

17:610:512:01 Interaction Design

Project 2, Assignment 6: How the Prototype Meets User Needs

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Introduction:

User research and persona/scenario development identified various user needs with regard to a Mobile Course Registration App. From review and analysis of our user surveys, we've come to regard the following as the most pressing and universal concerns to be met in the design of our app:

- Ability to research, choose and register for courses all from within a mobile app
- Ability to see a dashboard listing all requirements toward a major / concentration, which courses have been completed, which remain to be taken, and which are available for registration in the current term
- Ability to register for an available course without leaving the dashboard area
- Ability to save a closed course section to be notified and/or automatically registered if and when a spot should open up in that section
- Similar functionality for: required courses in a major/concentration outside the Core, minor requirements and electives
- A Search function to choose electives by keyword rather than/in addition to course number
- Ability to see all currently registered courses with day/time, location, credits, instructor, etc. in one place and to drop courses from there

From our user research we developed the persona of Maya Gomez, an undergraduate Biology major. Through the following, we hope to describe how our prototype mobile app meets her needs and the needs of students like her.

Maya: A Student's Registration Process

We'll follow Maya through the process of choosing and scheduling classes for the Summer 2020 term.

First she sees the registration control panel from which she can see screens which show where she stands as far as her major core and required electives, minor, and non-major electives. As we will see, she can also register for available classes from within those screens.

The screenshot displays the Rutgers Course Navigator interface for student Maya Gomez (RUID 123-00-4567). The interface is organized into several sections:

- Navigation:** 'HOME' and 'LOG OUT' links are located at the top right of the header.
- Header:** The Rutgers logo and 'RUTGERS Course Navigator' are displayed in the top left.
- User Information:** 'MAYA GOMEZ: RUID 123-00-4567' is shown below the header.
- PROGRESS AND REGISTRATION:** This section is divided into three categories:
 - MAJOR Biological Sciences:** Includes 'Core Requirements' and 'Approved Electives', both with right-pointing arrow icons.
 - MINOR Cinema Studies:** Includes 'Required Coursework' with a right-pointing arrow icon.
 - OTHER Electives:** Includes 'Non-Major Coursework' with a right-pointing arrow icon.
- ENROLLMENT:** This section includes 'CURRENT SEMESTER Summer 2020' and 'All Currently Enrolled Courses' with a right-pointing arrow icon.

The first thing she wants to know is where she stands in her major. She hits the link for the Core Requirements screen under Biological Sciences.

The initial view shows all the required core courses for the major. The status area on the right of the screen shows which of these courses she has already completed, which she still needs to take, and of those, which are available for registration in this term.

The three buttons at the top can filter the view to show only Available or only Completed.

The image displays three screenshots of the Rutgers Course Navigator interface for the Major in Biological Sciences. Each screenshot shows the user's name (MAYA GOMEZ: RUID 123-00-4567) and the course status for various required and elective courses.

Screenshot 1: Core Requirements

Course ID	Course Name	Status
01:119:115	General Biology I	COMPLETED
01:119:116	General Biology II	AVAILABLE REGISTER
01:119:117	Biological Research Laboratory	COMPLETED
01:160:161	General Chemistry I	COMPLETED
01:160:162	General Chemistry II	AVAILABLE REGISTER
01:160:171	Introduction to Experimentation	COMPLETED
01:160:307	Organic Chemistry II	AVAILABLE REGISTER
01:160:308	Organic Chemistry I	COMPLETED
01:160:311	Organic Chemistry Laboratory	AVAILABLE REGISTER
01:447:380	Genetics	NOT AVAILABLE
01:540:135	Calculus I	COMPLETED
01:540:138	Calculus II	AVAILABLE REGISTER
01:750:203	General Physics I	AVAILABLE REGISTER
01:750:204	General Physics II	NOT AVAILABLE
01:750:205	General Physics Laboratory	AVAILABLE REGISTER
01:750:206	General Physics Laboratory	NOT AVAILABLE

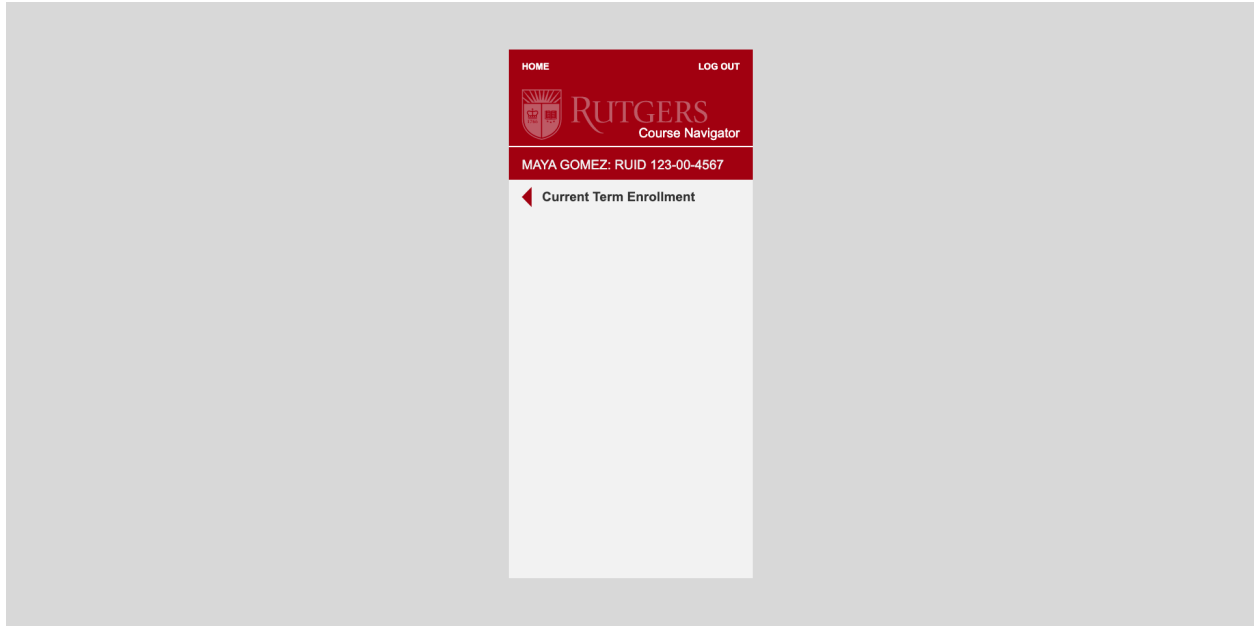
Screenshot 2: Approved Electives

Course ID	Course Name	Status
01:119:128	Anatomy & Physiology	AVAILABLE REGISTER
01:146:345	Fundamentals of Neurobiology	AVAILABLE REGISTER
01:146:356	Systems Physiology	AVAILABLE REGISTER
01:146:474	Immunology	AVAILABLE REGISTER
11:115:190	Intro Biochemistry	AVAILABLE REGISTER
14:125:201	Intro Biomedical Engineering	AVAILABLE REGISTER

Screenshot 3: Core Requirements (Filtered)

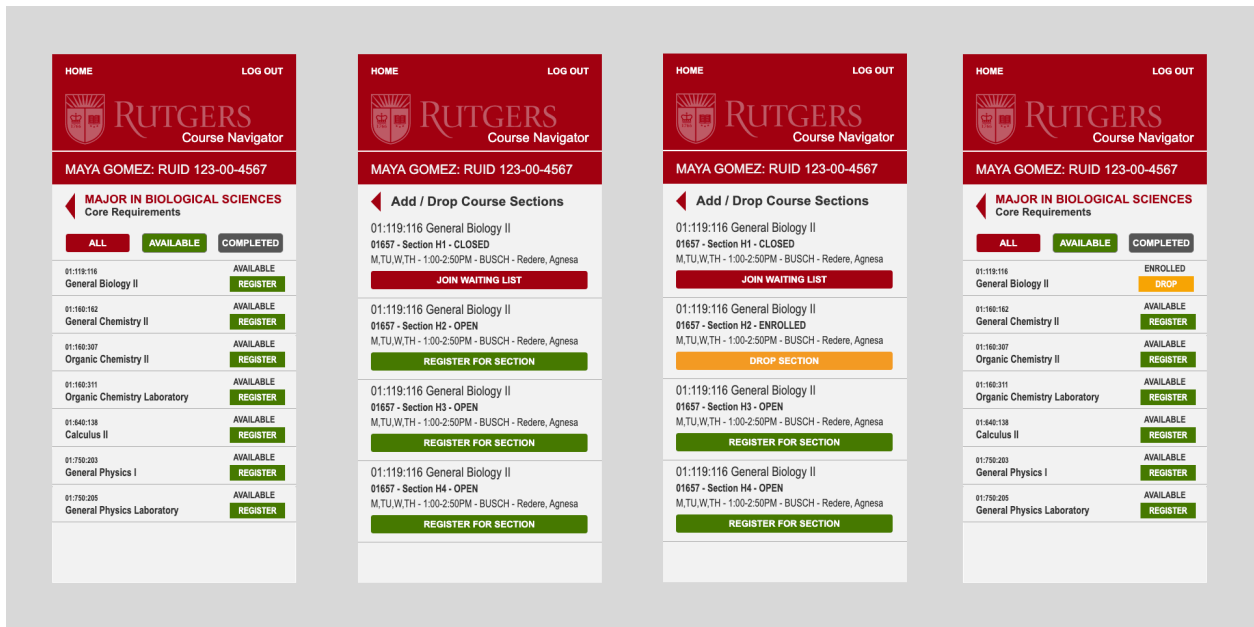
Course ID	Course Name	Status
01:119:115	General Biology I	COMPLETED
01:119:117	Biological Research Laboratory	COMPLETED
01:160:161	General Chemistry I	COMPLETED
01:160:171	Introduction to Experimentation	COMPLETED
01:160:308	Organic Chemistry I	COMPLETED
01:640:135	Calculus I	COMPLETED

After reviewing, Maya can now begin to choose some courses for the summer term. From the All Currently Enrolled Courses link we can see her current term is a blank slate.

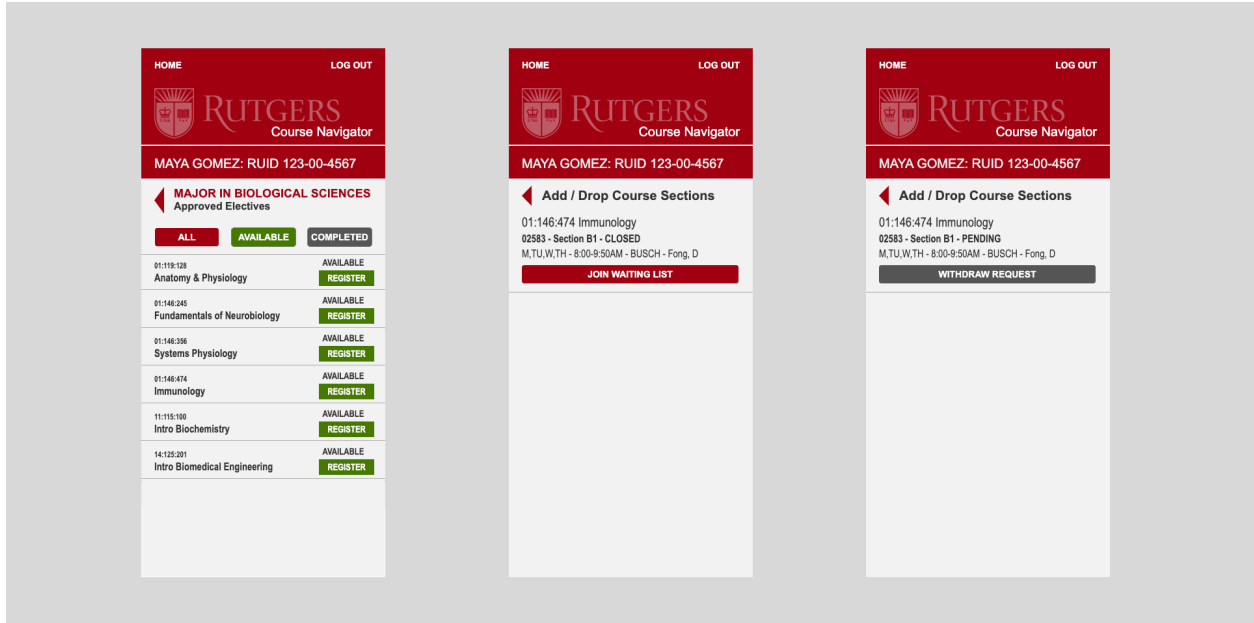


From the Core Requirements screen, she chooses General Biology II. Following the link, she finds four sections, three open and one closed, and chooses one of the open sections. After selecting, the section is marked as ENROLLED and now offers the option of dropping the class.

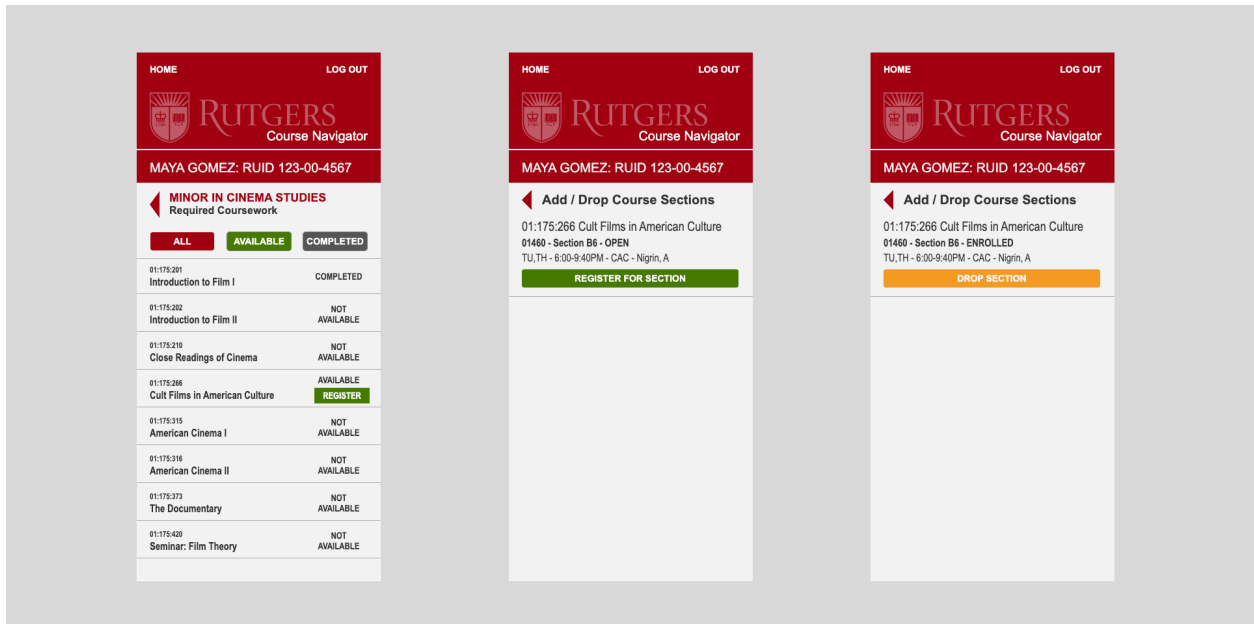
Returning to the Core Requirements screen, we can see General Biology II marked as ENROLLED.



The next step will be to enroll in a required elective for the Biology major. The Approved Electives screen brings up a list of elective courses that earn credits toward the major. From the Available view, Maya chooses Immunology, but finds only one closed section. She selects the Join Waiting list button, which enables her to be informed when space in the class opens. She has the option to remove herself from the waiting list by hitting Withdraw Request.

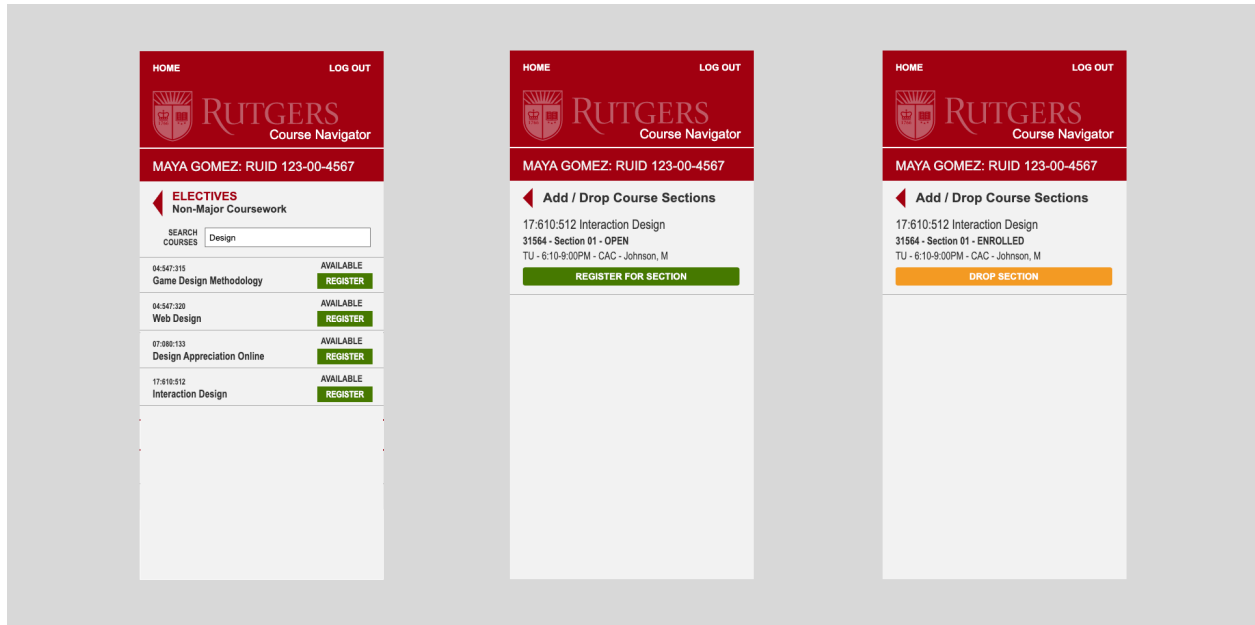


She repeats the process to choose a class within her minor of Cinema Studies. Like the major, all required courses for the minor are listed, and can be filtered to show Available and Completed.

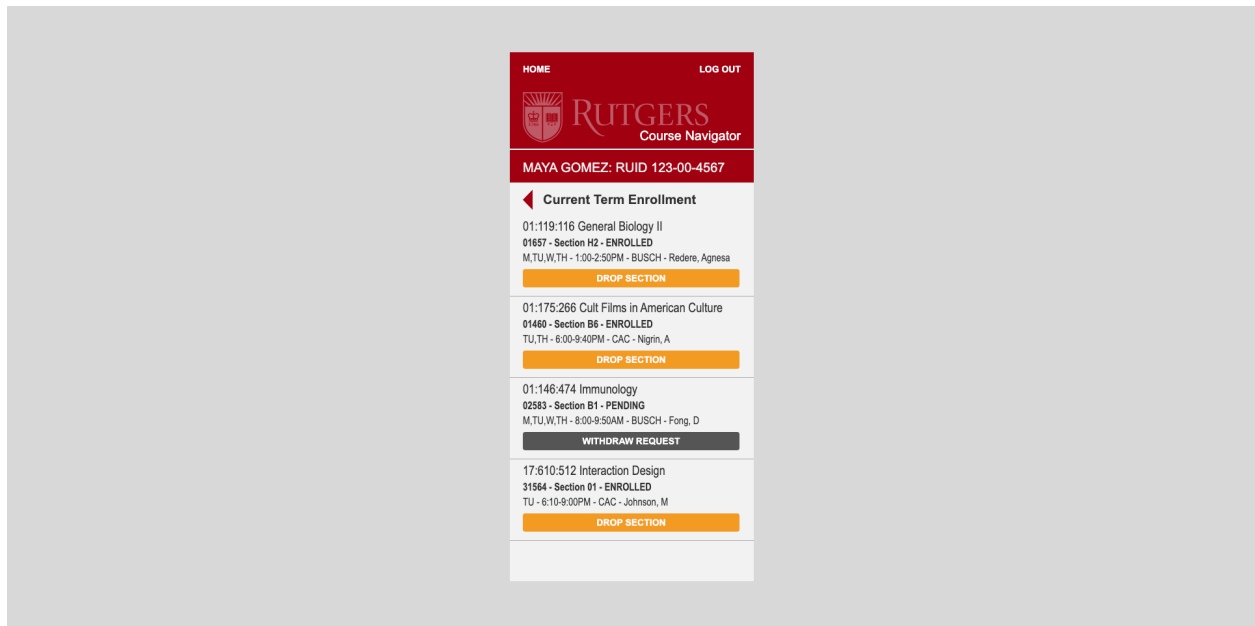


Finally, she will choose a non-major elective. Since the number of courses outside the major and minor areas is so large, the Non-Major Coursework screen functions by the use of a search bar, which can look up courses by text or course number.

Maya would like to try a design class and enters the keyword Design in the search. This brings up four available classes. She chooses one and registers for an open section.



Returning to the All Currently Enrolled Courses screen, we now see a full course load with three classes enrolled and one pending notice of an opening.



Conclusion

Though there are some features that may enhance the usefulness of our prototype, and feedback from user tests will reveal weaknesses and unmet needs, this iteration of the app seems to be headed in the right direction. Aside from any particular features, the key to an effective registration app design would seem to be bringing the information about the individual student and the university into one place. When this is accomplished, the course registration process can be an efficient, satisfying user experience.