses would count for a requirement they need to fulfill.

Design Option 1

<u>A</u>	<u>B</u>
SUMMARY	SUMMARY
5 DEGREE CREDITS REPA. HOURS	Degree: CS / ART combined Credits: 67/90 
CS MAJOR REQUIREMENTS	GPA : 3/4
ART MAJOR	UNIVERSITY HOURS : 110 / 160
GENERAL	
NUPATH	
TRANSFER CREDIT	CS MAJOR REQUIREMENTS 3/10
	CS CORE REQUIREMENTS

Design option 2

<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	CS MAJOR REQUIREMENTS #
CS MAJOR REQ	
SUMMARY	ART MAJOR REQUIREMENTS +
UNIVERSITY DEGREE:	
CS / ART	
CREDITS:	
67 / 90	GENERAL -
GPA: 3/4	WRITING INTENSIVE <input checked="" type="checkbox"/> FIRST YEAR writing <input type="checkbox"/> WRITING IN DISCIPLINES complete one of: WRI 3300, WRI 3315
This course has been completed	

selected
color

TOTAL DEGREE ;

~~100/100~~

CS
8/10

ART
3/10

GENERAL
17/8

NUPATH
24/11

CS REQUIREMENTS

uncompleted

completed

• ELECTIVES

• Foundation courses

• DATA REQUIREMENT

o data science

☒ course DS 2500

☐ course DS 3200

or

course DS 3150

☒ course DS 3300

DESIGN OPTION 3

Landing Page

Ben Wetherby
Degree: B.A. Communications
Credits: 61

Current
audit

Explore
audits

A simple landing page. A quick summary is displayed with basic student info. users have two options, either click to view current audit or choose to explore audits. clicking on audit momentarily changes the button outline, providing user with feedback.

Audit Page

Print/pdf download
transfers user to a different page.

Return to landing page



Summary

CS Requirements

- Foundation
- Computer Interaction
- Electives

APR 2005

General

CS Requirements 6/10

Foundation: 2/2

- CS 3000
- CS 1000

Computer Interaction 0/1

Choose one of following

CS 2300 CS 2310 CS 2320

Guidesign

How many requirements have been fulfilled for entire section

courses completed for specific requirement

Completed courses are marked by a green icon.

hovering a mouse over a course number will reveal course name

When a number is clicked that course's description (taken from the course catalog) pops up below the requirement.

uncompleted requirement is left blank

Scroll to next page

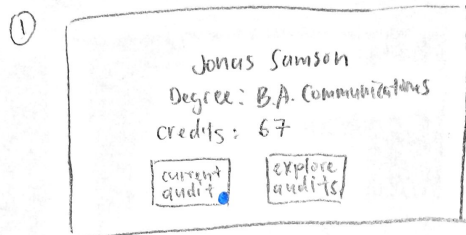
Clicking section advances to said section & reveals subrequirements

Scenario storyboard 1: determining how many courses left to graduate

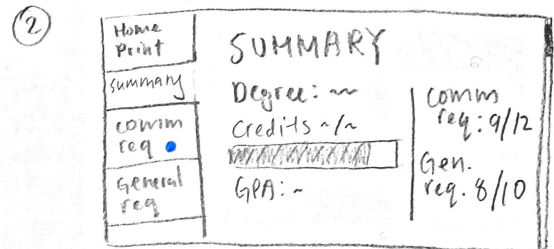
- where user clicks

Context

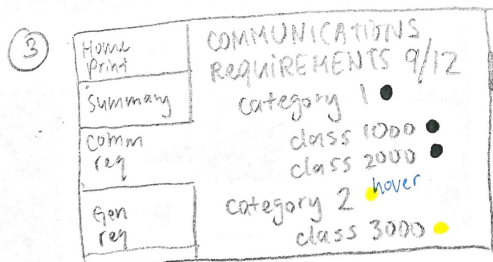
- on laptop
- navigated to webpage from myNortheastern portal



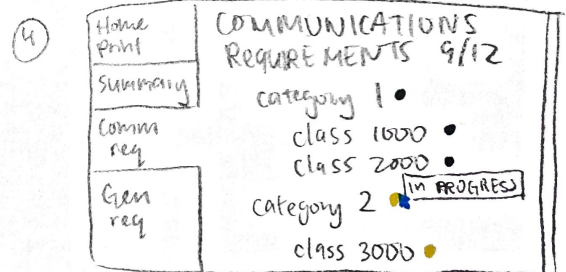
landing page that's customized for user, shows 2 options to continue



clicking "current audit" brings up this main page with summary dashboard and left-side menu



clicking a section on the left menu scrolls page down to a category of classes, with statuses labeled by color



hovering over a colored symbol brings up a tooltip with the definition

Scenario 2

①

Sean Smith
unexcused

current audit explore audit

audit landing page

②

EXPLORE

year

College

Program

Degree

Electrical

Environmental

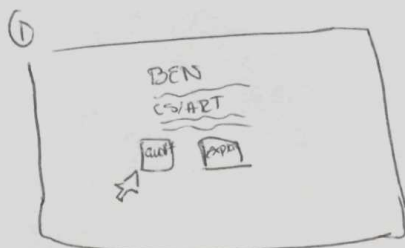
Explore page for
choosing potential audits.
user fills in categories
using a dropdown menu.

③

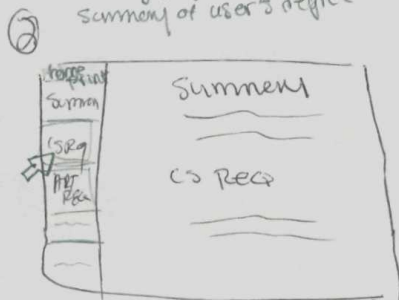
Summer	Transfer Credit 12
Ce	Approved
General	AP Math
	AP Writing
	AP Chemistry
Transfer Credit	Unapproved
	AP French

the user clicks on the
transfer credit section and can
see which AP courses are
approved for AP credit. the
user repeats this for each
degree option.

Scenario 3: Storyboard



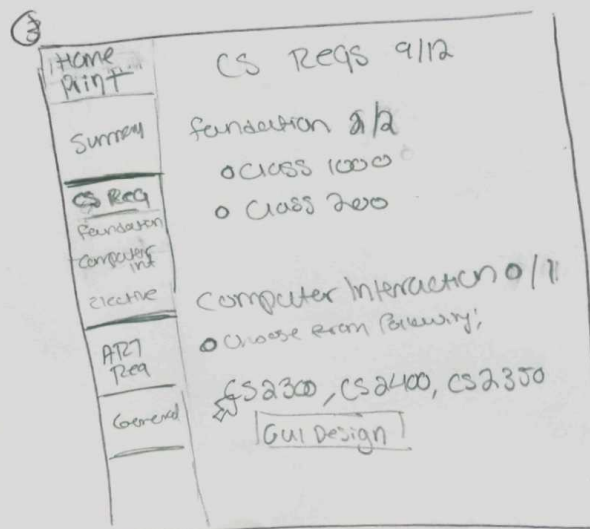
Landing page: Features a summary of user's degree



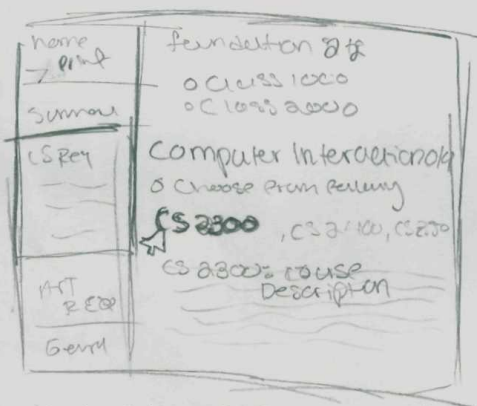
Audit page: side menu on left.

A more in-depth summary on top, followed by individual requirement sections

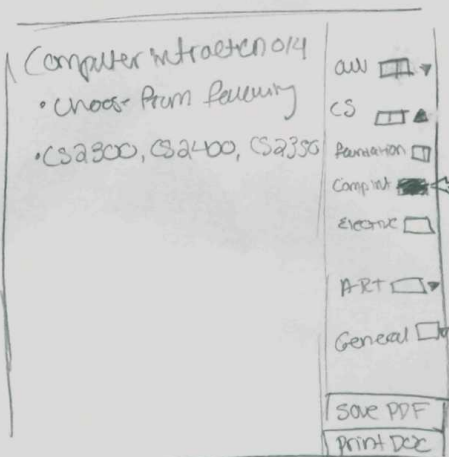
User clicks CS Req. section on left menu to advance to that section.



User has focused on CS section, choosing this section causes CS Req subrequirements to be seen on left. User hovers over course number to view the class title.



User clicks the course number and a course description from the course catalog appears under the class. The class is highlighted.



Users can press print on top left of audit page to be transported to the pdf/print stage. Users can choose what information to include in this document.