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SW Engineering CSC 648 / 848 Fall 2019

Milestone 3:

GatorDater

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Milestone	Version	Date Submitted For Review
Milestone 3	1	11/21/2019
Milestone 2	1	10/24/2019
Milestone 1	2	

Table of Contents

Table of Contents 1

Data Definition V2 2

Functional Requirements V2 3

Priorities 4

UI Mockups & Storyboards 5

High level database architecture & organization 30

High level APIs and Main Algorithms 33

High Level UML Diagrams 34

High Level Application Network & Deployment Diagrams 35

Key Risks 37

Project Management 38

Data Definitions V2

Users: User can be registered or unregistered.

1. **Registered User - Student:** Registered user who is able to browse classes and schedule office hours with a professor.
2. **Registered User - Professor:** Registered user who is able to allocate hours for office hour scheduling and manage his/her appointments.
3. **Unregistered User - Guest:** Unregistered user who has the ability to search for professors and view their available office hours.
4. **Administrator:** A registered user who has the ability to ban users, create and delete appointments, and blacklist email addresses.

Application:

1. **Calendar:** Calendar to display scheduled office hours associated with students and professors
    a. **Office Hour**: record of the date and time with professors name

Functional Requirements V2

For Registered Users:

1) Users shall be able to make an account
2) Users shall be able to login
3) Users shall be able to access the office hour page
4) Users shall be able to cancel their scheduled office hours appointment
5) Users should be able to edit profile
6) Users shall be able to specify which class they belong to

For Registered Users That Are Students:

1) Users shall be able to search for their professors
2) Users shall be able to reserve a time slot

For Registered Users That Are Professors:

1) Professor shall be able to post their available time slots.
2) Professor shall be able to restrict hours from being scheduled
3) Professor shall be able to specify which class is allowed to schedule office hours

System Tasks:

1) System shall make reserved time slots unavailable
2) System shall send an email when a user signs up
3) System shall add scheduled office hours to personal calendar
4) System shall check professor's calendar for free slots
5) System shall add selected office hours to professor's calendar
6) System shall send email to student and professor when office hours scheduled
7) System shall send email to student/professor when meeting cancelled.

Priorities

Priority 1:

1) Users shall be able to make an account
2) Users shall be able to login
3) Users shall be able to access the office hour page
4) Users shall be able to reserve a time slot
5) Professors shall be able to post their available time slot
6) System shall add schedules office hours to personal calendar
7) System shall add selected office hours to professor's calendar

Priority 2:

1) Users shall be able to edit profile
2) Users shall be able to search for their professor
3) Professor shall be able to restrict hours from being scheduled
4) System shall make reserved time slots unavailable
5) System shall check professor's calendar for free slot

Priority 3:

1) Users shall be able to specify which class they belong to
2) Professor shall be able to specify which class is allowed to schedule office hours
3) System shall send an email when a user signs up
4) System shall send email to student and professor when office hours scheduled
5) System shall send email to student and professor when meeting cancelled

UI Mockups and Storyboards

Navbar:

- Home(guide)
- Schedule Office Hours
- Your Booked Hours
- Notification Bell(idk if we know how to do this or need this)
- **Register/Login/Logout:** Popup in the top right corner.

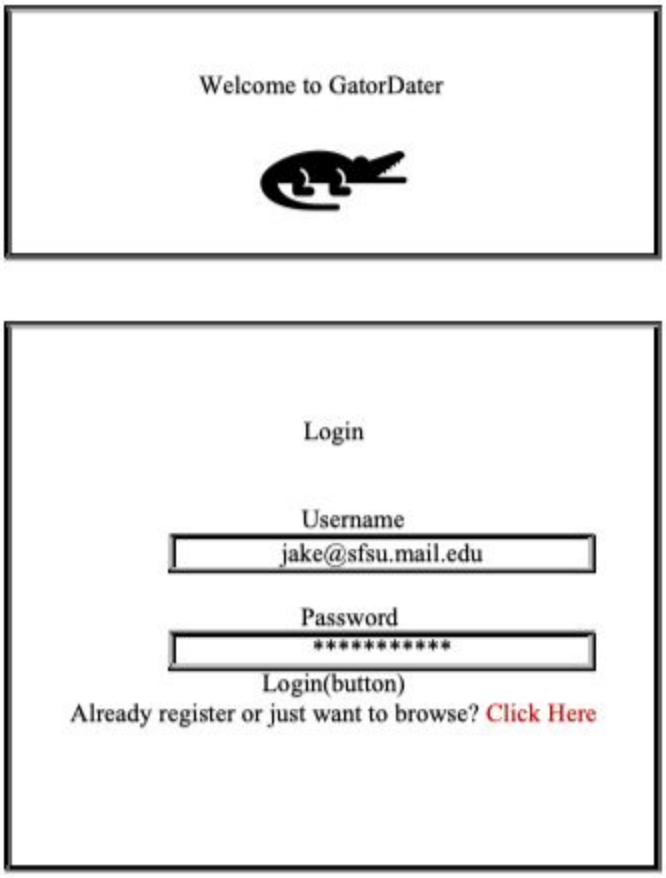
Register Page:

- Asks if the user has registered or not. If they have not, register them immediately after they enter in their information
- Option to take them to the home page if they have registered or skip to brows

Welcome to GatorDater

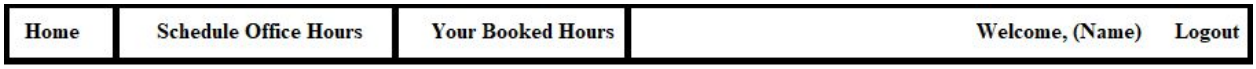
Register
email:
username:
password:
Already registered or just want to browse? Click Here

Login Page:


Welcome to GatorDater
Login
Username
jake@sfsu.mail.edu
Password
****
Login(button)
Already register or just want to browse? Click Here

User Home Page:

- A detailed step by step guide on how to use the app with pictures for the students



Welcome to the GatorDater Homepage

Step by step guide on how to use the program with pictures to be implemented

1
2
3
4
5

Professor Home Page:

User Schedule Page:

- Search bar for professor's name
- Make appointments per time slot on this page.
- Calendar with time slots will be blocked off(marked red and unselectable) if the slot is already booked

Home	Schedule Office Hours	Your Booked Hours	Welcome, (Name) Logout

Schedule your office hours here

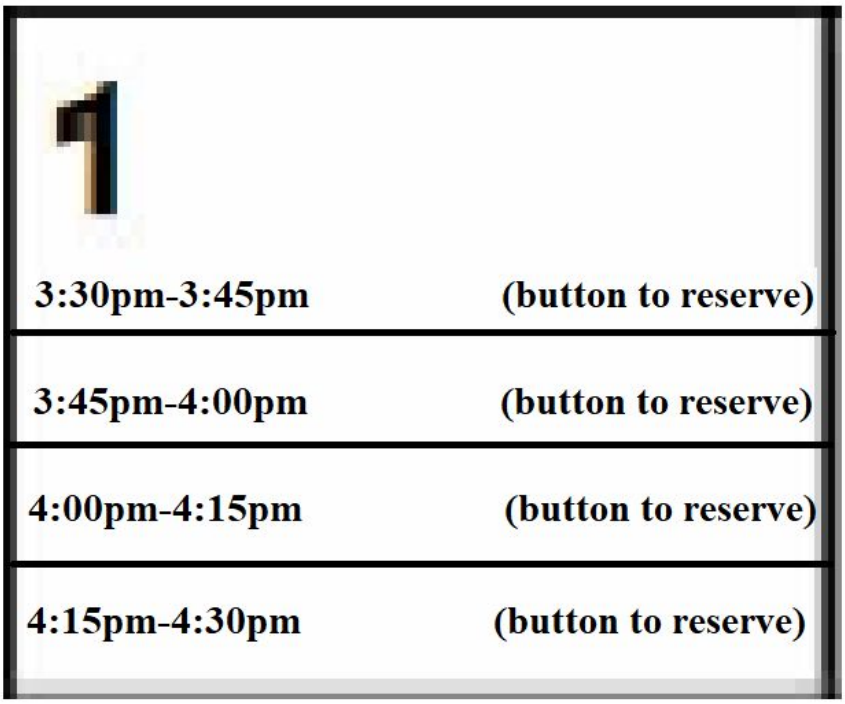
Search for your professor: Jack Jones

November 2019

SUN	MON	TUE	WED	THU	FRI	SAT
					1 3:30pm - 4:30pm open slots	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Home	Schedule Office Hours	Your Booked Hours	Welcome, (Name)	Logout

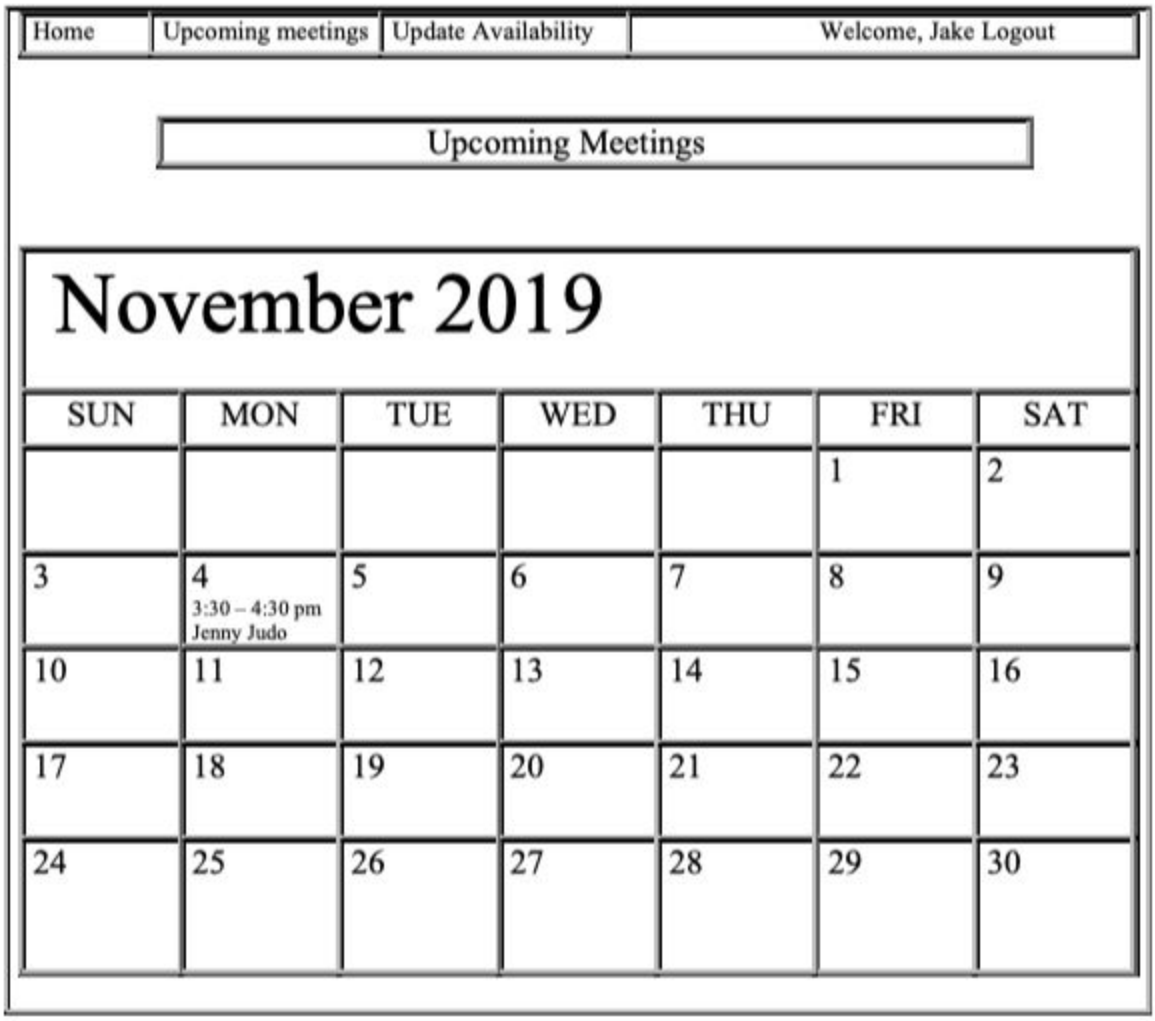
Reserve your hours

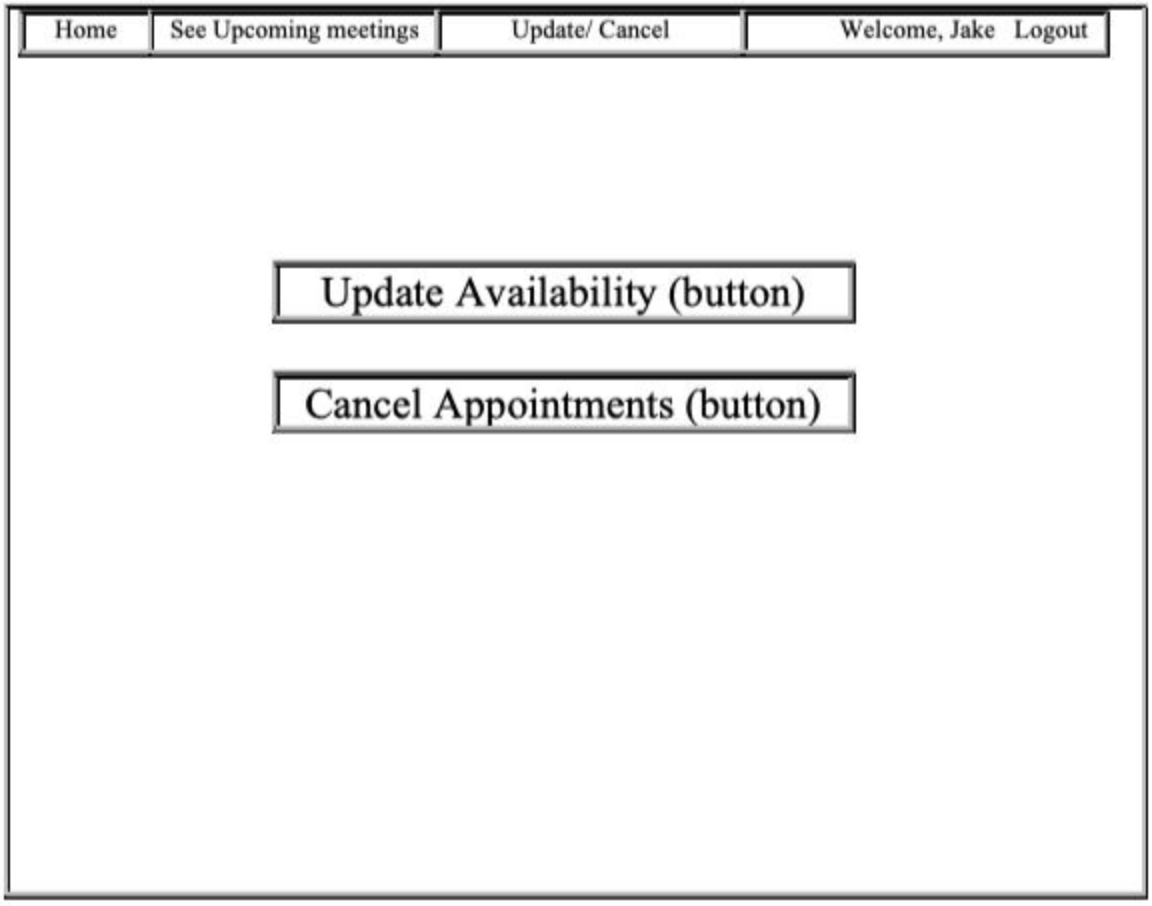


Professor's Page(only professors and admin can see):

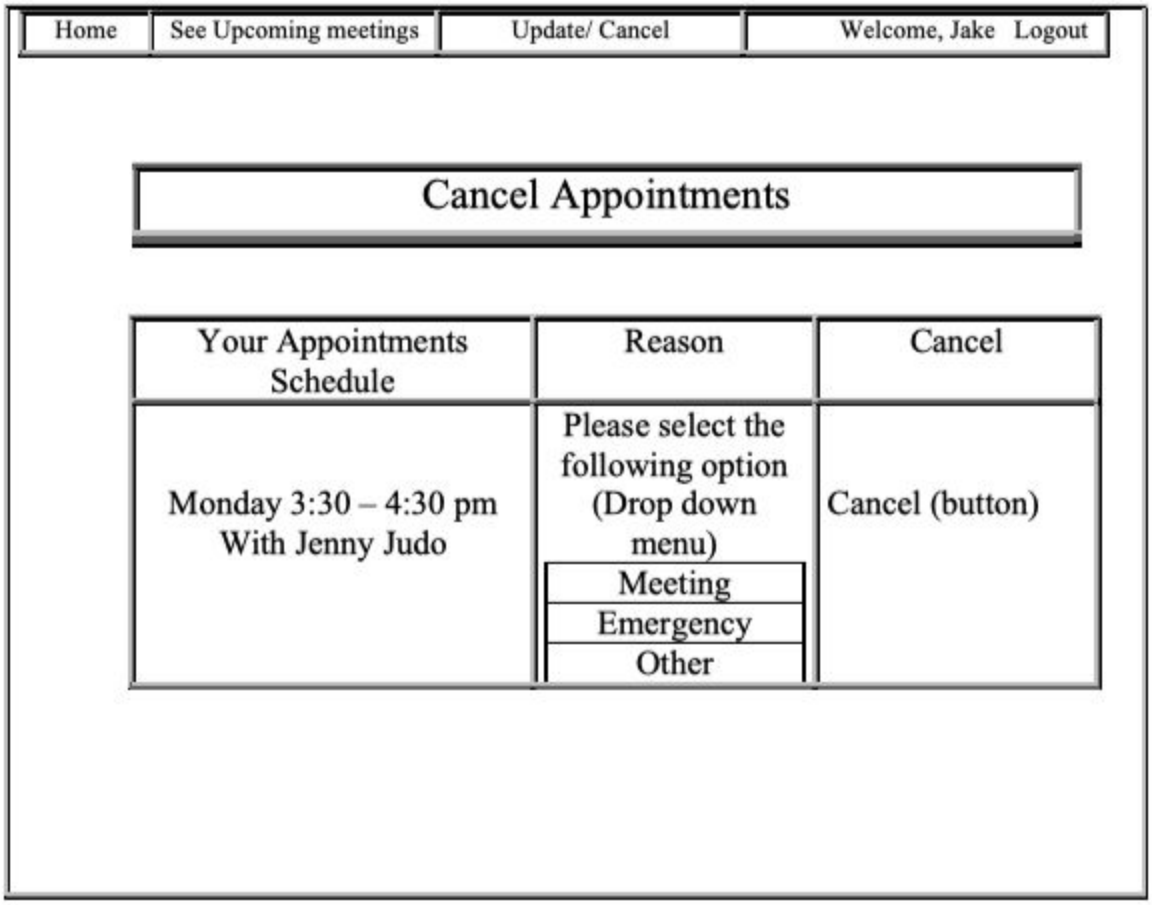
- Popup to tell professor if a student wants to reserve a time slot
- Button to accept a student's office hour appointment
- Button to deny a student's office hour appointment
- Button to provide a reason for cancelling appointment to student

Professor Schedule/Calendar Page:



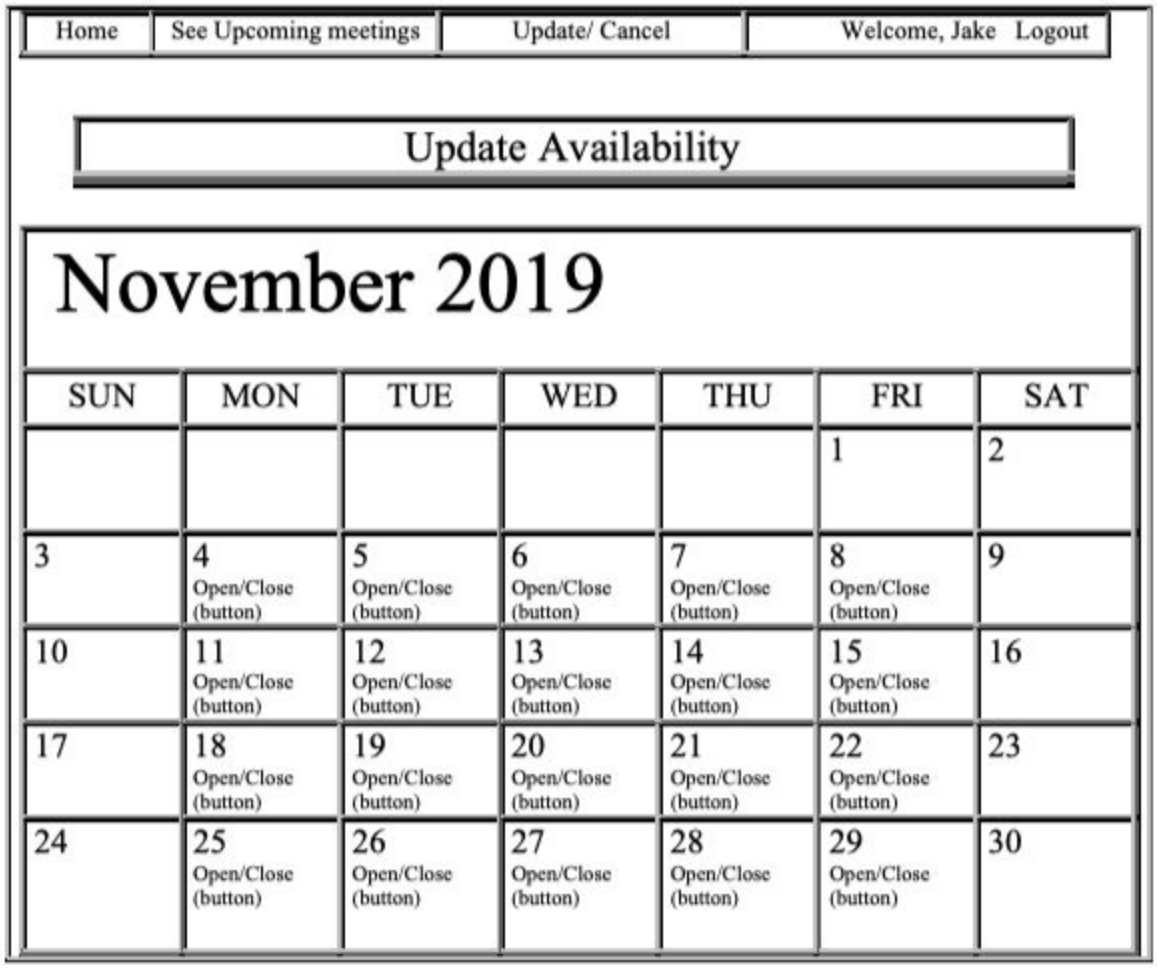

Home
See Upcoming meetings
Update/ Cancel
Welcome, Jake Logout
Update Availability (button)
Cancel Appointments (button)

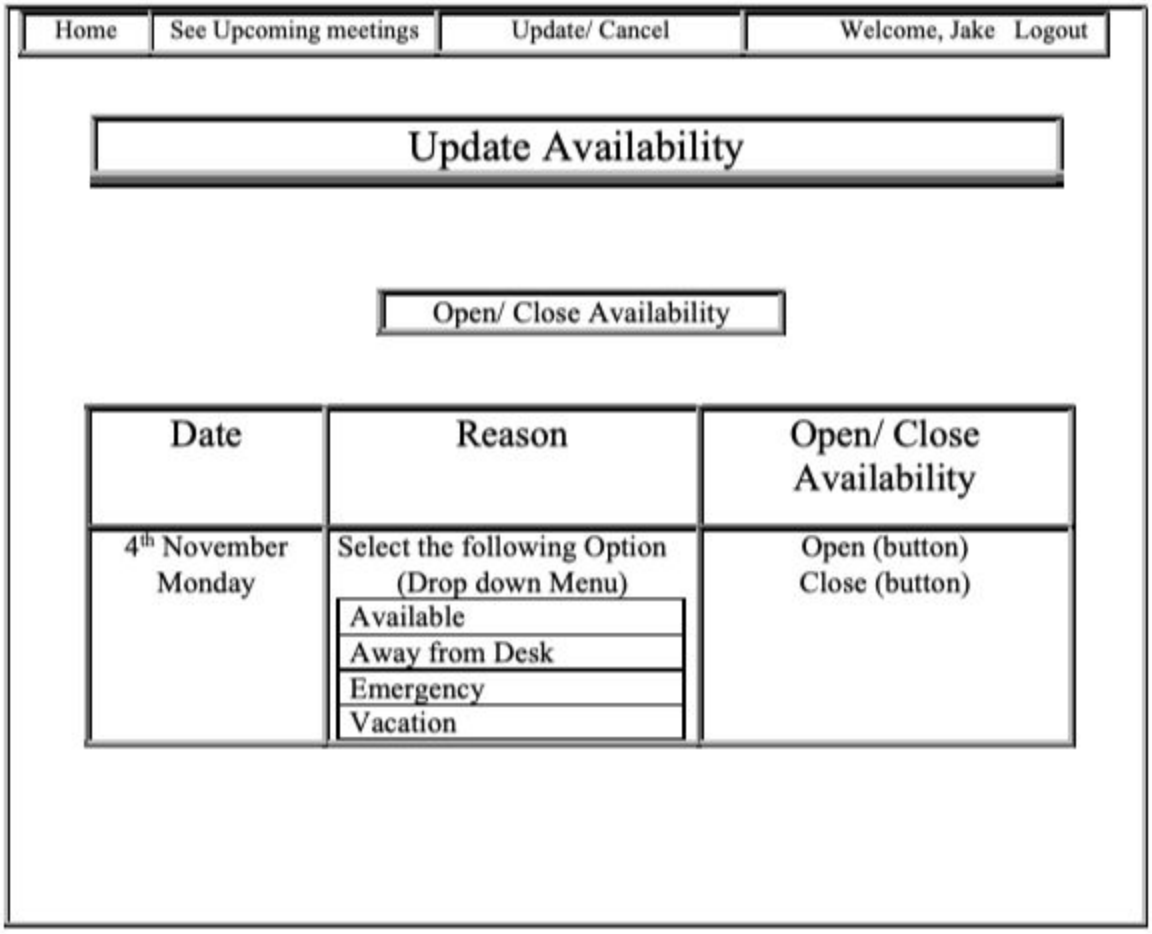
Professor Cancelling Appointment:

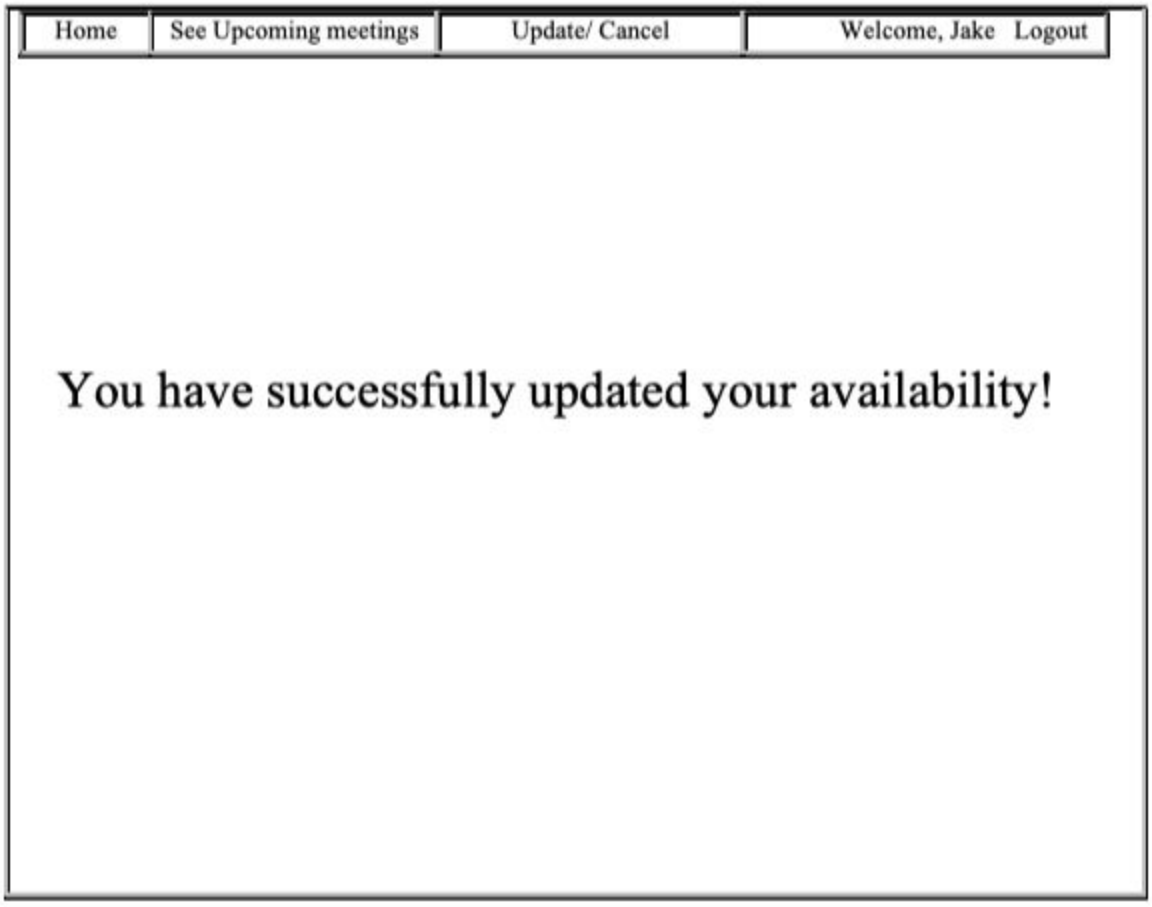


Home
See Upcoming meetings
Update/ Cancel
Welcome, Jake Logout
Your appointment has been successfully cancelled!
At the meantime please update your availability, Thank you,

Professor Updating Availability:




Home
See Upcoming meetings
Update/ Cancel
Welcome, Jake Logout
Update Availability
Open/ Close Availability
Date
Reason
Open/ Close Availability
4th November
Monday
Select the following Option
(Drop down Menu)
Available
Away from Desk
Emergency
Vacation
Open (button)
Close (button)



Your Page(only students can see):

1. Notifies you on what professor you booked and what time slot you have.
2. Able to cancel their appointment if something comes up

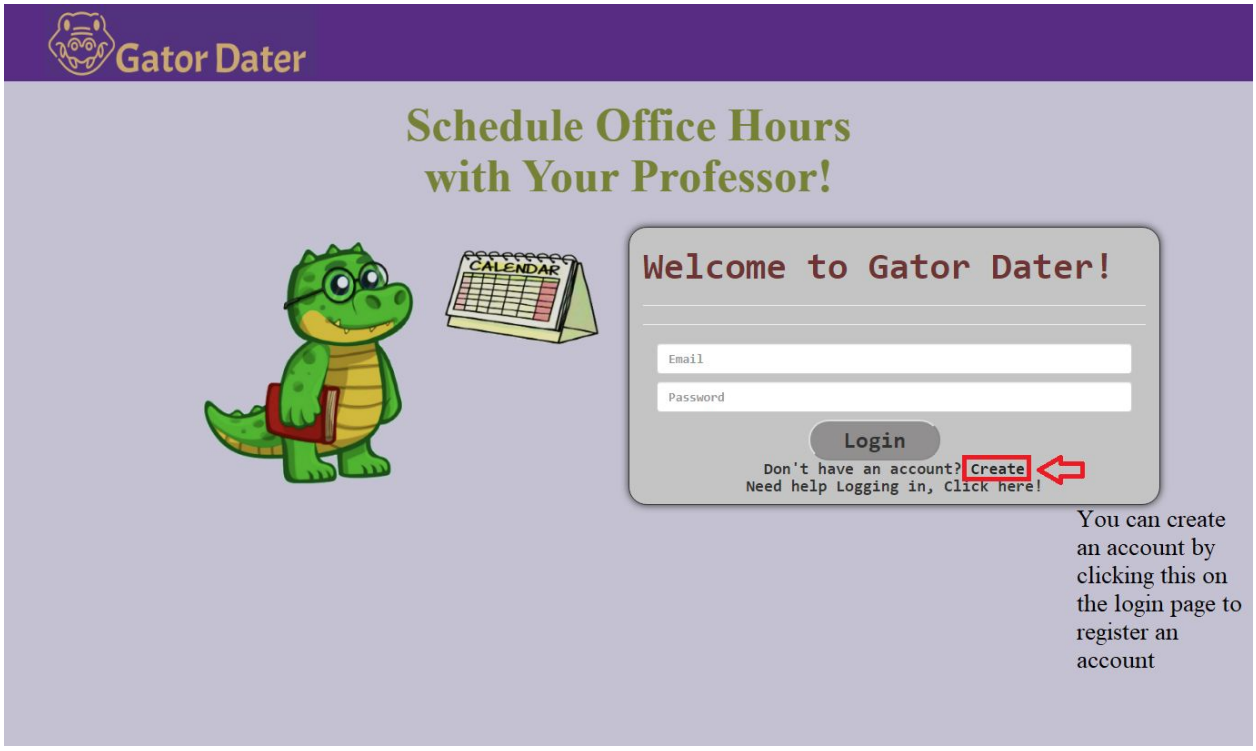
Student Page

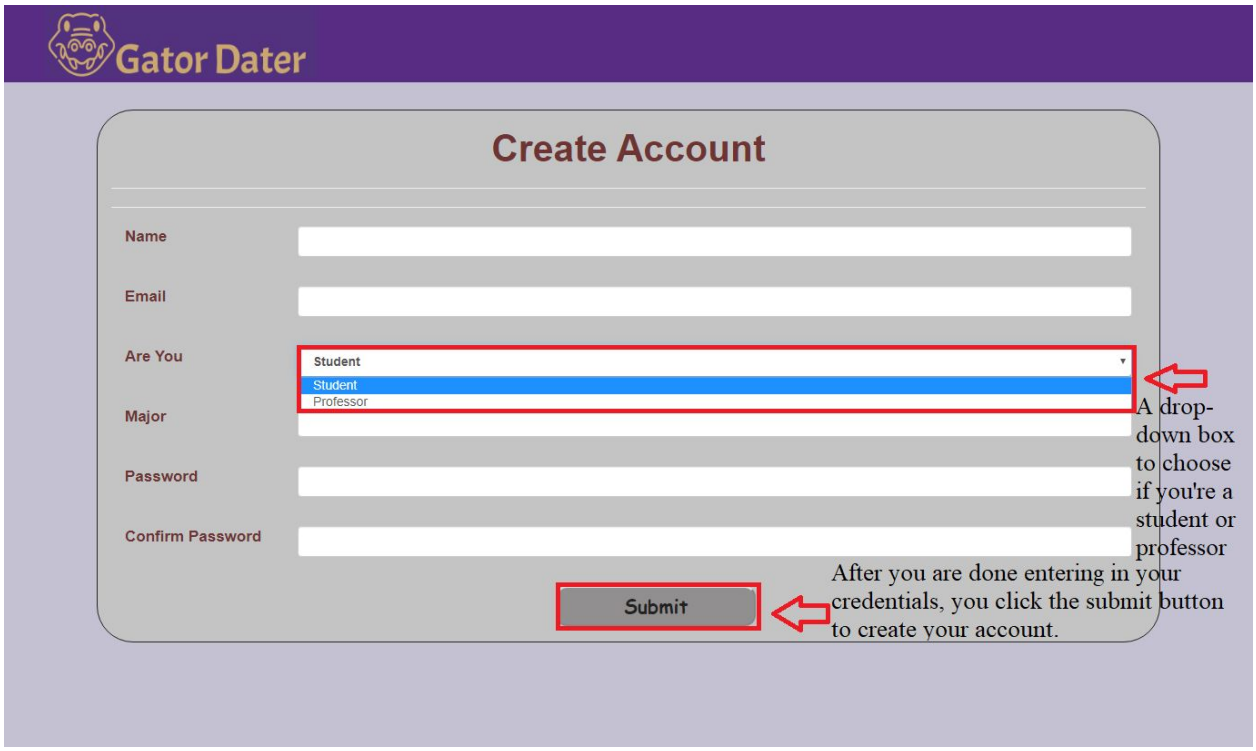
Confirmation:

Your office hours with Professor Jack Jones has been confirmed!

Cancel Button
Cancel the appointment

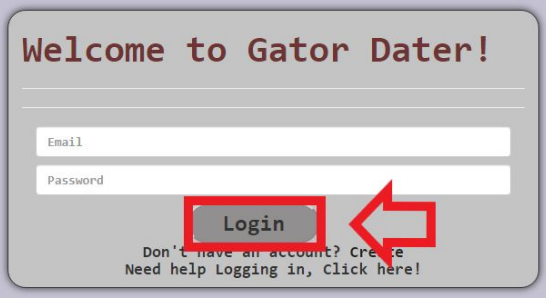
Storyboards





Gator Dater

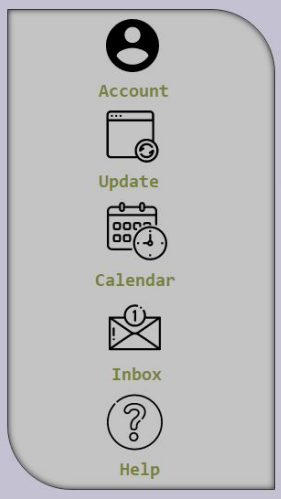
Schedule Office Hours with Your Professor!

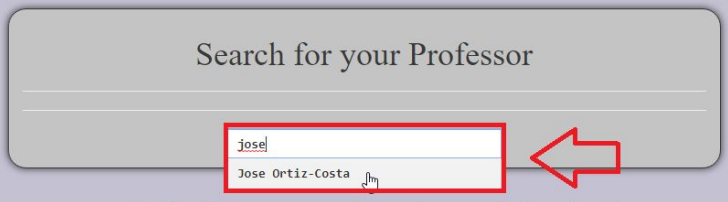


The login button takes us to the homepage of our website

Gator Dater

Welcome Daniel Tomasevich,Logout

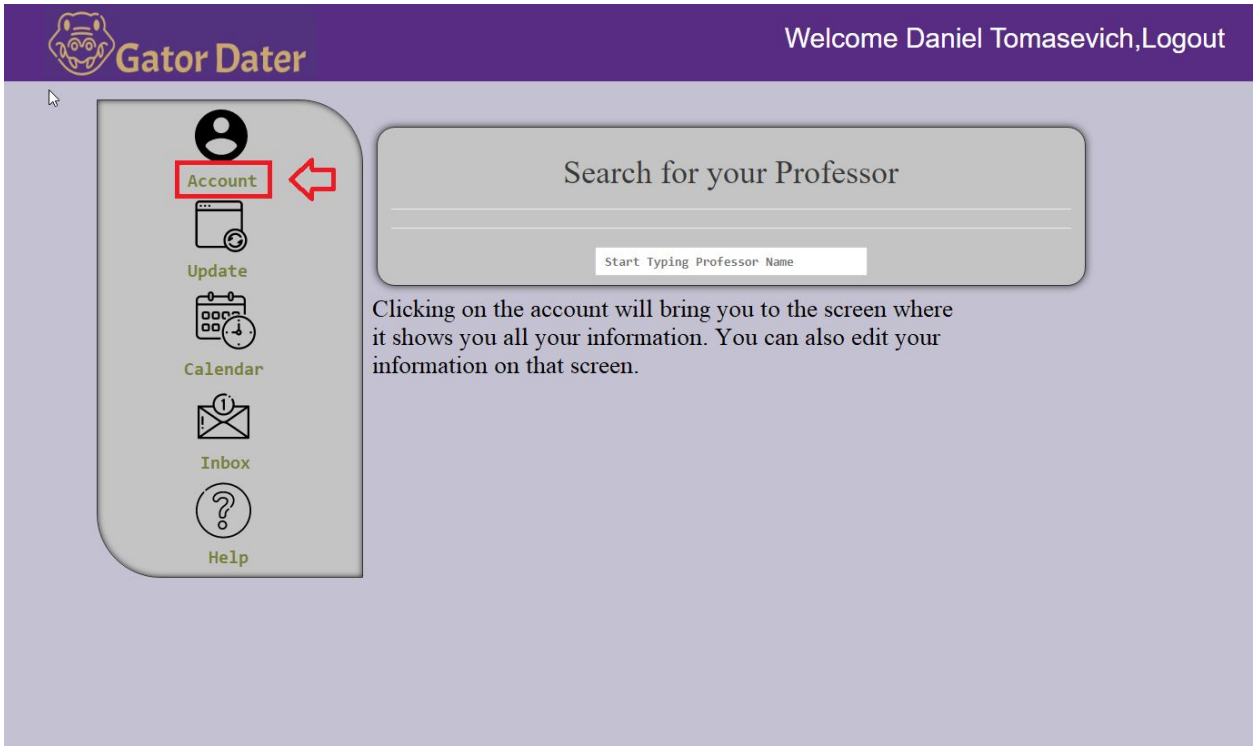


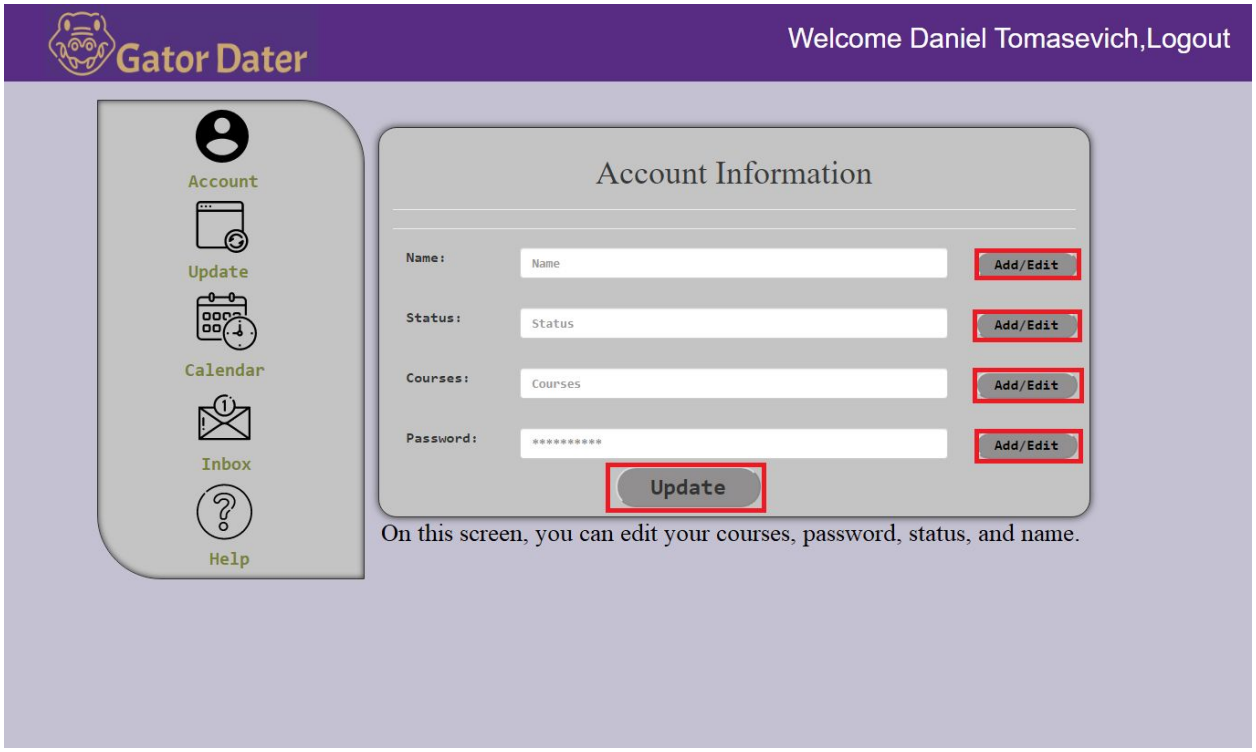


On the home page, we have the search function for our professors. After searching and clicking on the professor, you get transferred to the website where you can schedule with them.

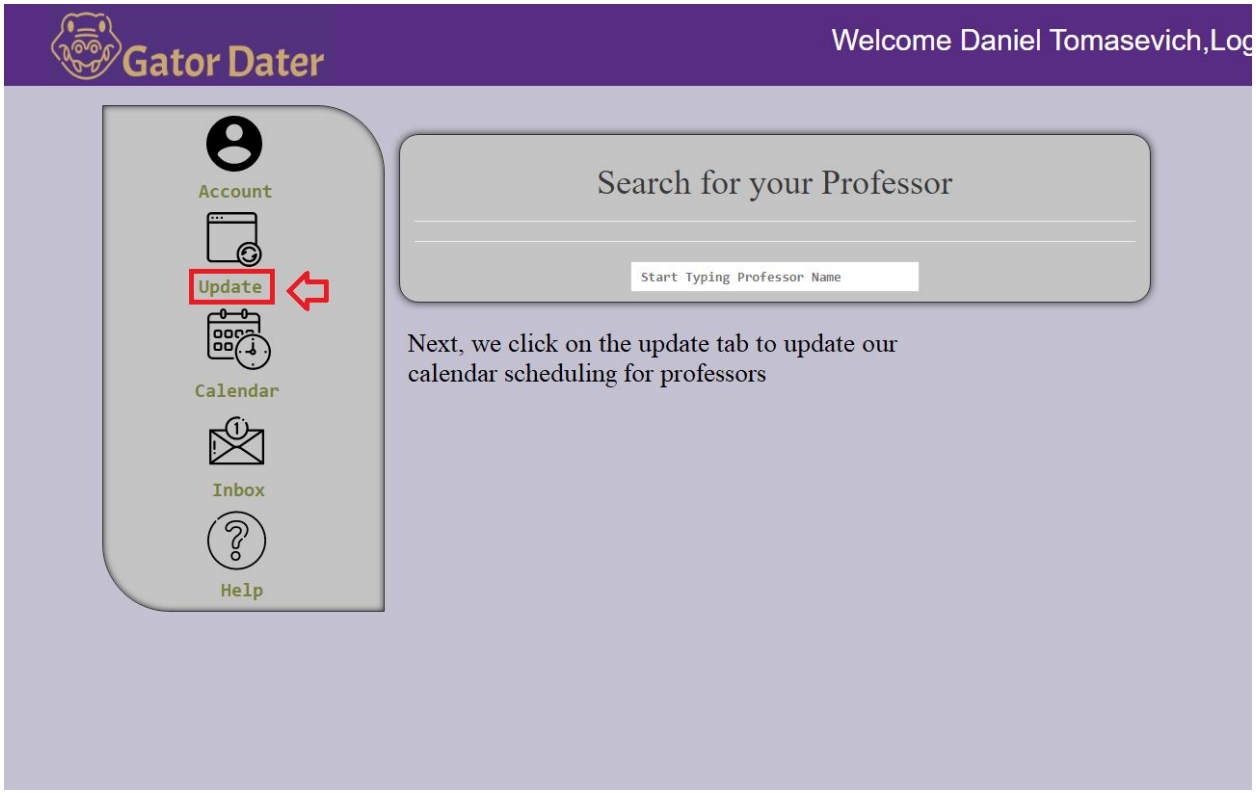
Firstname	Lastname	Class	About
Jose	Ortiz-Costa	CSC 648	I have not set an about me text yet.

Currently, this is the page that you get directed to, but it will change in the future

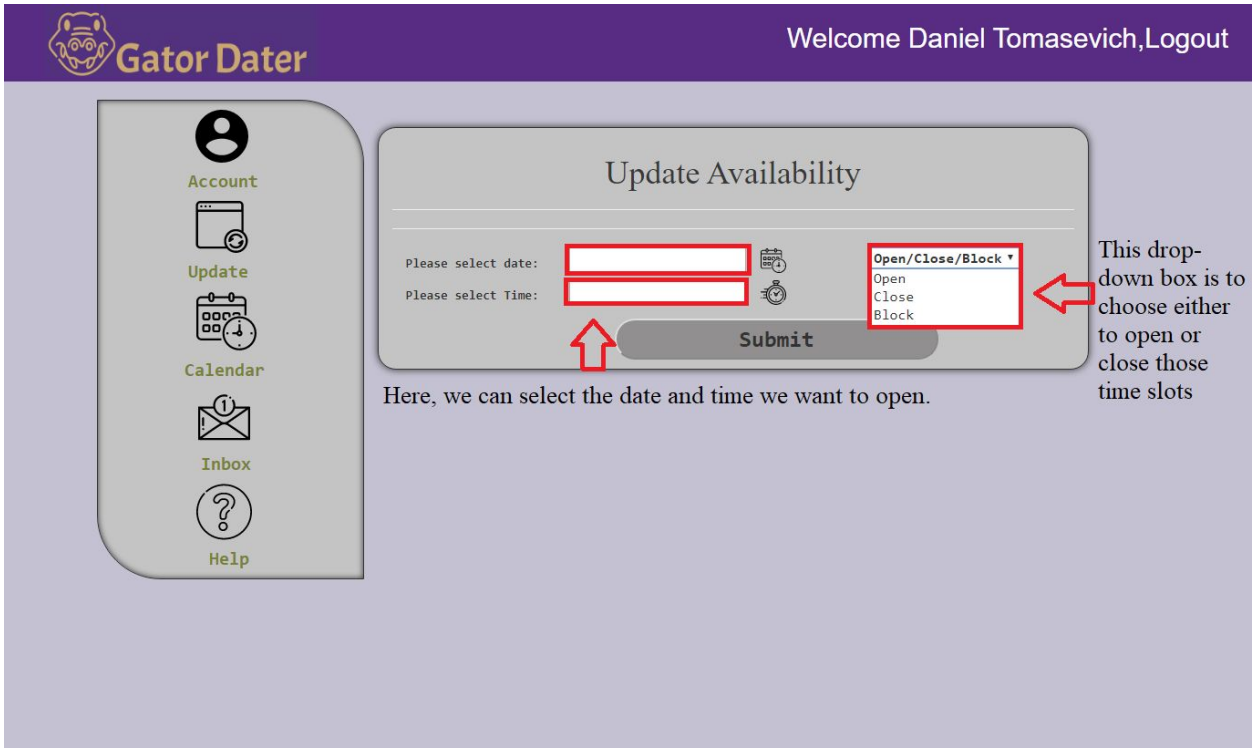


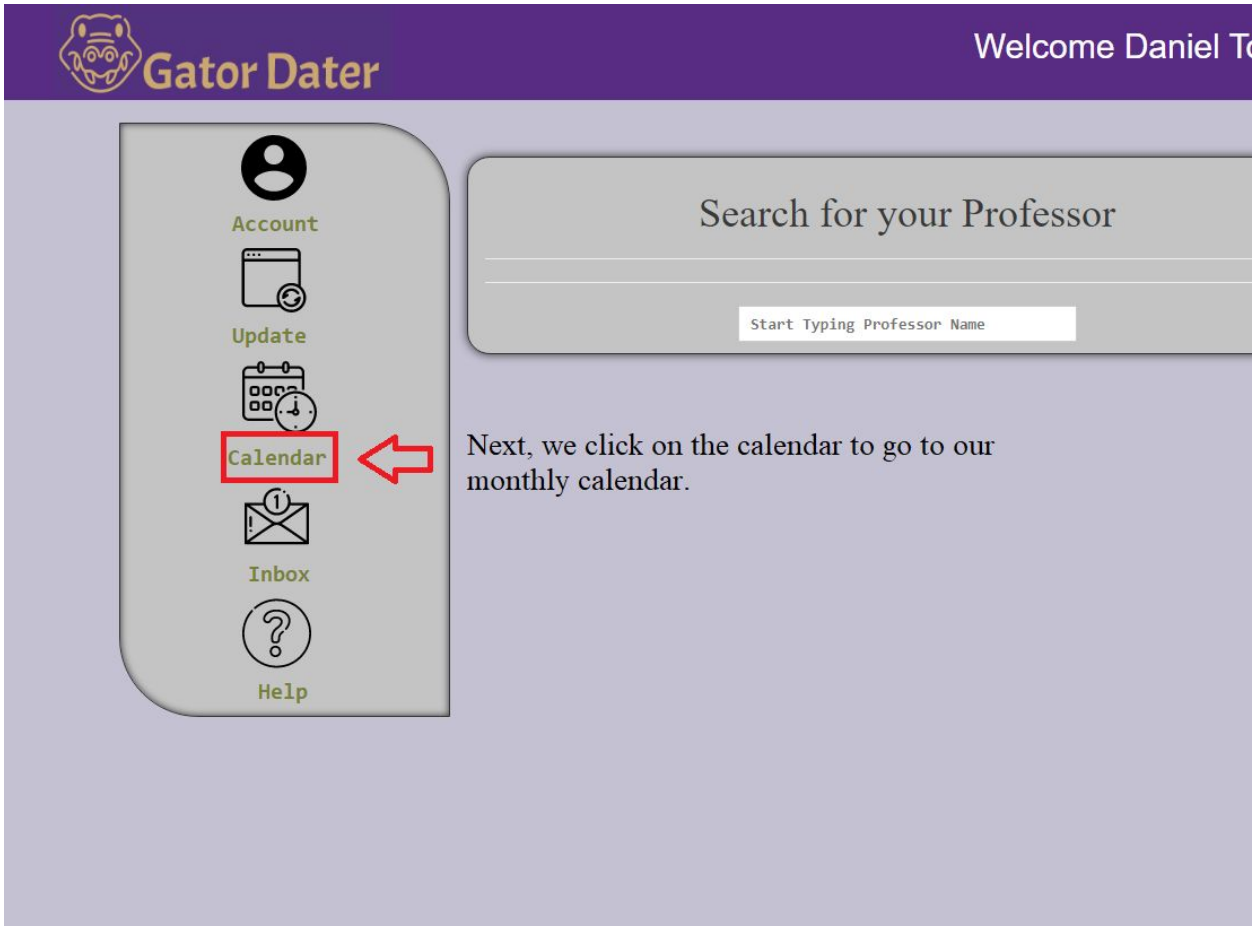


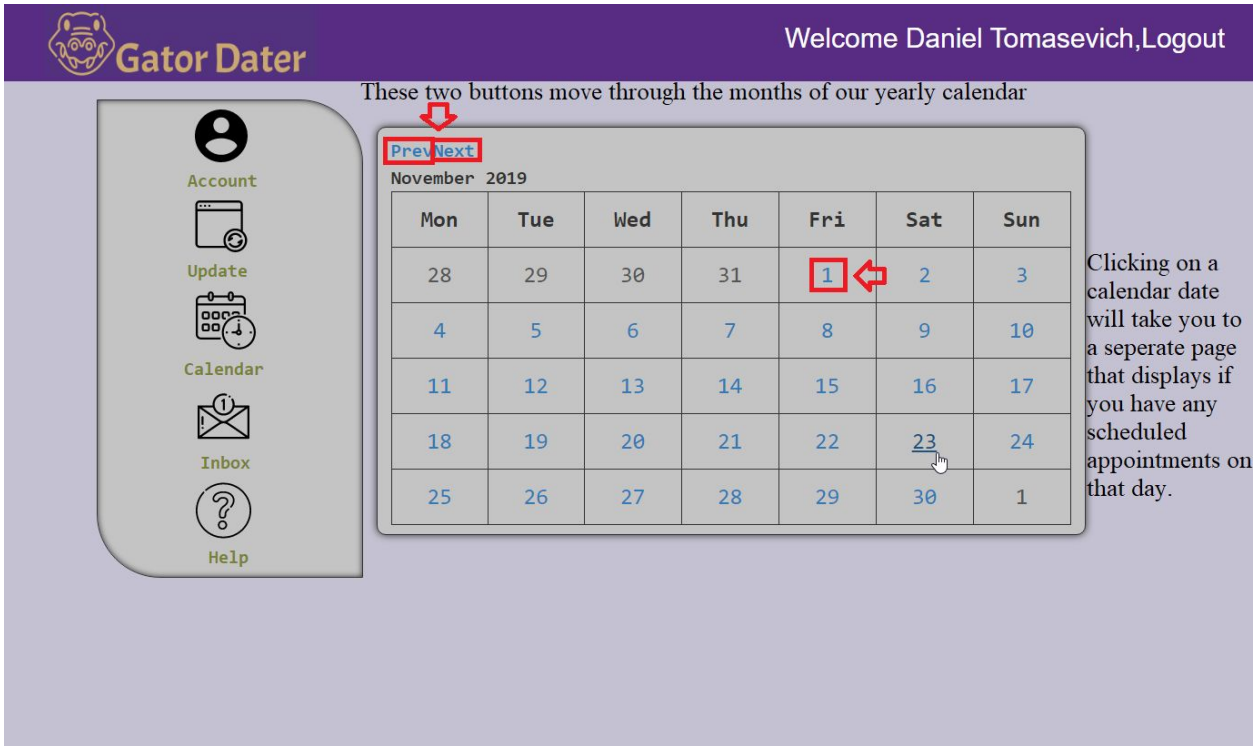
On this screen, you can edit your courses, password, status, and name.

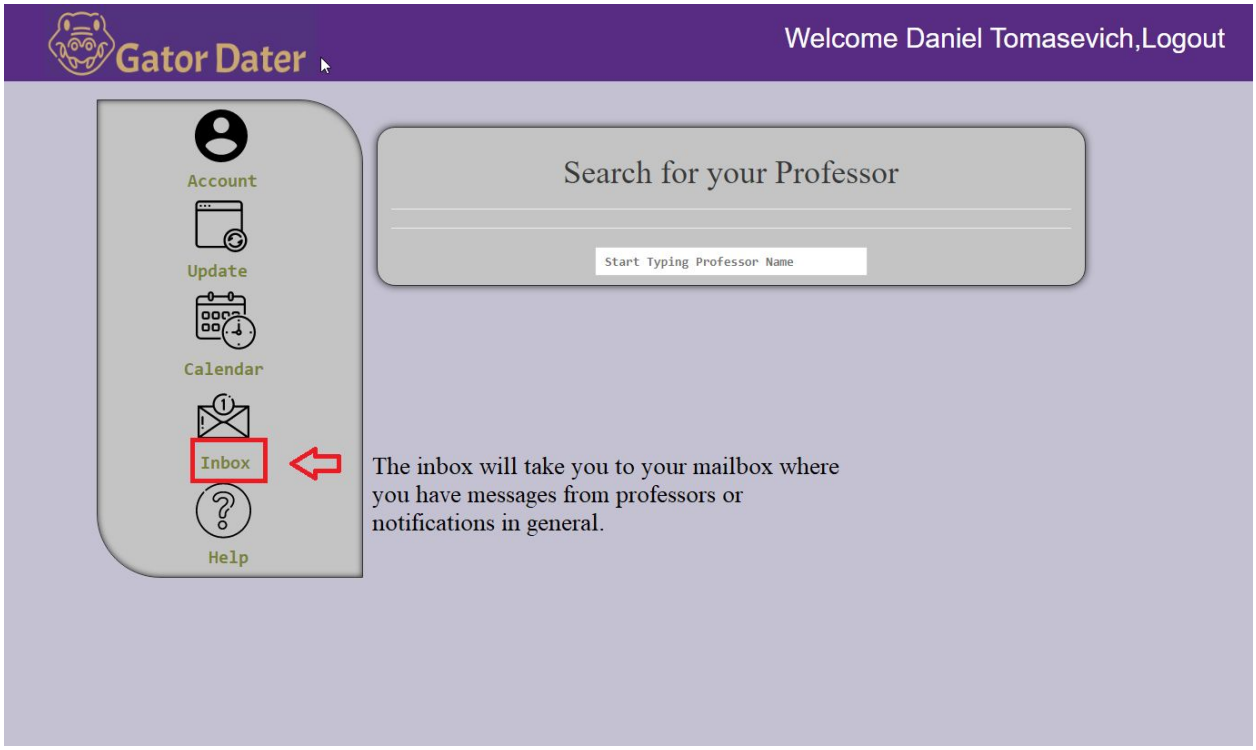


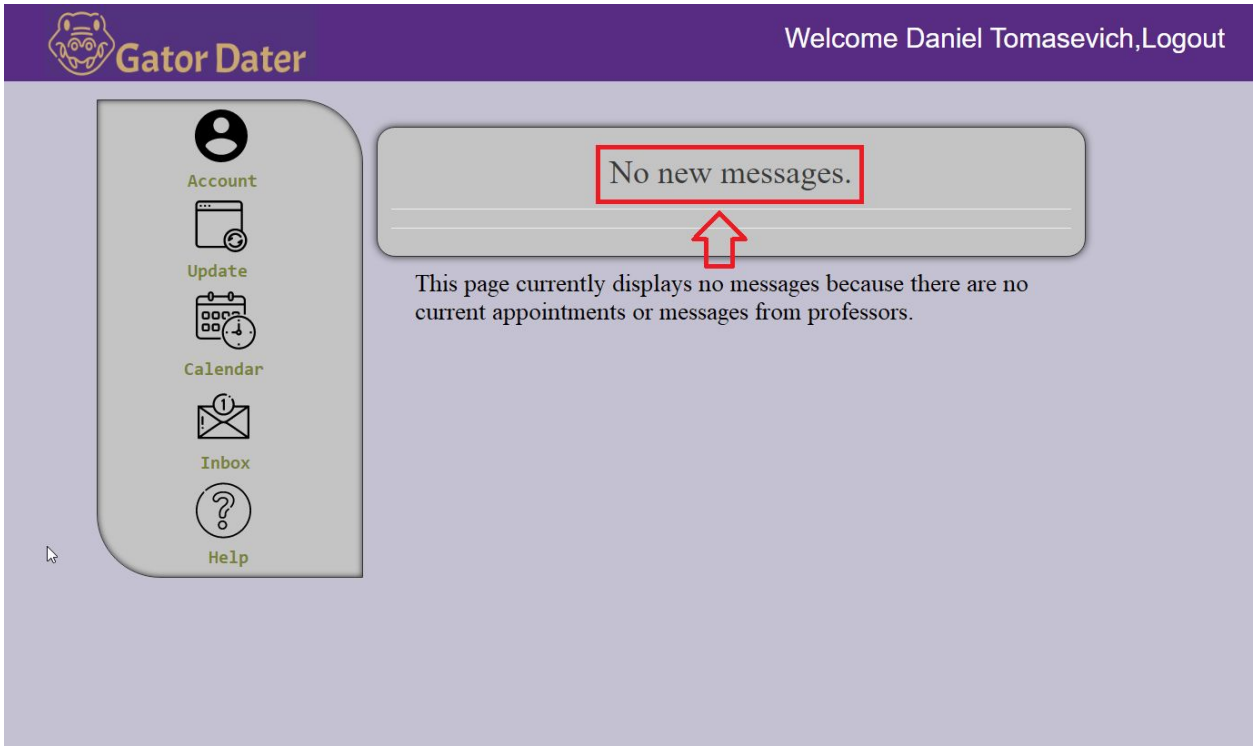
Next, we click on the update tab to update our calendar scheduling for professors

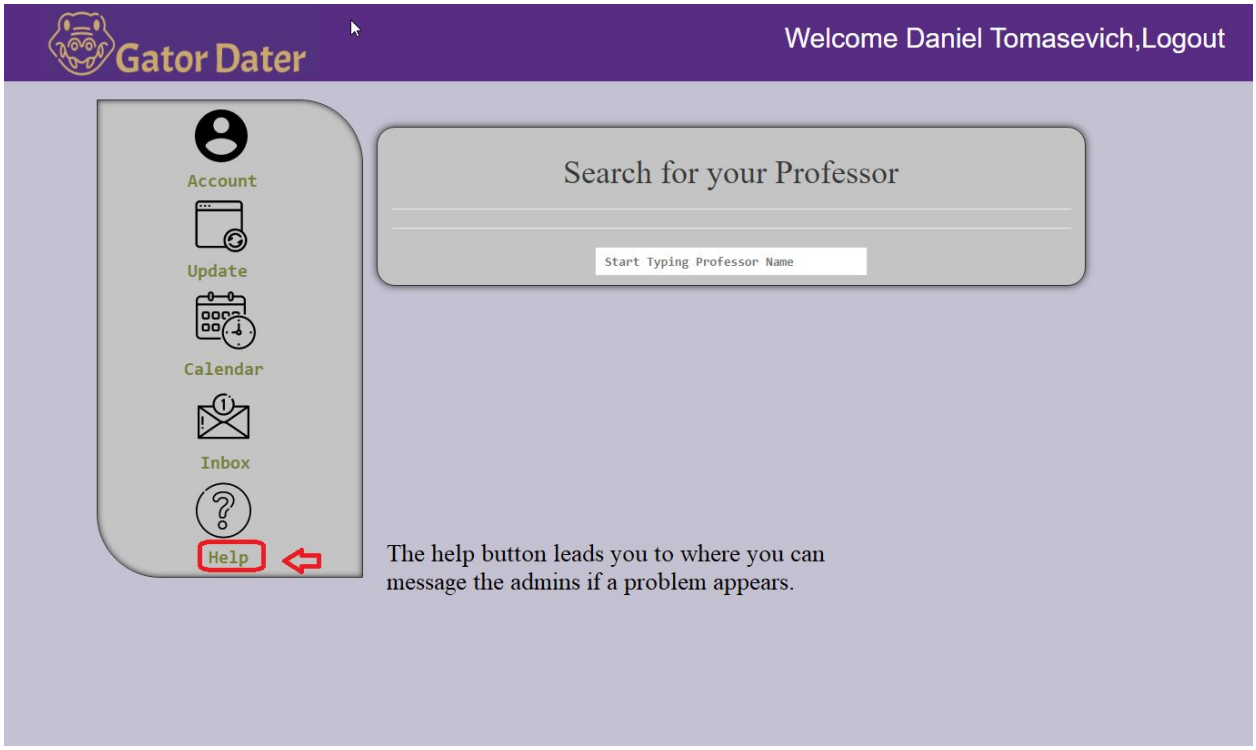

Gator Dater
Welcome Daniel Tomasevich,Logout
Account
Update
Calendar
Inbox
Help
Update Availability
Please select date:
Please select Time:
Open/Close/Block
Open
Close
Block
Submit
This drop-down box is to choose either to open or close those time slots
Here, we can select the date and time we want to open.

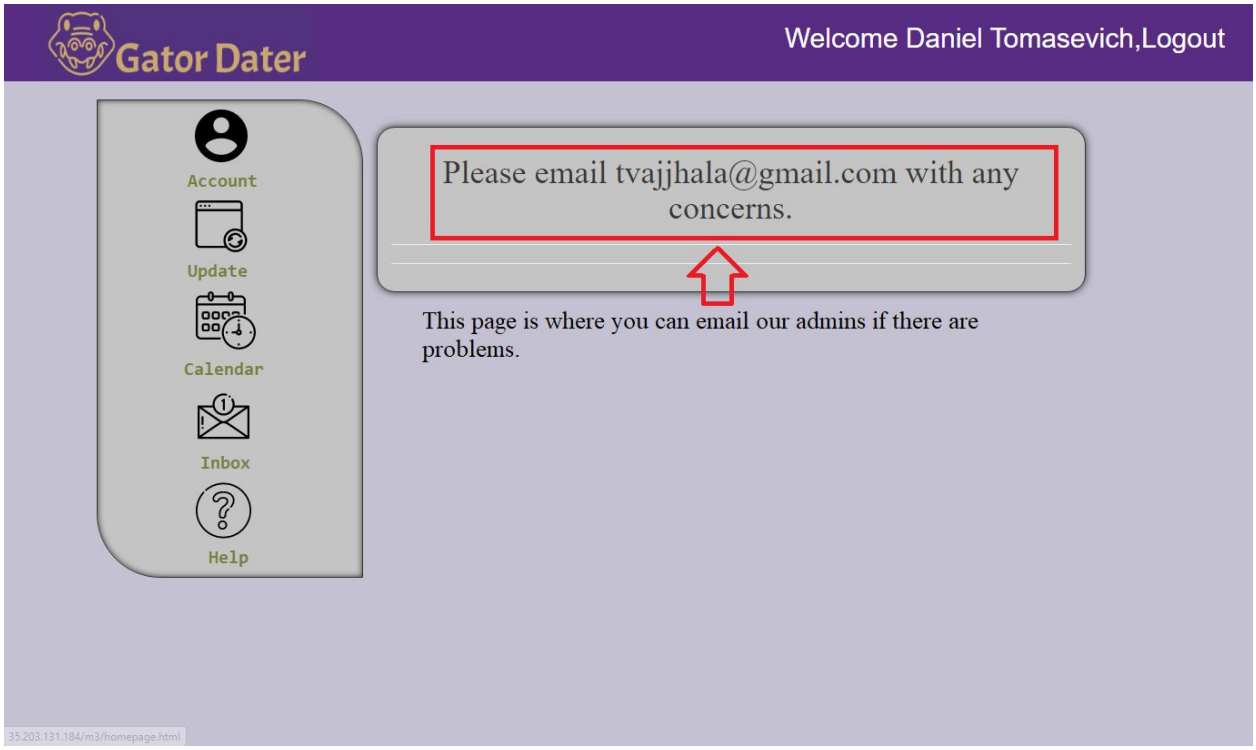

Gator Dater
Welcome Daniel T
Account
Update
Calendar
Inbox
Help
Search for your Professor
Start Typing Professor Name
Next, we click on the calendar to go to our monthly calendar.

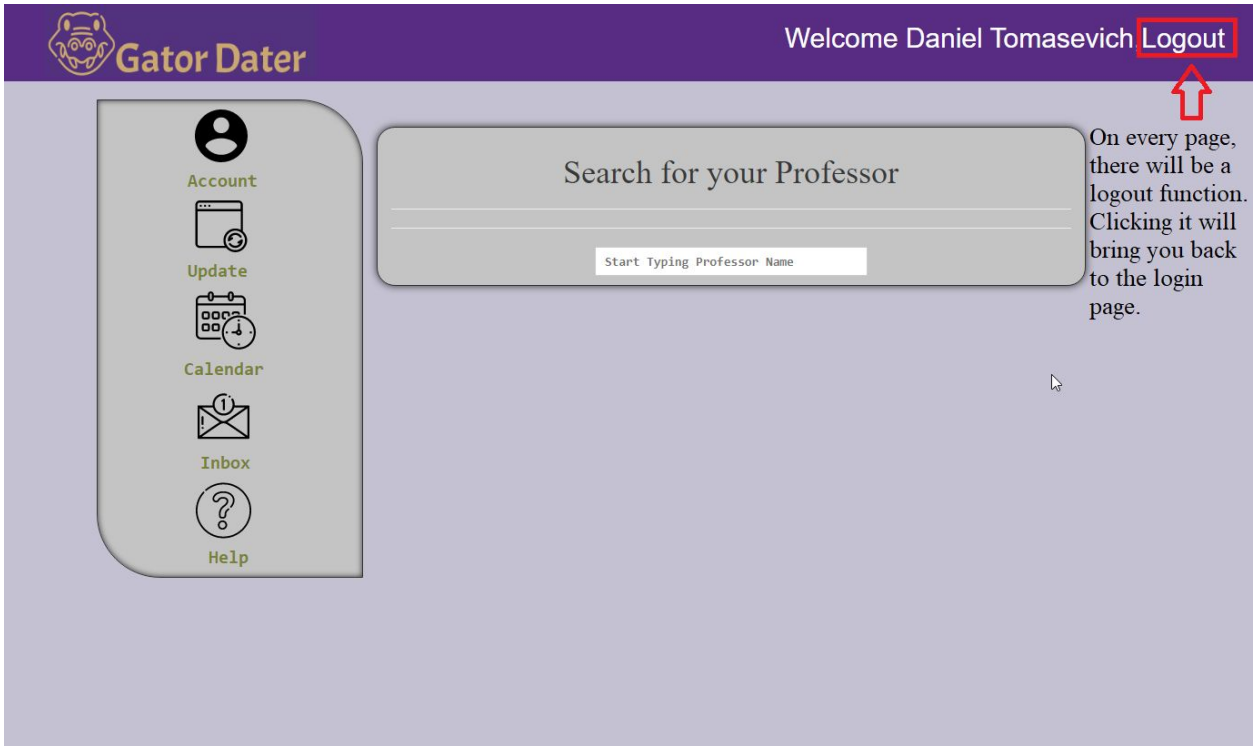

Gator Dater
Welcome Daniel Tomasevich,Logout
These two buttons move through the months of our yearly calendar
Prev Next
November 2019
Mon Tue Wed Thu Fri Sat Sun
28 29 30 31 1 2 3
4 5 6 7 8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 1
Account
Update
Calendar
Inbox
Help
Clicking on a calendar date will take you to a seperate page that displays if you have any scheduled appointments on that day.


Gator Dater
Welcome Daniel Tomasevich,Logout
Search for your Professor
Start Typing Professor Name
Account
Update
Calendar
Inbox
Help
The inbox will take you to your mailbox where you have messages from professors or notifications in general.


Gator Dater
Welcome Daniel Tomasevich,Logout
Account
Update
Calendar
Inbox
Help
No new messages.
This page currently displays no messages because there are no current appointments or messages from professors.


Gator Dater
Welcome Daniel Tomasevich,Logout
Account
Update
Calendar
Inbox
Help
Search for your Professor
Start Typing Professor Name
The help button leads you to where you can message the admins if a problem appears.


Gator Dater
Welcome Daniel Tomasevich,Logout
Account
Update
Calendar
Inbox
Help
Please email tvajjhala@gmail.com with any concerns.
This page is where you can email our admins if there are problems.

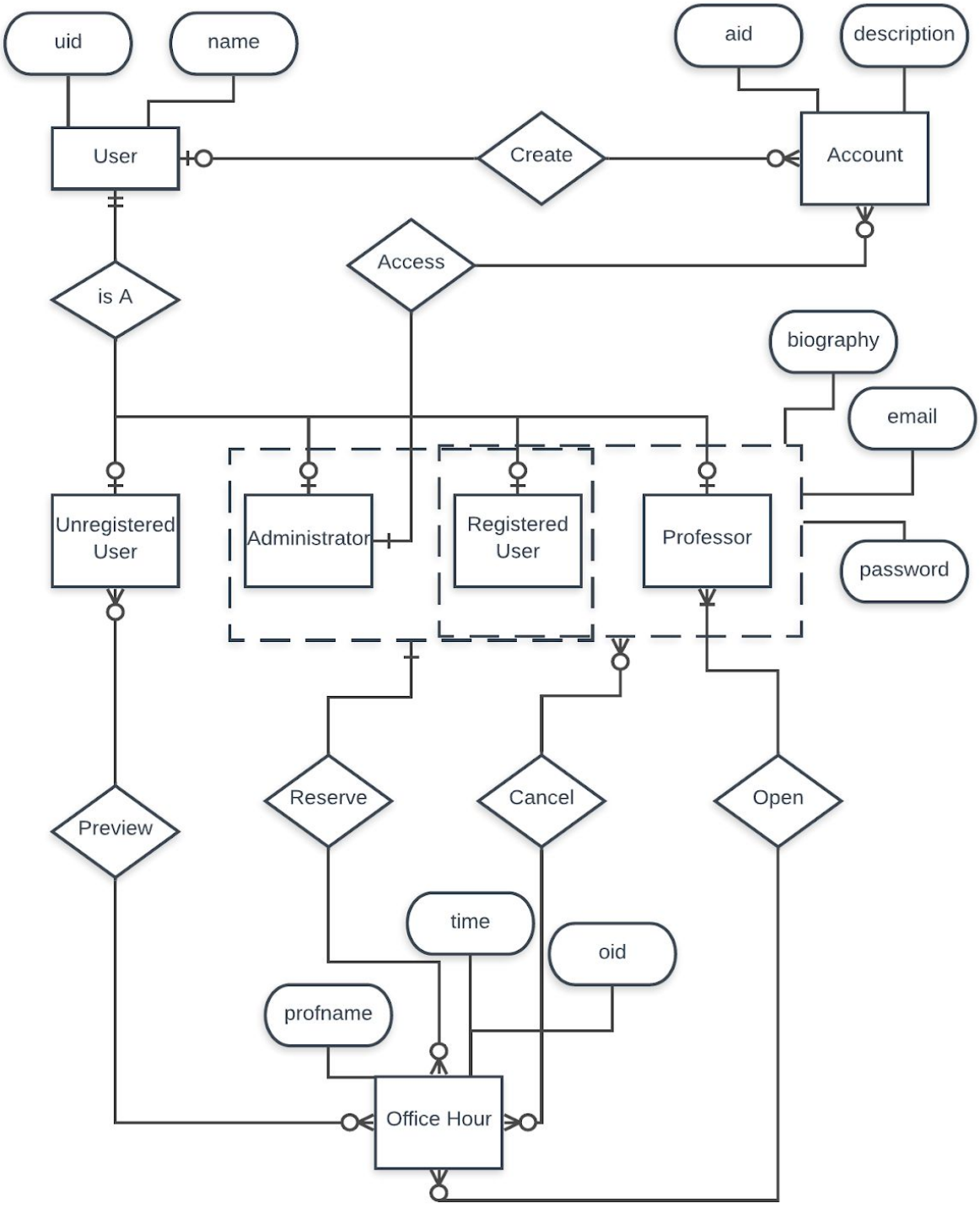

Gator Dater
Welcome Daniel Tomasevich Logout
Account
Update
Calendar
Inbox
Help
Search for your Professor
Start Typing Professor Name
On every page, there will be a logout function. Clicking it will bring you back to the login page.

High Level Database Architecture and Organization

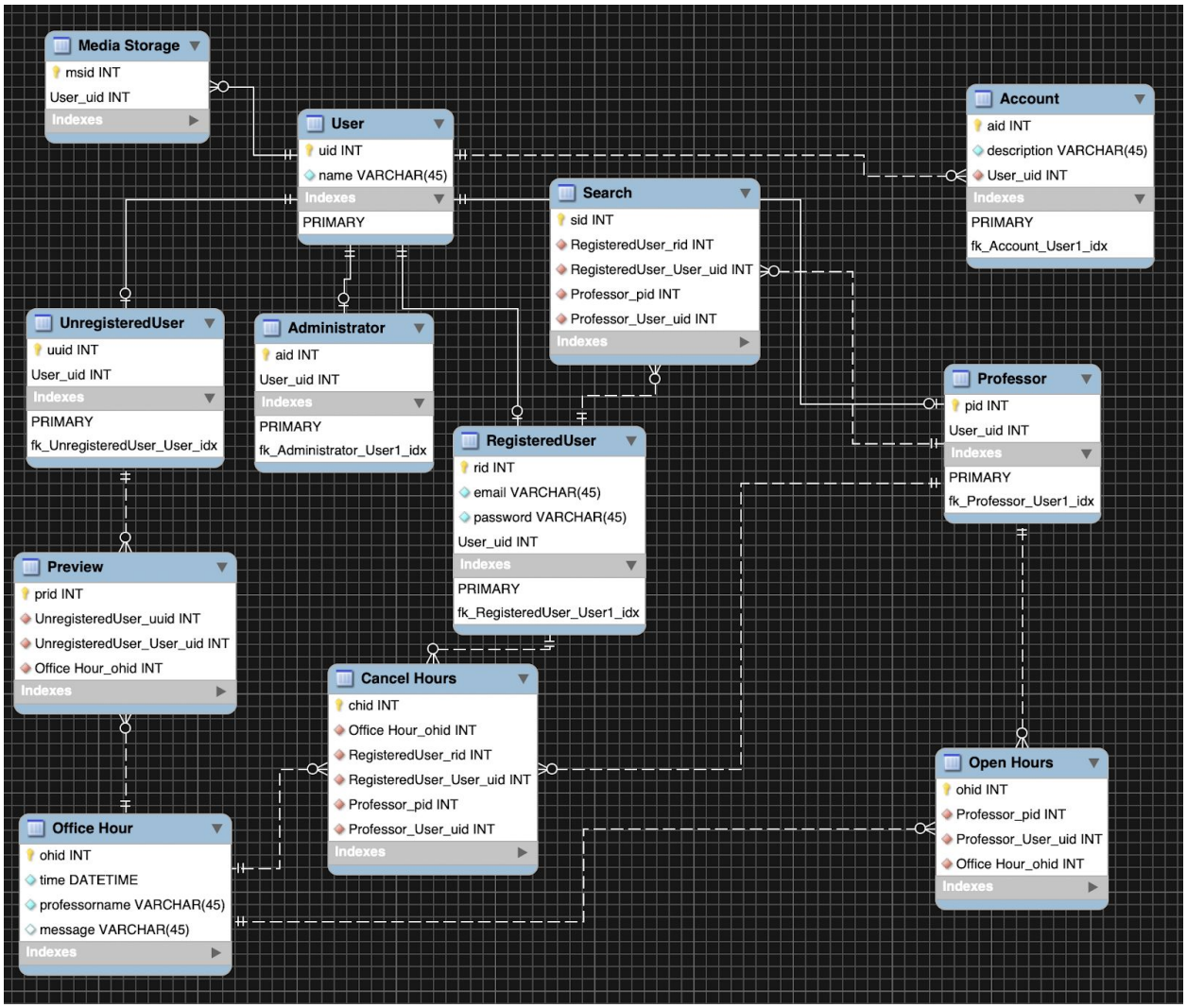
Business Rules :

1. Users can create multiple accounts
2. A registered user can reserve unlimited office hours
3. A professor can open multiple office hours
4. Each office hour is reserved by only one registered user
5. Unregistered users can preview unlimited office hours
6. A registered user can cancel unlimited office hours
7. A professor can cancel multiple office hours

ERD


uid
name
aid
description
User
Create
Account
Access
is A
biography
email
Unregistered User
Administrator
Registered User
Professor
password
Reserve
Cancel
Open
Preview
time
oid
profname
Office Hour

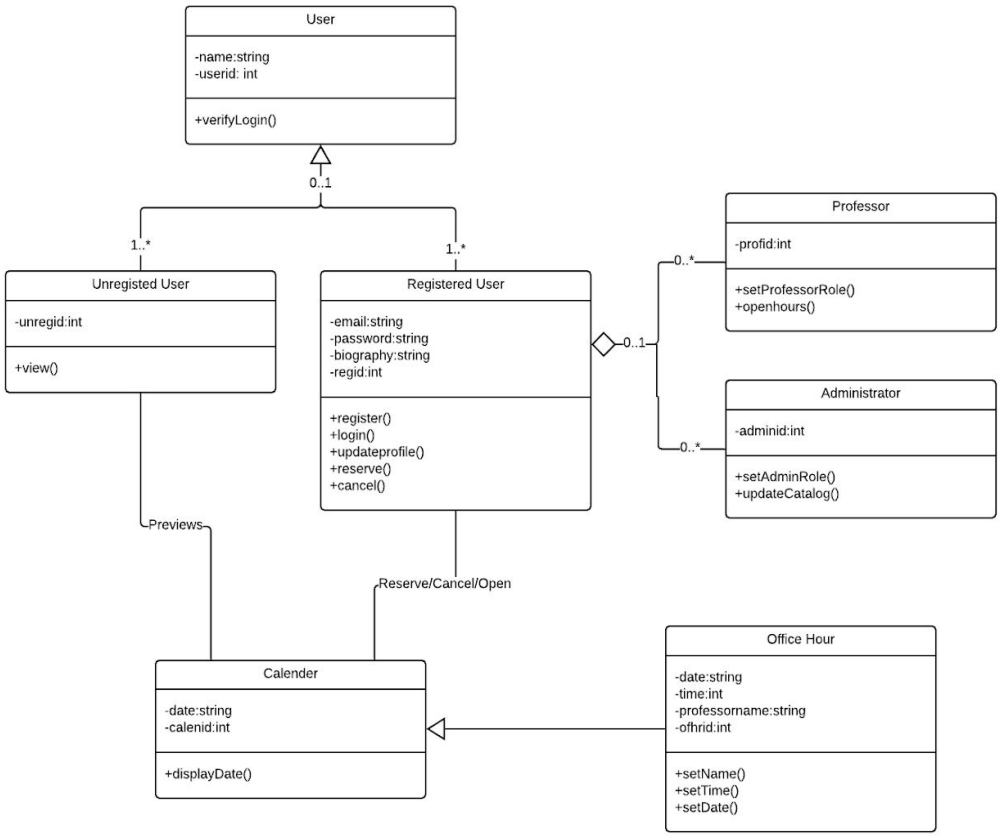
DB Model


Media Storage
msid INT
User_uid INT
Indexes
User
uid INT
name VARCHAR(45)
Indexes
PRIMARY
Account
aid INT
description VARCHAR(45)
User_uid INT
Indexes
PRIMARY
fk_Account_User1_idx
Search
sid INT
RegisteredUser_rid INT
RegisteredUser_User_uid INT
Professor_pid INT
Professor_User_uid INT
Indexes
UnregisteredUser
uuid INT
User_uid INT
Indexes
PRIMARY
fk_UnregisteredUser_User_idx
Administrator
aid INT
User_uid INT
Indexes
PRIMARY
fk_Administrator_User1_idx
Professor
pid INT
User_uid INT
Indexes
PRIMARY
fk_Professor_User1_idx
RegisteredUser
rid INT
email VARCHAR(45)
password VARCHAR(45)
User_uid INT
Indexes
PRIMARY
fk_RegisteredUser_User1_idx
Preview
prid INT
UnregisteredUser_uuid INT
UnregisteredUser_User_uid INT
Office Hour_ohid INT
Indexes
Cancel Hours
chid INT
Office Hour_ohid INT
RegisteredUser_rid INT
RegisteredUser_User_uid INT
Professor_pid INT
Professor_User_uid INT
Indexes
Open Hours
ohid INT
Professor_pid INT
Professor_User_uid INT
Office Hour_ohid INT
Indexes
Office Hour
ohid INT
time DATETIME
professorname VARCHAR(45)
message VARCHAR(45)
Indexes

High Level APIs and Main Algorithms

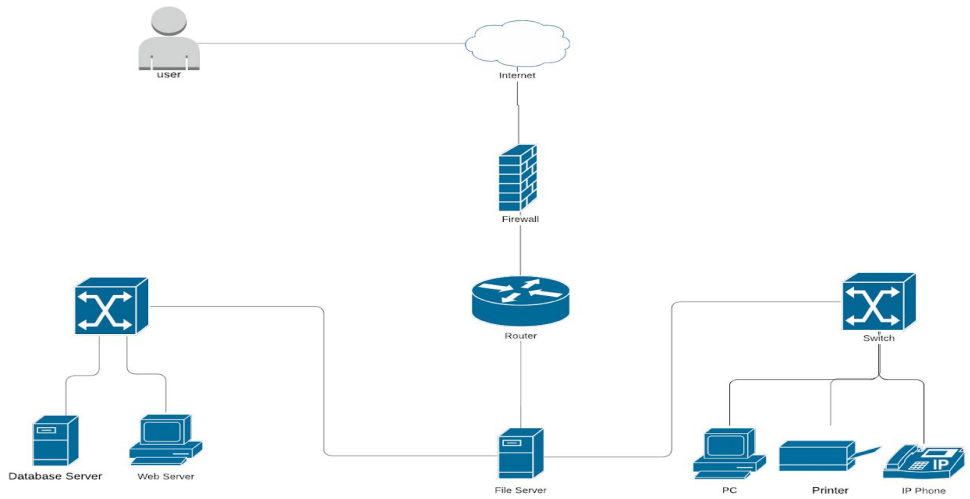
No real APIs are currently implemented or foreseen. Most of the backend communication will be via PHP -> MySQL connect and functions. We use POST requests to communicate with the backend, and bcrypt to hash the user's sensitive information before it is stored in the database. For search we currently use MySQL LIKE operator as that serves all our needs for the professor lookup. But in the future when we bridge our db with the frontend we may need to find another solution for other aspects of our software.

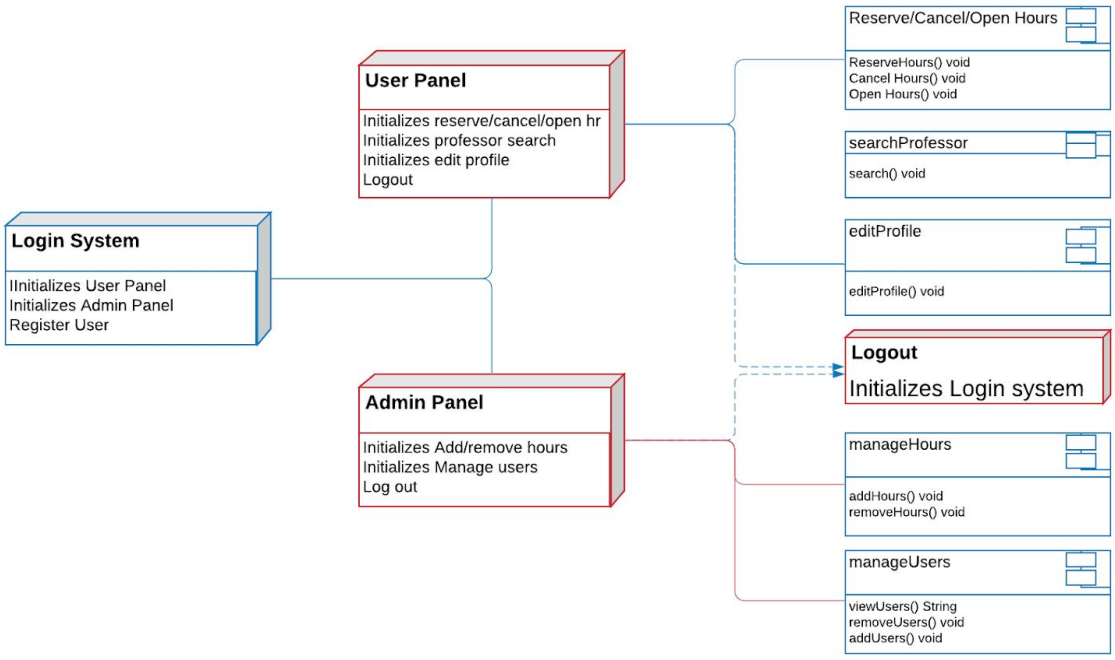
High Level UML Diagrams



The central class is the User. Associated with the User are an Unregistered User, Registered User, Professors and Administrator. Unregistered User are associated with only previewing the Calendar. While Registered User, Professors, and Administrator are able to reserve/cancel/open to a Calendar. The Calendar contains date each with its associated Office Hour.

High Level Application Network and Deployment Diagrams




Login System
IInitializes User Panel
Initializes Admin Panel
Register User
User Panel
Initializes reserve/cancel/open hr
Initializes professor search
Initializes edit profile
Logout
Admin Panel
Initializes Add/remove hours
Initializes Manage users
Log out
Reserve/Cancel/Open Hours
ReserveHours() void
Cancel Hours() void
Open Hours() void
searchProfessor
search() void
editProfile
editProfile() void
Logout
Initializes Login system
manageHours
addHours() void
removeHours() void
manageUsers
viewUsers() String
removeUsers() void
addUsers() void

Current Risks

Skills risks: The team as a whole possesses the skills to complete all aspects of the project. Some members need to be helped out/brought up to speed on how to implement certain features, but as a whole we do have the knowledge to do so and educate everyone to bring them to the same level.

Schedule risks: So far, we have been able to meet all the deadlines and have our prototypes meet all of the requirements on time. No issues with the delivery schedule.

Technical risks: None so far.

Teamwork risks: None so far, each team member is putting in effort and doing their best.

Legal/content risks: None so far.

Project Management

For M2, I split the load of the front end and back end to their respective teams. My front end team worked on the UI Mockups/Storyboards and my back end team worked on the high level database architecture and organization. I helped both sub-teams with their tasks. I also put together the vertical prototype. Not much help was needed from the front end or back end team for this part as it was pretty simple for a single team member to put together. What we really need to do moving forward is to bring the whole team up to speed on the latest UI mockup tools such as Figma, which would have made our UI mockups look a lot nicer. Right now the mockups were built using paint and word. I'll be sure to have a meeting specifically for teaching team members about other tools we can use rather than solely focusing on getting the work done and distributing load.