

University of Florida

Department of Computer and Information Science and
Engineering

User Experience Design

(CEN5728) Fall 2022

Instructor: Benjamin Lok

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Project 2: Cycle 4

Teaching Assistant Assignment System (TAAS)

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Contents

1. Acknowledgement Form	2
2. User Personas, Needs, Scenarios, Storyboards	4
3. Taskflow	5
4. Wireflow.	10
5. Screenshots of the prototype.	5
6. YouTube Link.	10

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Participant Acknowledgement Form









CEN 4722 / CEN 5728 User Experience Design
Participant Acknowledgment Form

Submitted by:

Devang's Group: Devang Kale, Priti Gumaste, Omkar Parab, Sriram Karthikeya Valiyeti




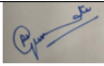
Participants: By signing this form, you acknowledge that you have participated in a focus group or user test for the above group related to the above course on the date indicated below. In addition, you acknowledge that you are aware that you are bound by UF's honor policy in signing this form to indicate that you have actually participated in a focus group or user test for the class as required.



Printed Name of Participant	Signature of Participant	Date of Participation	Printed Name of Participant	Signature of Participant	Date of Participation
Dr. Zhang Rong		10/28/2022	Lisha Zhou		11/10/22
Siddharth Batra		10/27/2022	Alexandre Siqueira		11/10/2022
Taher Mulla		10/27/2022	Annanya Vedala		12/2/22
Shashank Kumar		10/27/2022			
Amanpreet Kapoor		11/24/2022			



Group Members: please initial below to indicate that your group members acknowledge that you are aware that you are bound by UF's honor policy in students signing this form only if they have actually participated in a focus group or user test for the class as required.

(group members' initials)					
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User Personas, Needs, Scenarios, and Storyboards

User Persona 1

Baburao - The Busy Guy

"I wish I could apply to TAship as quickly as possible"

Demographics

Name : Michael Baburao

Age : 24

Role : PhD Student

Location : Gainesville



User Background:

- Baburao is a PhD student who is doing research under a Professor.
- He published multiple research papers.
- He wants to become a TA in courses related to his field.
- Doesn't know about the TAAS portal.
- He thinks by teaching students, he can learn a lot of new things.

Pain Points & Frustrations

- He has to email every professor to apply for TAship.
- Baburao is very busy with academics and has to followup with the professors via email about the application status
- Doesn't know where to get the requirements for TA applications.

User Needs Statement

- Baburao a PhD student needs to find information about the TA application process in one place so that, he doesn't have to spend a lot of time on it.

According to new research ... (Nichita, 2017)
In research from Nichita ... (2017)

Scenario and Storyboard for Persona 1

Scenario:

Baburao is a Ph.D. student interested in Machine Learning and currently works as a Research Assistant. He wishes to become a Teaching Assistant because he believes the best way to learn new things is by teaching. He starts looking for assistantships by cold-emailing professors, but to no avail. Frustrated, Raj consults the student advisor. The advisor tells Raj about the TAAS portal, where Raj can search for open assistantship positions, make applications and get updates about his application. Raj is happy that he can now use a one-stop application to get assistantship offers.

PERSONA: Baburao

USER STORY/SCENARIO: Doesn't know about TAAS



Babubrao, a PhD student is looking for assistantship opportunities.



He is reaching out to professors by writing emails for open positions.



Baburao reaches out to his advisor for help with applying to TA roles.



He applies for the roles on the TAAS



He gets the assistantship that he wanted, get notifications and emails from the portal



Time to celebrate

PAGE #

PROJECT/TEAM:

DATE:

STORYBOARD NNGROUP.COM

(Storyboards Help Visualize UX Ideas, n.d.)

User Persona 2

Maria - The Guru

"I wish I knew the real time status of my applications."

Demographics

Name: Maria Mohan
Age: 23 years old
Role: Master's Student
Location: University of Florida, Gainesville.



User Background

- Maria is a masters in computer science student.
- She is a coding enthusiast.
- She is looking for assitantship this semester because she loves teaching.
- She has applied to assistantships on the TAAS portal.

Pain Points & Frustrations

- Maria has applied to assitantship for 3 courses.
- She is not aware about the status of her applications.
- She does not know whom to reach out to.
- Her application status just says as submitted.

Needs & Goals

- Maria a Graduate Student needs to know her application's status as soon as possible so that she can refresh her memory in the courses that she gets the job .

McCarthy, A. (2020, October 9). man in brown leather jacket smiling. Unsplash.

<https://unsplash.com/photos/RGKdWJOUFH0>

Scenario and Storyboard for Persona 2

Scenario:

Maria is a graduate student at the University of Florida. She is tech-savvy and loves to teach. Excited about the prospect of becoming a teaching assistant, Maria makes multiple applications on TAAS Portal using one single application form. She keeps waiting for a response but to no avail. Maria wishes there was a way to keep track of her applications individually and to see updates regarding the status of each of her applications. Maria finds that the TAAS Portal has a “Recent Updates” section where she can track her applications. There, she learns that one of her applications has been processed and she is approved as a TA. She likes this usability feature very much.

PERSONA: *Maria*

USER STORY/SCENARIO: Worried about her application status



Maria is tech savvy person, who wants assistantship as she loves teaching.



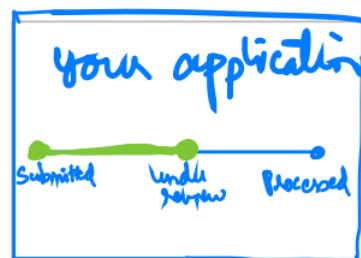
She has applied for the role.



She is worried about how long it will take to hear back from them.



Maria logs in to the portal and checks for the updates.



She can now see status of her application directly on the portal



She gets the assistantship. She's partying

PAGE #

PROJECT/TEAM:

DATE:

STORYBOARD NNGROUP.COM

(Storyboards Help Visualize UX Ideas, n.d.)

User Persona 3

Andrea - The Multitasker

"It is frustrating to navigate multiple pages of the application to get a small task done"

Demographics

Name : Andrea Singh

Age : 35

Role : Manager of TA Portal

Location : University of Florida
Gainesville.



User Background

- Dr. Andrea is the admin of the TA Portal
- She manages the communication between students and professors after they apply for a TA position.
- She has a busy schedule and likes to process things in an orderly, neat fashion

Pain Points & Frustrations

- Dr. Andrea has to manually send out emails to students regarding their application status, and finds it repetitive to do so
- Dr. Andrea does not like the overall interface of the TAAS application
- She finds it extremely hard to navigate around the application

User Needs Statement

- Dr. Andrea is the admin of the TA Portal and needs a more responsive, usable application to make her job easier

According to new research ... (Liverani, 2019)
In research from Liverani ... (2019)


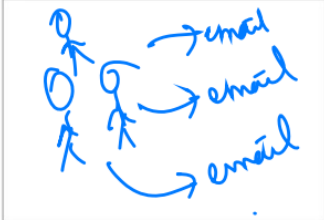

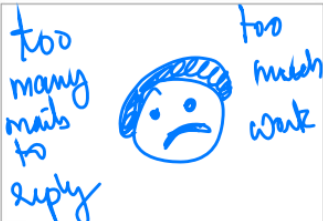
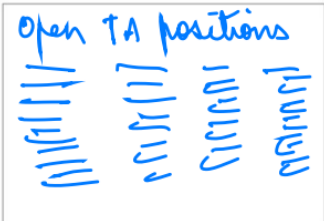

Scenario and Storyboard for Persona 3

Scenario 3:

Dr. Andrea is the admin of the TA Portal and is tasked to manage and process every TA application she receives on the portal. Dr. Andrea is frustrated by the fact that she needs to navigate a lot for doing simple tasks on the portal, and does not like the experience of the portal in general. She also finds it hard to email every single student about their application status, as well as answer queries about assistantship availability.

PERSONA: **Andrea**

USER STORY/SCENARIO: **Is fed up of navigating through multiple screens**

		
Andrea is the TA Admin and handles everything related to TAAS application	She receives multiple emails from students enquiring about the TA position	She needs to reply to all the emails manually, which increases her workload
		
Andrea is frustrated with the amount of emails she gets, which piles upon her already busy schedule	Students can now see a list of openings in the application once Andrea uploads relevant documents	Andrea's workload is reduced considerably, and her inbox is not cluttered anymore. She is happy

PAGE #

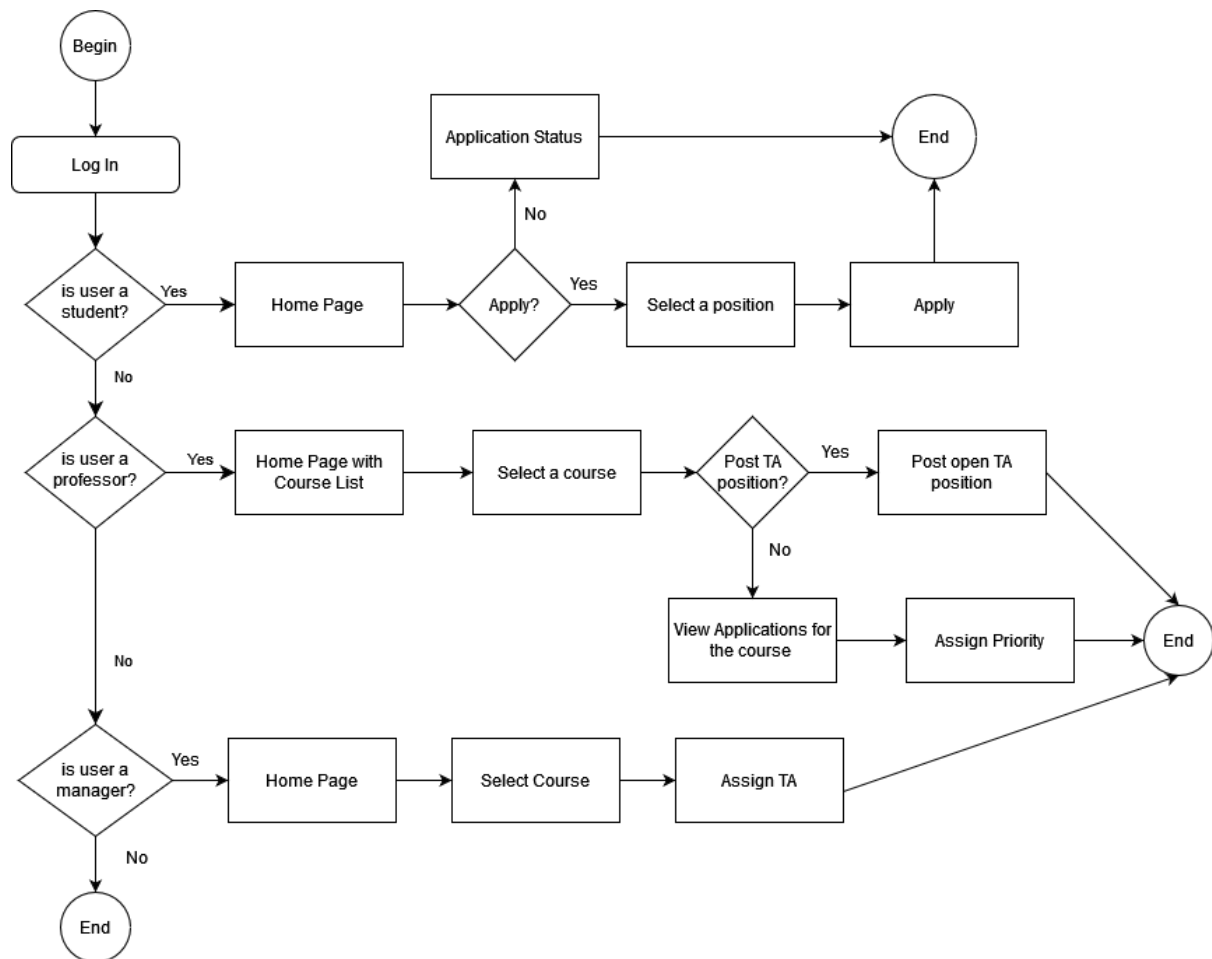
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(Storyboards Help Visualize UX Ideas, n.d.)

Task Flow

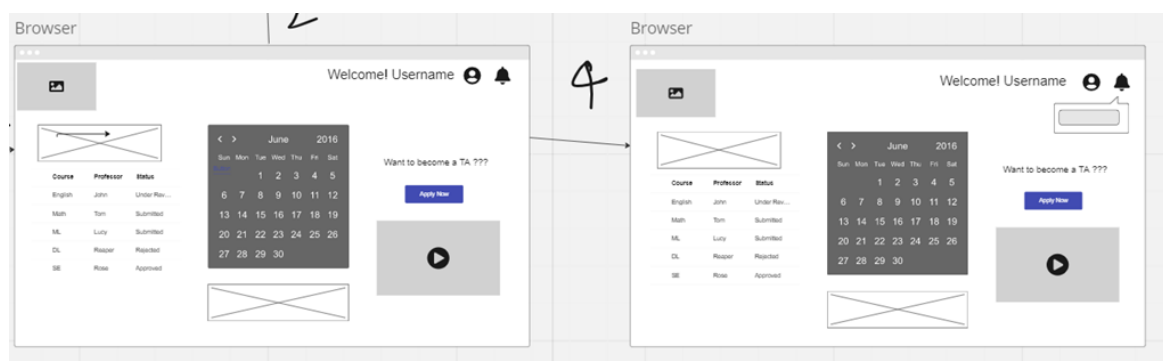
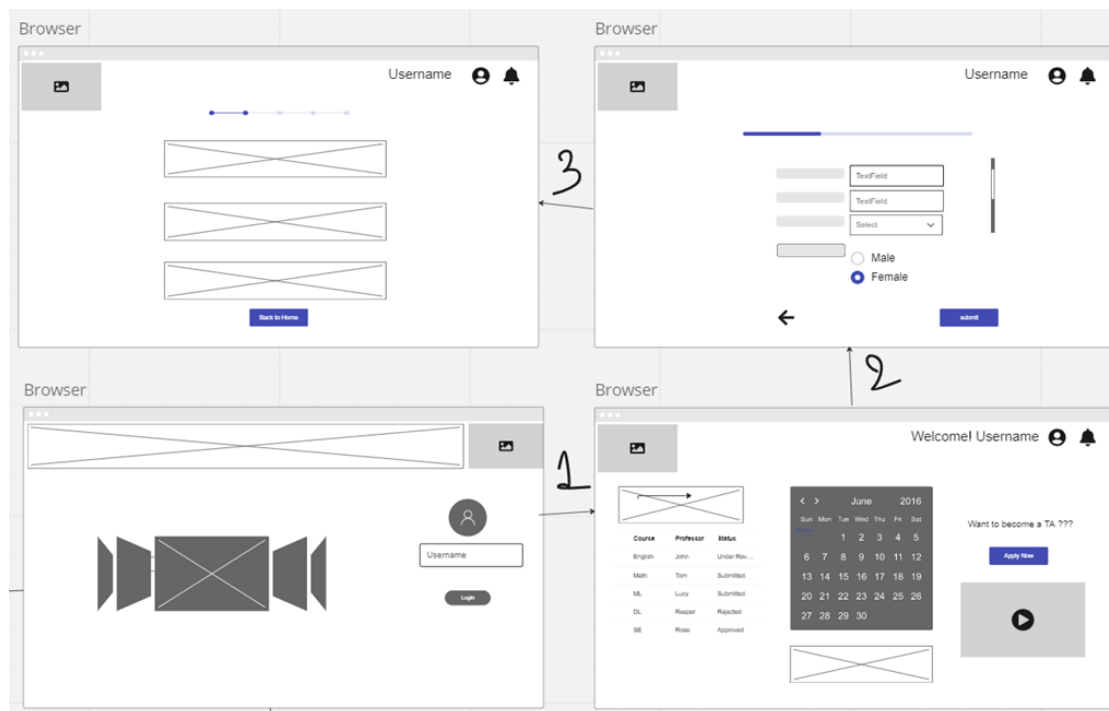


Design 1

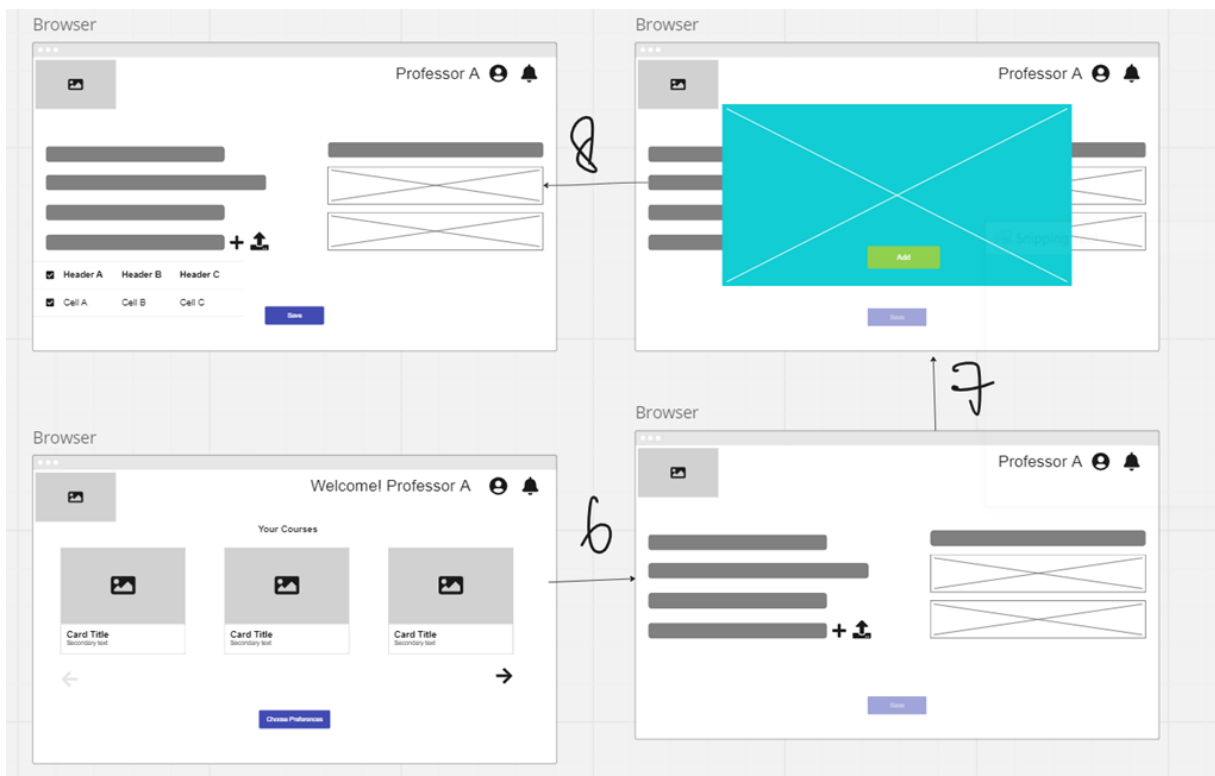
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Wire Flow

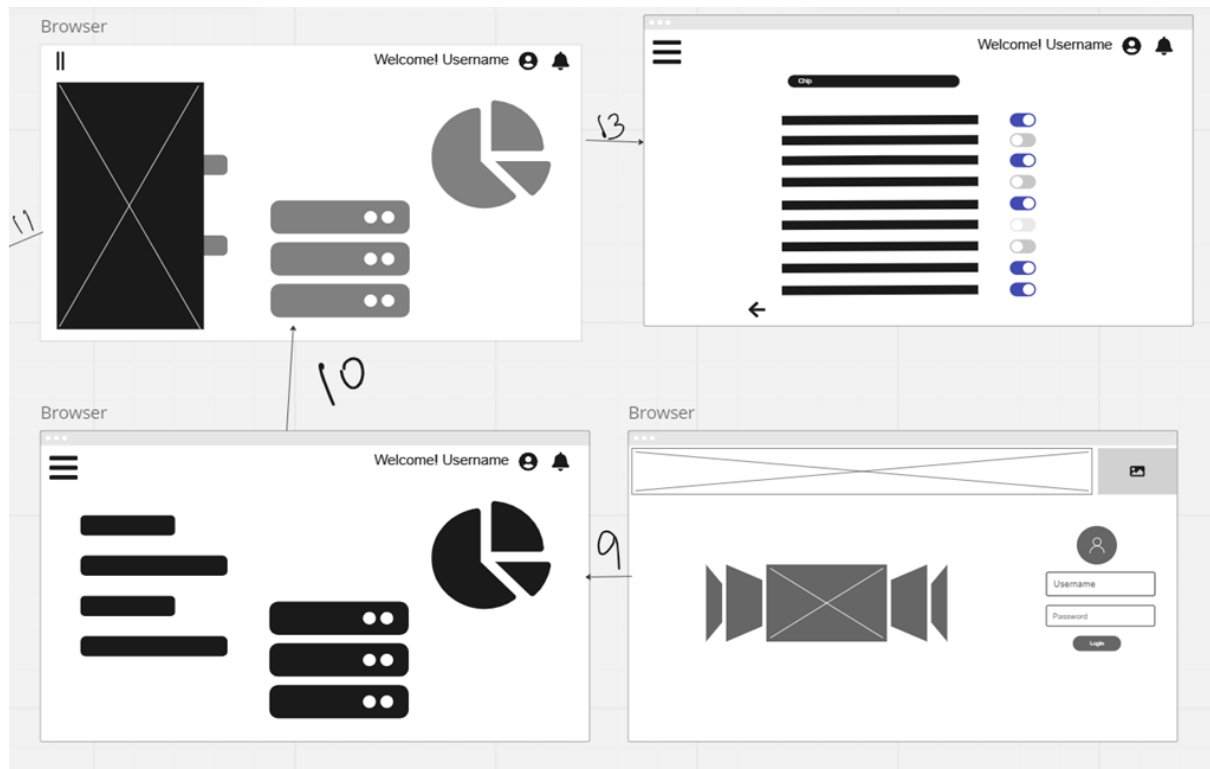
1. When a student clicks login, he is taken to the student home screen, which has a calendar with deadlines, a video on how to apply, the status of his application, etc.
2. Student clicks on the apply now button
3. Student fills out the form and clicks on the Submit button
4. When the Student clicks on the notifications button, he can see all notifications in a small popup in the top right corner

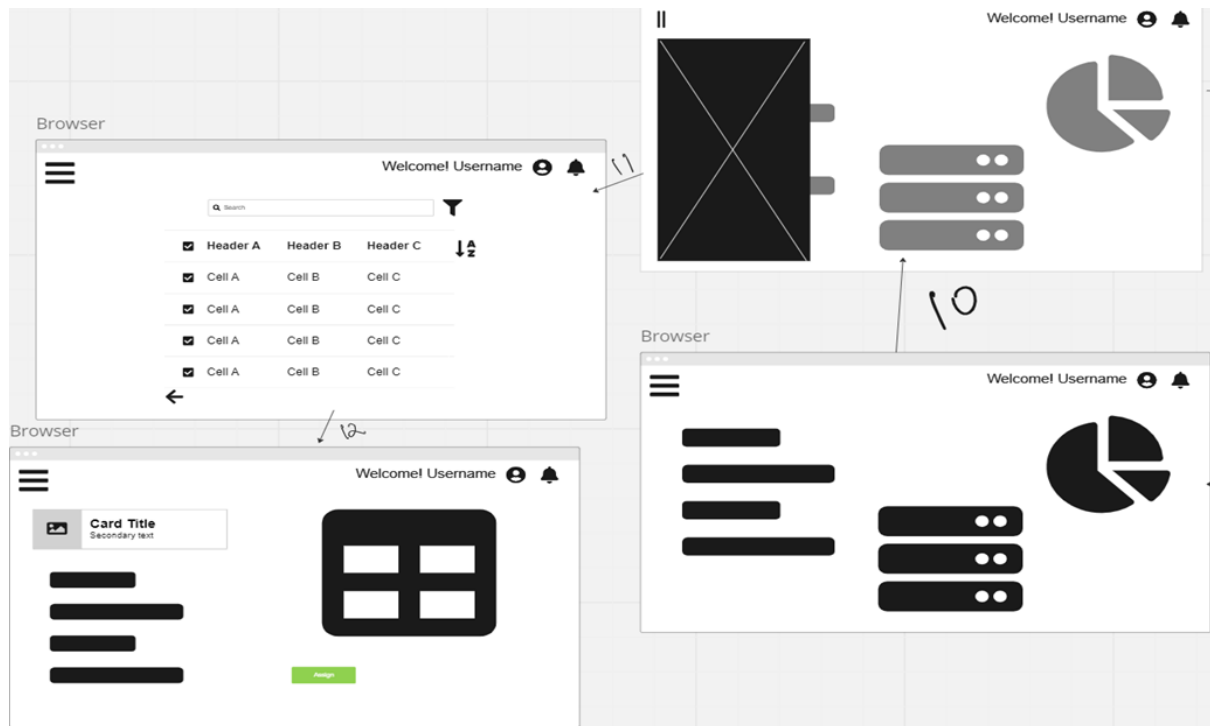


5. Professor Logs in
6. Professor clicks on Choose preferences or double clicks on any course
7. Professor clicks on the plus or upload button to add students to his preferences
8. Professor clicks on add; he can see the changes on the screen as a list format



9. Admin logs in
10. Admin clicks on the hamburger menu to see a list of actions they can perform
11. Admin selects assign courses to students
12. Admin accepts/ rejects applications, makes assignments, etc., and saves
13. Admin selects configuration from hamburger to see a list of configurable options.





Design Rationale:

1. Added back buttons wherever necessary to make it easy for the user to undo or go back from any screen
2. Added status indicators to specific processes
3. Added visual cues to show pending tasks
4. Used video as a tutorial for first-time users
5. Used lists, tables, and pie charts to show information since users disliked text-heavy designs

Design 2

User Flow

Student

1. Students login into the portal using Gatorlink and password and are directed to a page that lists open TA positions.
2. Students click the apply button on one of the open positions and are directed to an application form.
3. After clicking the submit button, the student gets directed to the application status page.

Professor

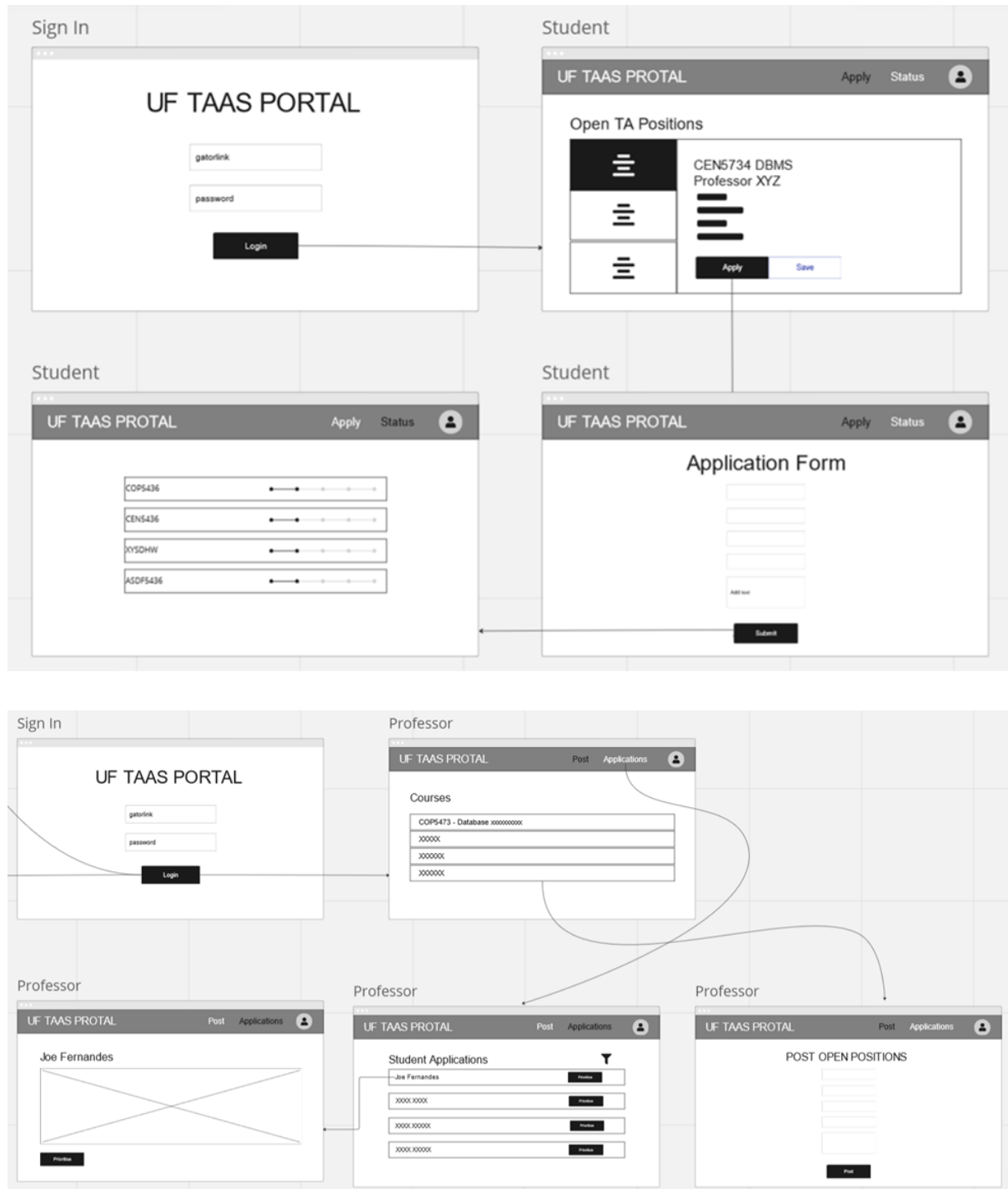
1. Professors log into the portal using the gator link and password and are directed to the course list page where they can view all the courses they will teach.
2. Professor selects a course and fills out a form to post TA open positions on the application.
3. Professors can view the list of applied students on the applications tab.
4. The professor clicks on the student's name, and it's directed to the student detail page.
5. Professor can view student information and prioritize the student.

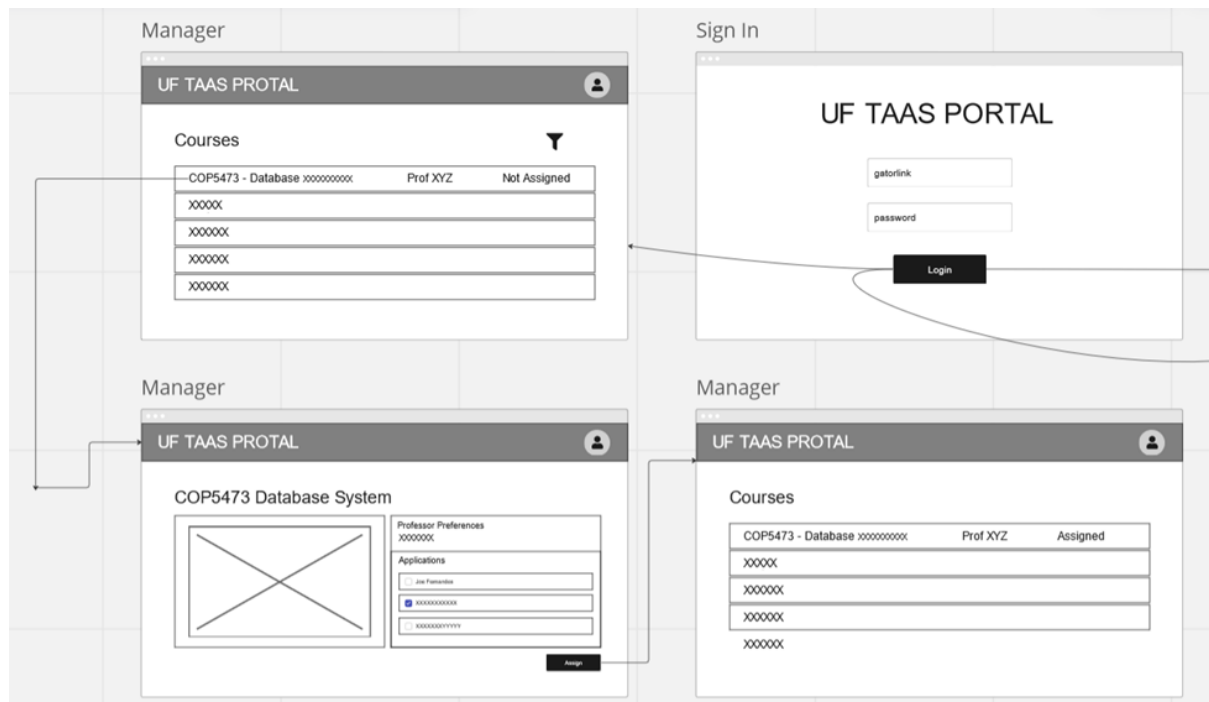
Manager

1. Manager logs into the portal using the gator link and password.
2. The manager can see the course list and the professor's name.
3. Manager clicks on any course and is directed to the course details page.
4. Managers can view the preferences of professors and students.
5. Based on the preferences manager can assign the TA position to any student.

Wire Flow

https://miro.com/app/board/uXjVPF_QvM0=/?share_link_id=82918748046





Design Rationale:

User Type: Student

1. Added Status and Apply tabs so users can toggle back and forth from the top navigation bar.
2. Divided the Open TA list window into two, so the user can view TA position details then and there without being directed to another page.
3. Added Step Progress Bar on the status page so that users can track the status of each application.

User Type: Professor

1. Added Post and Applications tabs so users can toggle back and forth from the top navigation bar.
2. Added a filter option on the Applications Page so that users can filter applicants based on courses or other factors.
3. Added a prioritize button beside each applicant so that users can prioritize an applicant without going through the applicant's details page.

4. Added a prioritize button inside the details page if the user chooses to go through the applicant's details and then prioritize.

User Type: Manager

1. Added Filter on Course List Page so that manager can filter courses based on various factors.
2. Status (Assigned or Not Assigned) present beside each course in the course list.
3. Users can simultaneously view course details, Professor preferences, and student preferences on the Course Details Page.

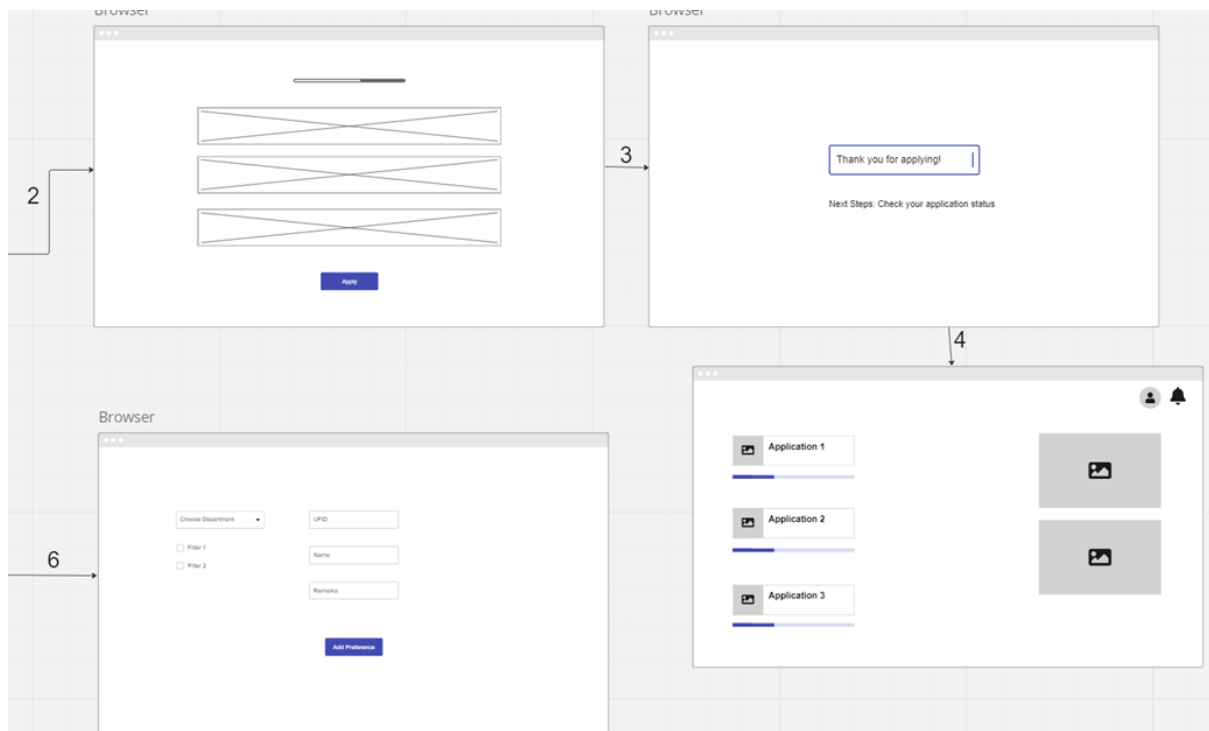
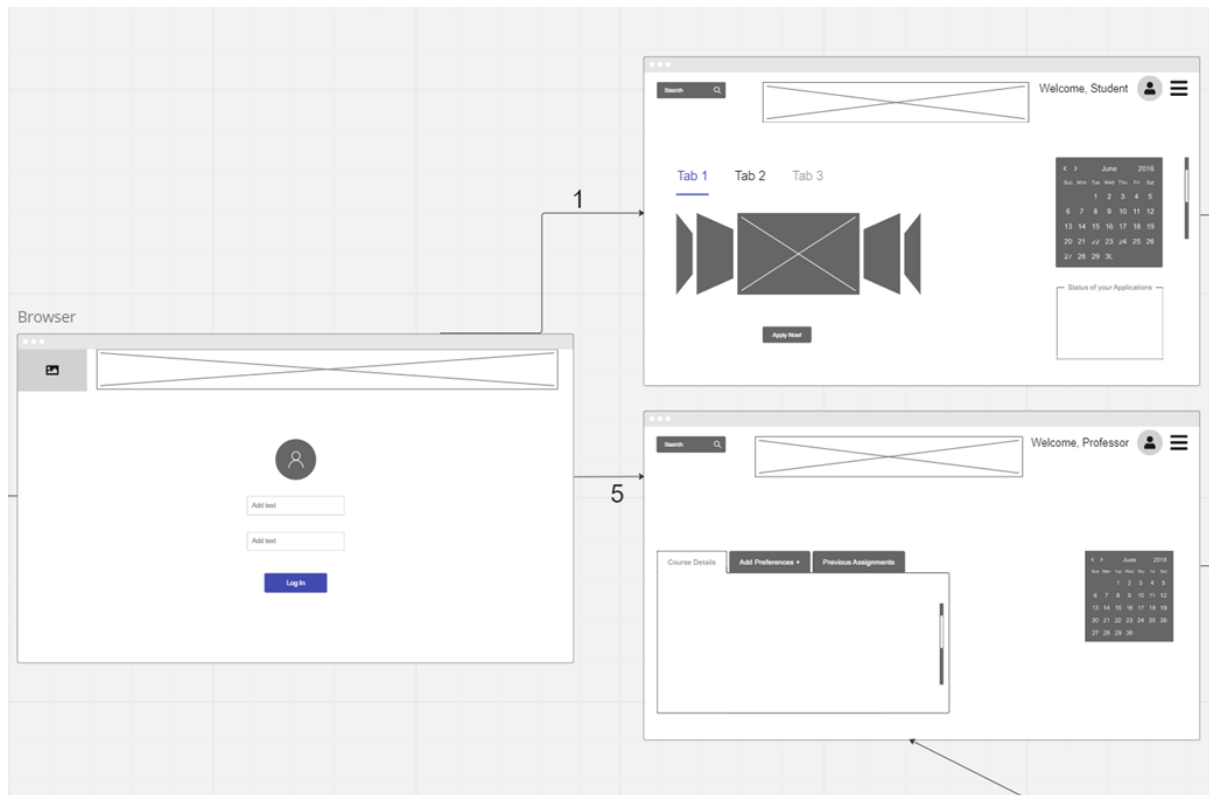
Design 3

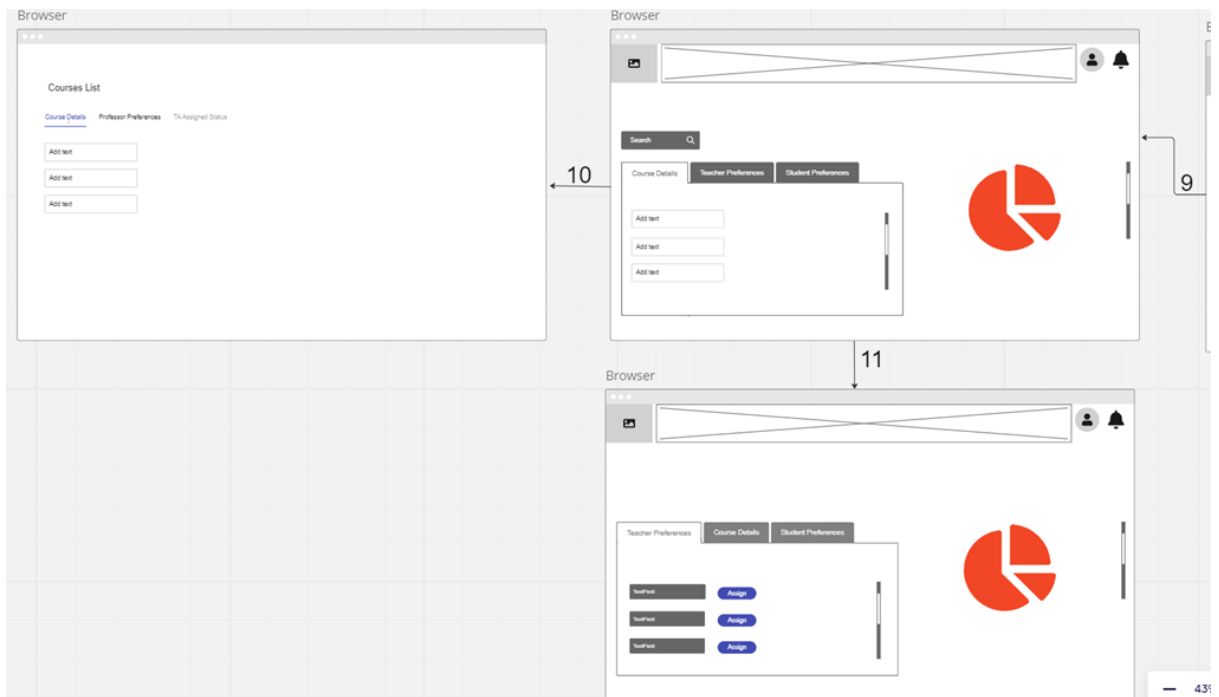
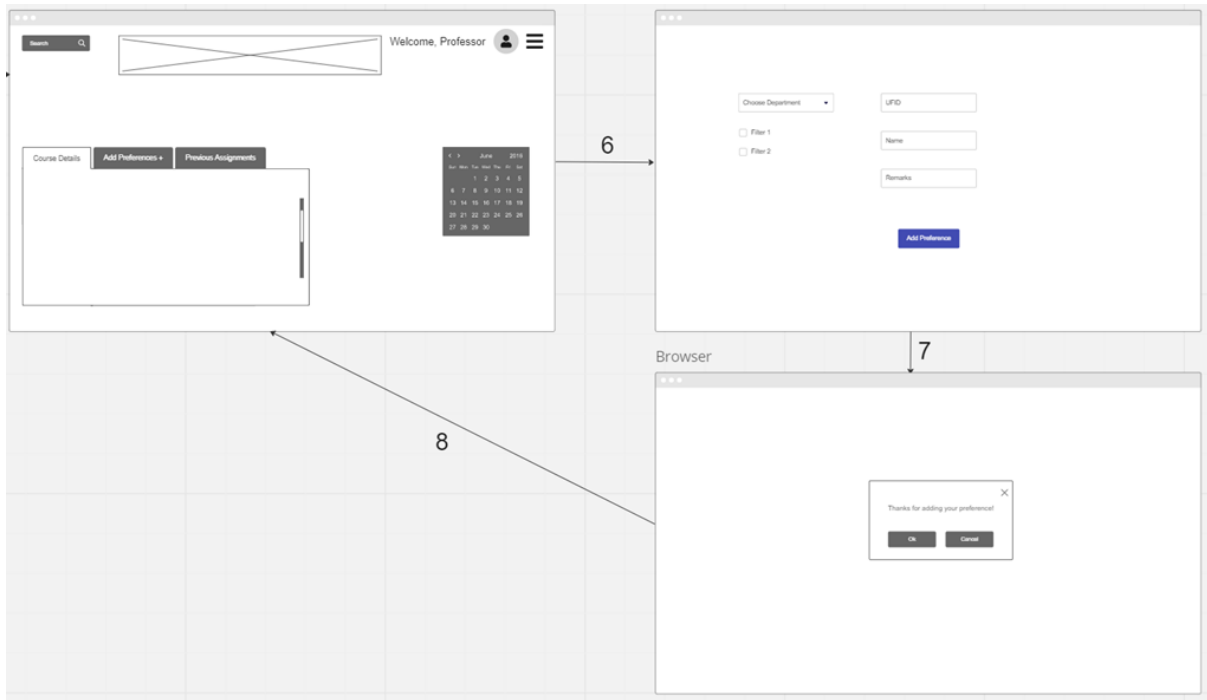
User Flow

1. Student logs in and sees a home screen where he can see multiple openings for TA, an Apply Now button, and the status of his applications.
2. On clicking Apply Now, he fills out details and chooses to Apply.
3. Next, he'll see a Thank you for applying screen from where he is redirected to check the status of his application.
4. On clicking check status, the student can see the status of all his applications individually.
5. Professor logs in and can see course details, add preferences, and his previous assignments.
6. Professors click on Add Preferences and adds their preference
7. Thanks for adding your preference.
8. Professor is redirected to the dashboard.
9. Administrator view, admin can log in and see course details and professor and student preferences.
10. On clicking a course, the admin can see course details, professor preferences, and TA Assigned Status.
11. On clicking Teacher Preferences, show the professor's preferences and Assign TA accordingly.

Wire Flow

https://miro.com/app/board/uXjVPF_76eA=?share_link_id=266352588120





Design Rationale:

User Type: Student

1. Added a Carousel so the student can browse through open TA Positions by sliding over each card and viewing them quickly.
2. Added an Apply Now button right below the carousel so the student can apply directly when he finds an exciting position.
3. Added a Calendar showing important application deadlines the student should follow.
4. Added a Card Based Application Status that shows the progress of every individual application.

User Type: Professor

1. Added a calendar showing important deadlines.
2. Used a Tab Based Design where the professor can easily see their courses, add preferences and check their previous TA assignment since it is organised in a Tab-like structure.

User Type: Manager

1. Added a pie chart depicting TA assignments Completed and TA assignments Pending to navigate work done and work yet to be done quickly.

Figma link to the prototype:

<https://www.figma.com/file/4C2IOuZPFgnZFRqiDKpN3S/Untitled?node-id=0%3A1&t=Ob9aKUAistg1rkcG-1>

Description of what the prototype is doing:

1. First, we have a Login Page where the user can input a username, password, and the Role assigned to that specific user (Manager, Professor, Student).
2. Once the user makes the selection, he will be directed to the home screen of that particular role.

Manager Role:

1. The manager can see all students who have applied for the course and can search and filter based on criteria.
2. The manager can click on Assign in the Navbar to Assign a particular student to a TA position for a particular course
3. The manager can also see the courses list and check which courses have been assigned a TA and which have not

Professor Role:

1. The professor comes to a home screen where they can see the courses they are currently teaching, whether they have added their preferences or not, and TA Assignment Status as Complete or Incomplete
2. Once a professor clicks on a course, it will show up the Course Details Tab, Add Preferences Tab (in case preferences have not been added yet), Current Assignments Tab (once TAs have been assigned), and Previous Assignments Tab.
3. Post a Position on the navbar allows the Professor to post a TA position taking into account the specific requirements that the Professor needs for the position.
4. Applications on the navbar allow the Professor to check all students who have applied for the particular TA position for the respective subject.
5. Clicking on a student enables the professor to view the complete Student Profile page of the student, allowing the professor to make a better decision while choosing preferences.

Student View:

1. The student view shows the student Open TA Positions along with a description of the selected position on the right.
2. The student has two options: Apply and Save. Apply allows the student to apply for the specific TA position and Save allows the student to save the position for future reference.
3. The Navbar provides a Status nav link that takes the student to a page where he can see the status of all TA positions he has applied to. This allows the student to track the application progress in an easy manner.

Updates made to the prototype from the previous version:

1. Removed the button to avoid redundancy
2. Added switch roles for every screen when we click on the profile icon to allow users to change roles.
3. Added more relevant data fields in each screen

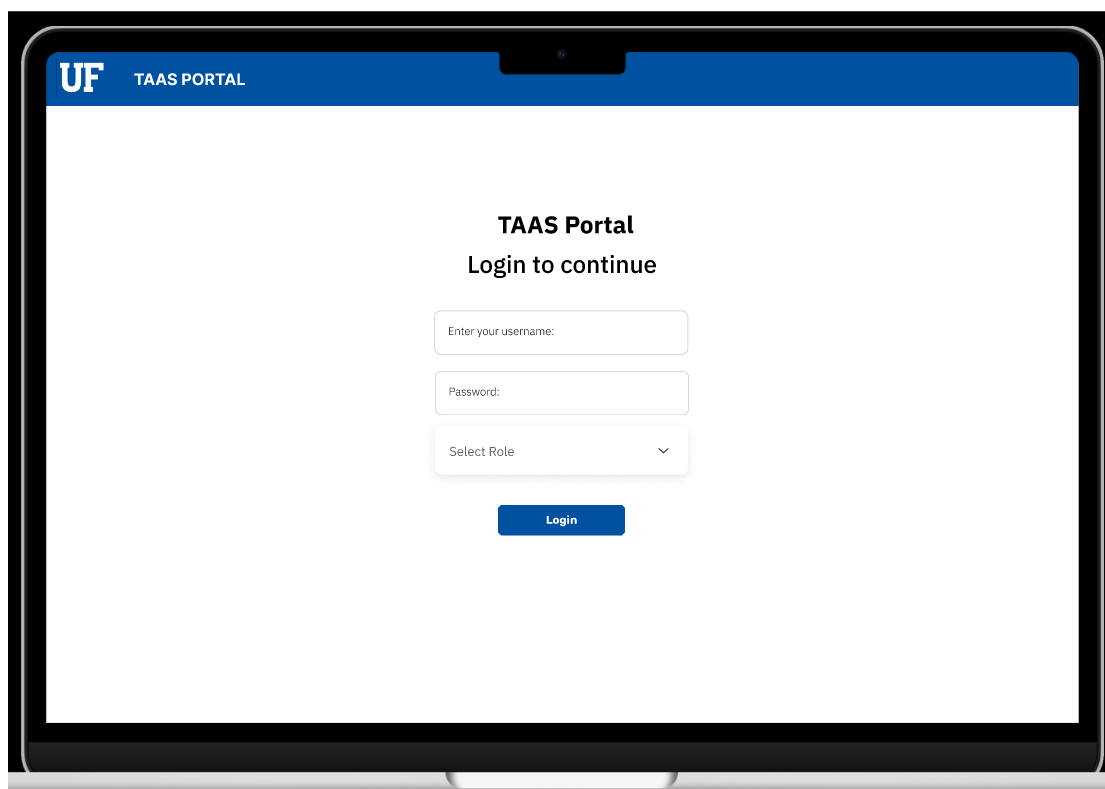
YouTube link:

<https://youtu.be/zhLHE7P9pEo>

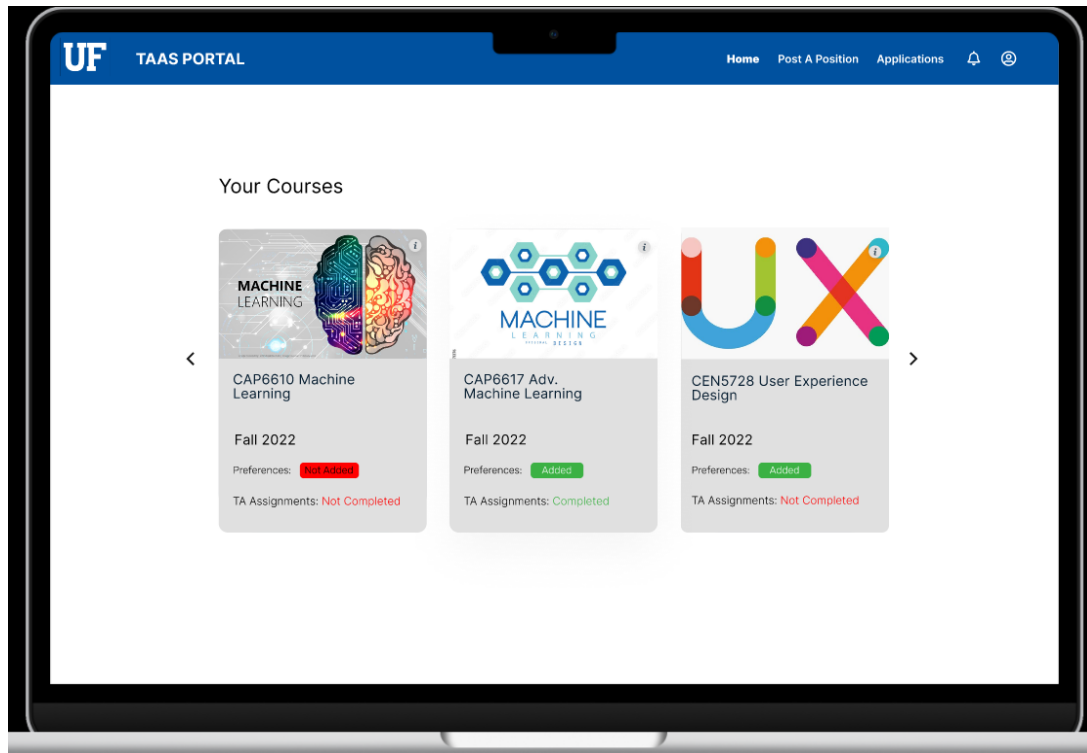
This video contains a walkthrough of the final design prototype along with the client feedback.

Some screenshots of the prototype:

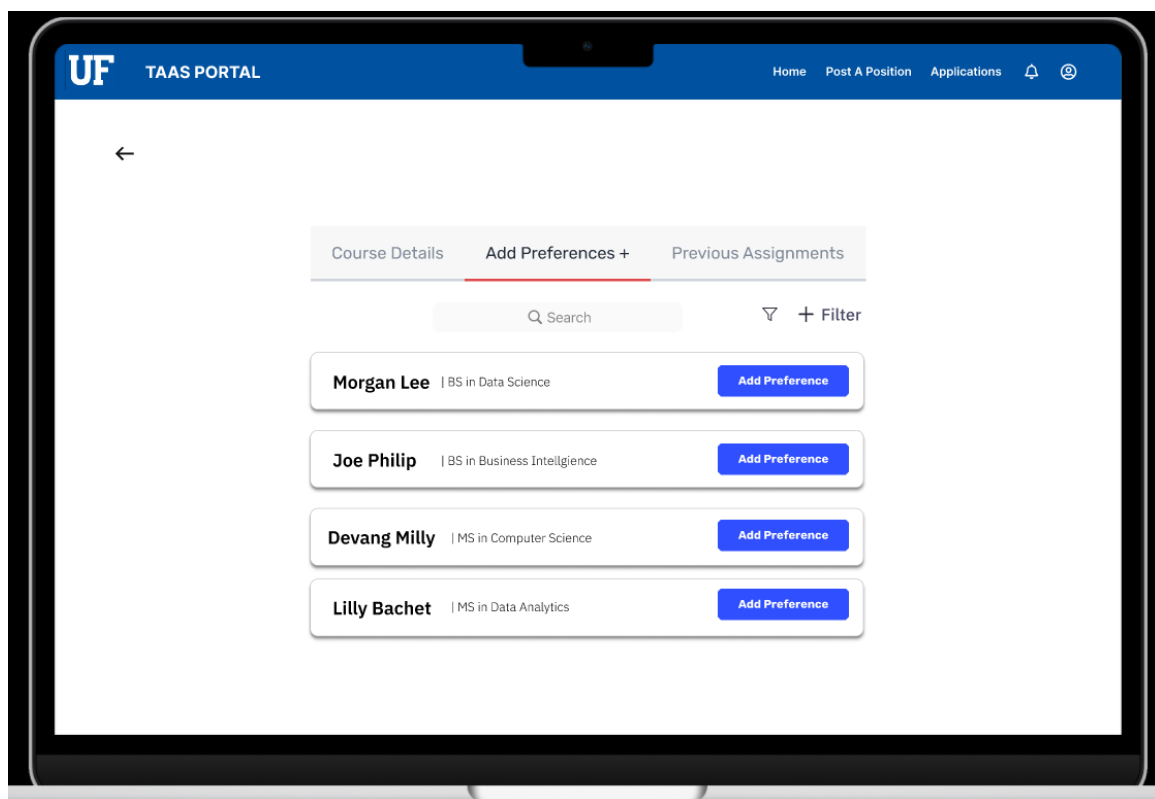
Login page of TAAS portal:



Professor point of view of the portal:

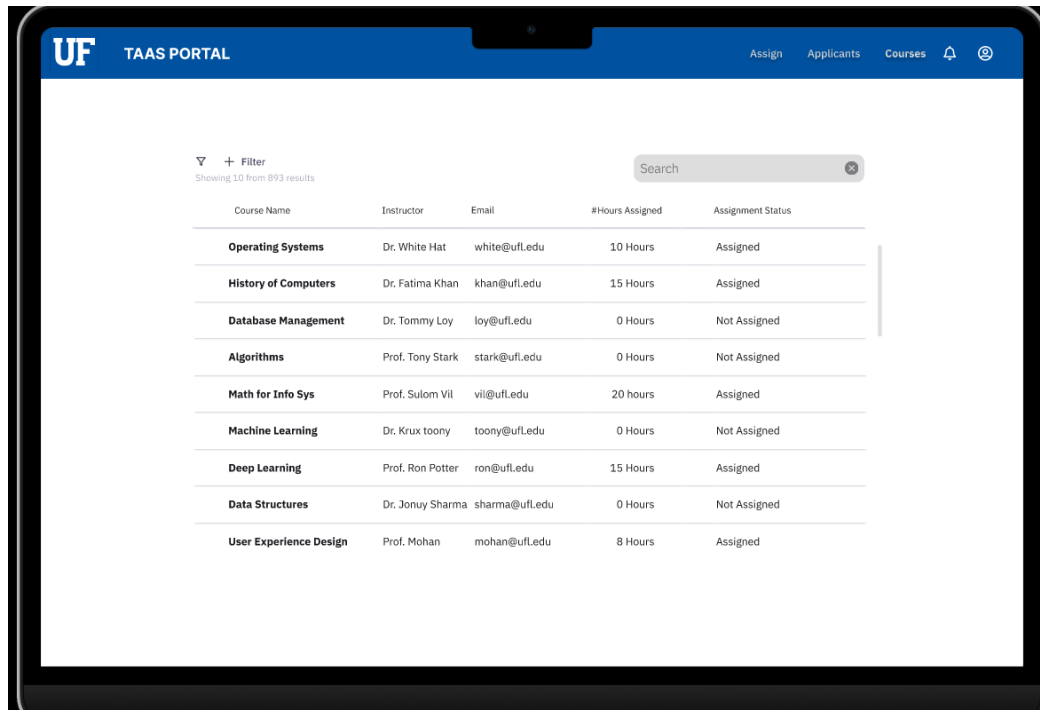


Professor can view the details of the students and add them as the preferred student:



Manager point of view of the portal:

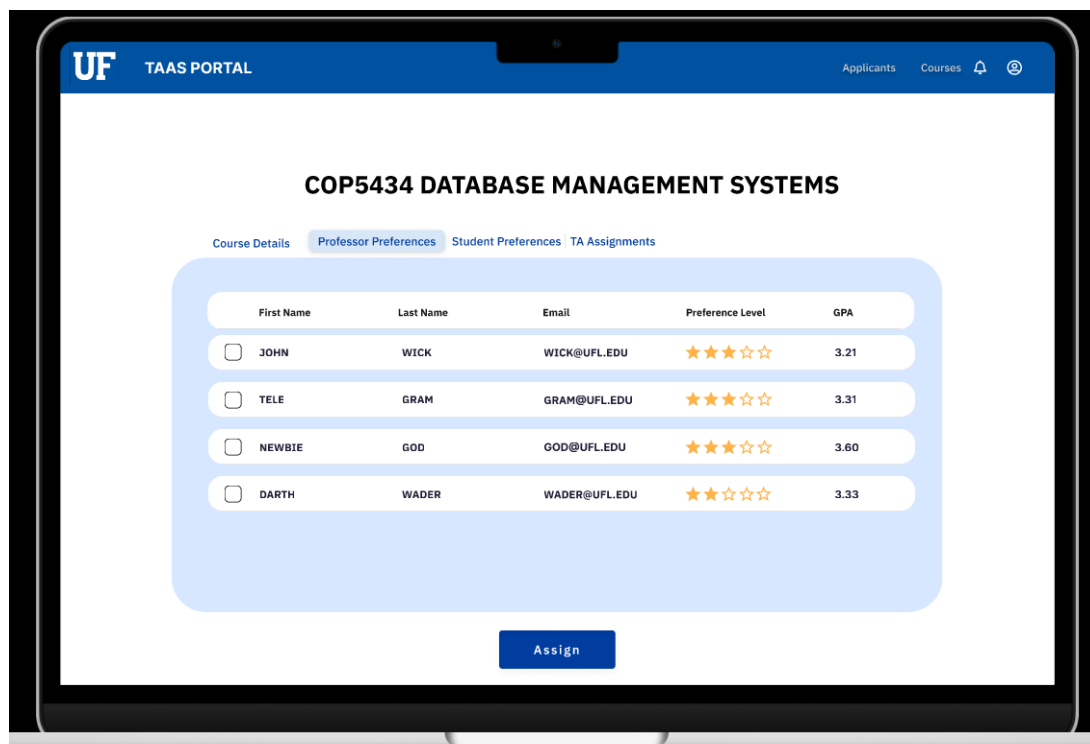
Manager can see all the details from the database such as the course name, Professor details, Number of hours assigned and the TA assignments done so far.



The screenshot shows the 'TAAS PORTAL' interface. At the top, there's a navigation bar with 'Assign', 'Applicants', 'Courses', and a notification bell. Below the header, there's a search bar and a filter icon. The main content is a table with 5 columns: Course Name, Instructor, Email, #Hours Assigned, and Assignment Status. The table lists 10 courses with their respective instructors and assignment statuses.

Course Name	Instructor	Email	#Hours Assigned	Assignment Status
Operating Systems	Dr. White Hat	white@ufl.edu	10 Hours	Assigned
History of Computers	Dr. Fatima Khan	khan@ufl.edu	15 Hours	Assigned
Database Management	Dr. Tommy Loy	loy@ufl.edu	0 Hours	Not Assigned
Algorithms	Prof. Tony Stark	stark@ufl.edu	0 Hours	Not Assigned
Math for Info Sys	Prof. Sulom Vii	vii@ufl.edu	20 hours	Assigned
Machine Learning	Dr. Krux toony	toony@ufl.edu	0 Hours	Not Assigned
Deep Learning	Prof. Ron Potter	ron@ufl.edu	15 Hours	Assigned
Data Structures	Dr. Jonuy Sharma	sharma@ufl.edu	0 Hours	Not Assigned
User Experience Design	Prof. Mohan	mohan@ufl.edu	8 Hours	Assigned

Admin can see the Professor and the Student preferences of the course and assign TA's accordingly -



The screenshot shows the 'TAAS PORTAL' interface for the 'COP5434 DATABASE MANAGEMENT SYSTEMS' course. The navigation bar includes 'Applicants', 'Courses', and a notification bell. Below the header, there's a title 'COP5434 DATABASE MANAGEMENT SYSTEMS' and a tabbed interface with 'Course Details', 'Professor Preferences', 'Student Preferences', and 'TA Assignments'. The 'Professor Preferences' tab is active, showing a table with 5 columns: First Name, Last Name, Email, Preference Level, and GPA. The table lists 4 professors with their preference levels and GPAs. At the bottom, there's an 'Assign' button.

First Name	Last Name	Email	Preference Level	GPA
<input type="checkbox"/> JOHN	WICK	WICK@UFL.EDU	★★★★☆	3.21
<input type="checkbox"/> TELE	GRAM	GRAM@UFL.EDU	★★★★☆	3.31
<input type="checkbox"/> NEWBIE	GOD	GOD@UFL.EDU	★★★★☆	3.60
<input type="checkbox"/> DARTH	WADER	WADER@UFL.EDU	★★★★☆	3.33

Manager can also click on any particular student name and see the student profile -

The screenshot displays the UF TAAS Portal interface. The top navigation bar includes the UF logo, 'TAAS PORTAL', and links for 'Applicants', 'Courses', a notification bell, and a user profile icon. The main content area is divided into three sections:

- Student Details:** A light blue box containing the following information:
 - First Name:** Emmanuel
 - Last Name:** Yeast
 - GPA:** 3.65
 - Degree:** Master's
 - Ufid:** 2432-2314
 - Nationality:** Mexican
 - TA Hours:** 0
- PROFESSORS WHO PREFER THIS STUDENT:** A table with columns: Instructor, Course Name, Course Short form, and Preference Level.

Instructor	Course Name	Course Short form	Preference Level
<input type="checkbox"/> DR. ROY	DBMS	CEN5432	★★★★☆
<input type="checkbox"/> DR. MANNY	CNS	CNT5687	★★★★☆
- COURSE PREFERENCE OF STUDENT:** A table with columns: Course Name, Instructor, Preference Level, and Course Taken?.

Course Name	Instructor	Preference Level	Course Taken?
<input type="checkbox"/> CEN5432 DATABASE MANAGEMENT	DR. ROY	★★★★☆	YES
<input type="checkbox"/> CNT5552 USER EXPERIENCE DESIGN	DR. POTTS	★★★★☆	NO

Below the Student Details box, a red text message states: "This student is currently not assigned to any course". Below this message is a blue button labeled "Assign".

Student point of view of the portal -

The screenshot displays the UF TAAS Portal interface from a student's perspective. The top navigation bar includes the UF logo, 'TAAS PORTAL', and links for 'Apply', 'Status', a notification bell, and a user profile icon. The main content area is titled "Open Teaching Assistantships Positions" and is divided into two columns:

- Left Column (List of Positions):** Three cards are displayed, each for a different position:
 - CAP5100:** Human-Computer Interaction, Professor Joe Smith. Posted 22 hours ago.
 - CIS6261:** Trustworthy Machine Learning, Professor Bruno Fers. Posted 22 hours ago.
 - CEN5105:** Computer Networks, Professor Joe Doe. Posted 22 hours ago.
- Right Column (Details for CAP5100):** A detailed view of the CAP5100 position:
 - Position:** CAP5100 Human-Computer Interaction, Professor Joe Smith.
 - Applicants:** 23 Applicants / Posted 22 hours ago.
 - Description:** Topics related to interaction with technology, including interface design, software tools, 3-D interaction, virtual environments, interaction devices, collaboration, and visualization.
 - Requirements:** (Section header, no details provided).
 - Buttons:** A blue "Apply" button and a white "Save" button.

Form details that students need to fill to apply for an assistantship -

The screenshot shows the 'UF TAAS PORTAL' application form. The header includes the UF logo, 'TAAS PORTAL', and links for 'Apply', 'Status', a notification bell, and a user profile icon. The form fields are as follows:

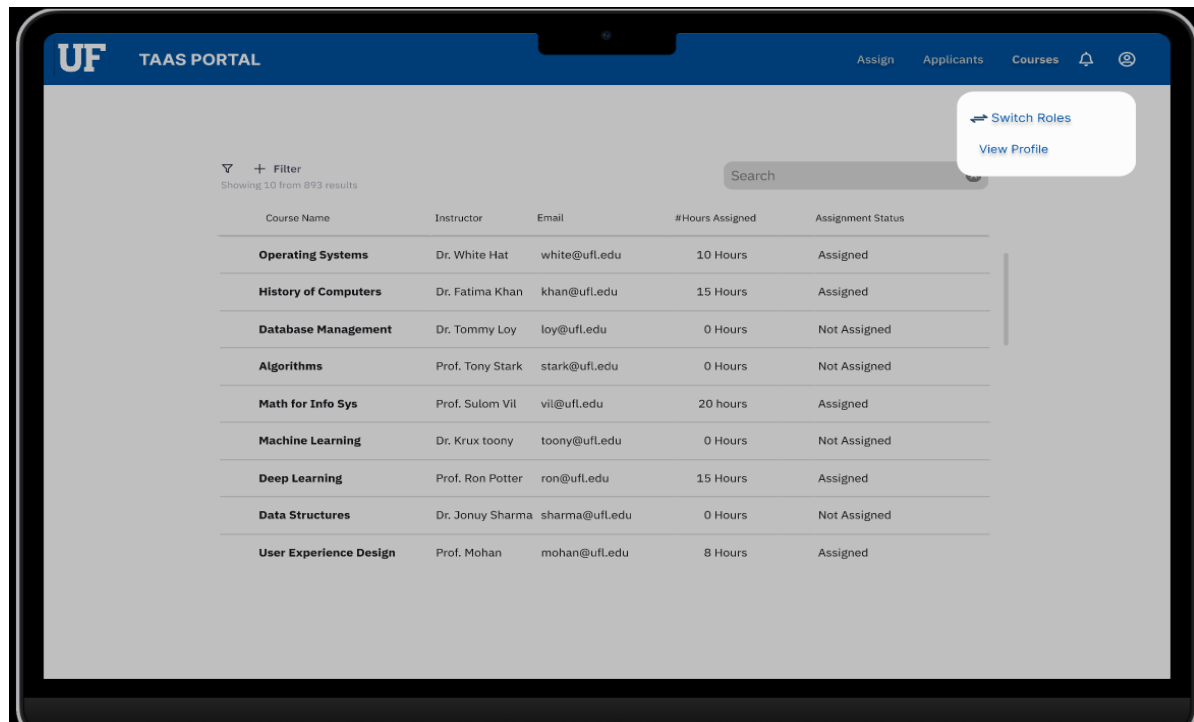
- UFID ***: A text input field.
- Have you previously taken this course ***: Radio buttons for 'Yes' and 'No' (selected).
- Course Pointer**: A text input field.
- GPA ***: A text input field.
- Preference***: A row of radio buttons labeled 'Low', '1', '2', '3', '4', '5', and 'High'. The '5' option is selected.
- Message**: A large text area for a message.
- Submit**: A blue button at the bottom.

Students can track their applications -

The screenshot shows the 'UF TAAS PORTAL' 'Track Applications' page. The header is identical to the application form. Below the header, there is a 'Track Applications' section with a filter icon and the text '+ Filter'. The page lists three applications, each with a progress bar showing the status of the application:

- CAP5100**
Human-Computer Interaction
Professor Joe Smith
Progress: Applied (filled dot) → Under Review (filled dot) → Decision (empty dot)
- COP5134**
Machine Learning
Professor Joe Doe
Progress: Applied (filled dot) → Under Review (empty dot) → Decision (empty dot)
- CEN3000**
Computer Networks
Professor Joson Smith
Progress: Applied (filled dot) → Under Review (filled dot) → Decision (empty dot)

Any user can click on the Profile icon to see options to change role and view profile.



Citations:

1. UF Logo - <https://logos-world.net/university-of-florida-logo/>
2. Images for presenting the courses -
 - a. <https://towardsdatascience.com/introduction-to-machine-learning-for-beginners-ee6024fdb08>
 - b. <https://www.pinterest.com/pin/flat-machine-learning-logo-design-computer-science-and-technology-artificial-intelligence-sign-digital-vector-symbol-for-business-824018063057948522/>
 - c. <https://in.pinterest.com/pin/167688786112066333/>
 - d. <https://www.pinterest.com/pin/ux-user-experience-design-and-research-sticker-by-oh-hi--167688786112066333/>
3. Figma to design the prototype - <https://www.figma.com/login>