

# COSC 4P02 - Progress Report 1

Mar 1, 2024

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TA: Brendan Park ([bp18ul@brocku.ca](mailto:bp18ul@brocku.ca))

GitHub: <https://github.com/kphillippo/habit-tracker>

Jira: <https://habittracker.atlassian.net/jira/software/projects/SCRUM/boards/1>

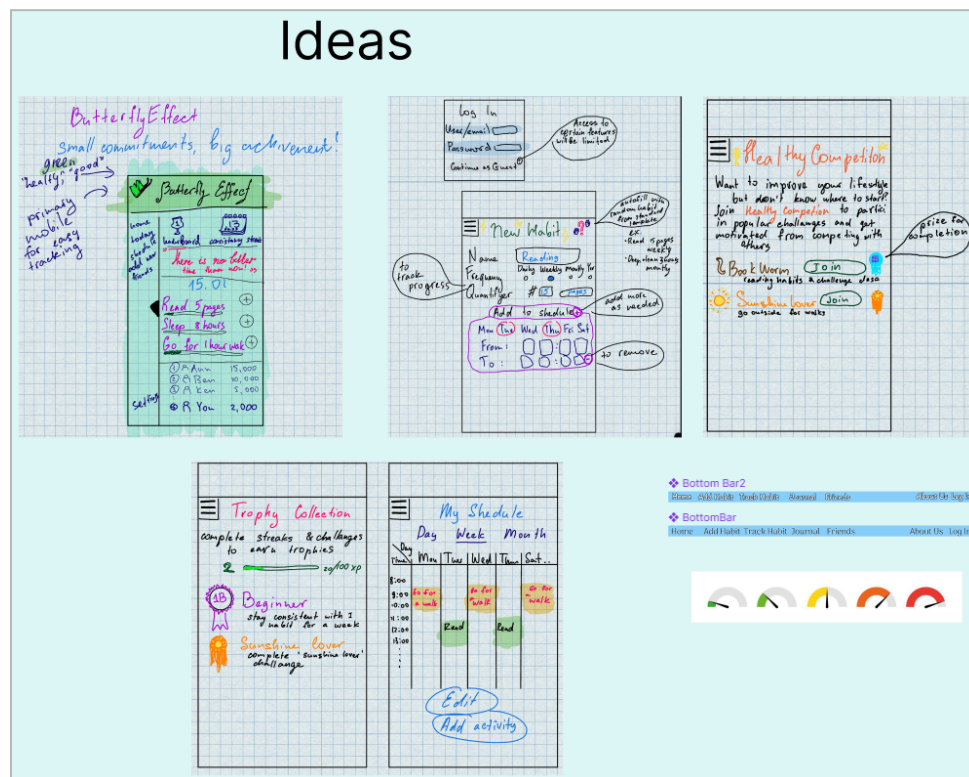
Figma: <https://www.figma.com/file/g4kPNHIQEhR718MbzswRJ/Design?type=design&node-id=0%3A1&mode=design&t=GJo5eAb9d65v0eO9-1>

## Progress Update

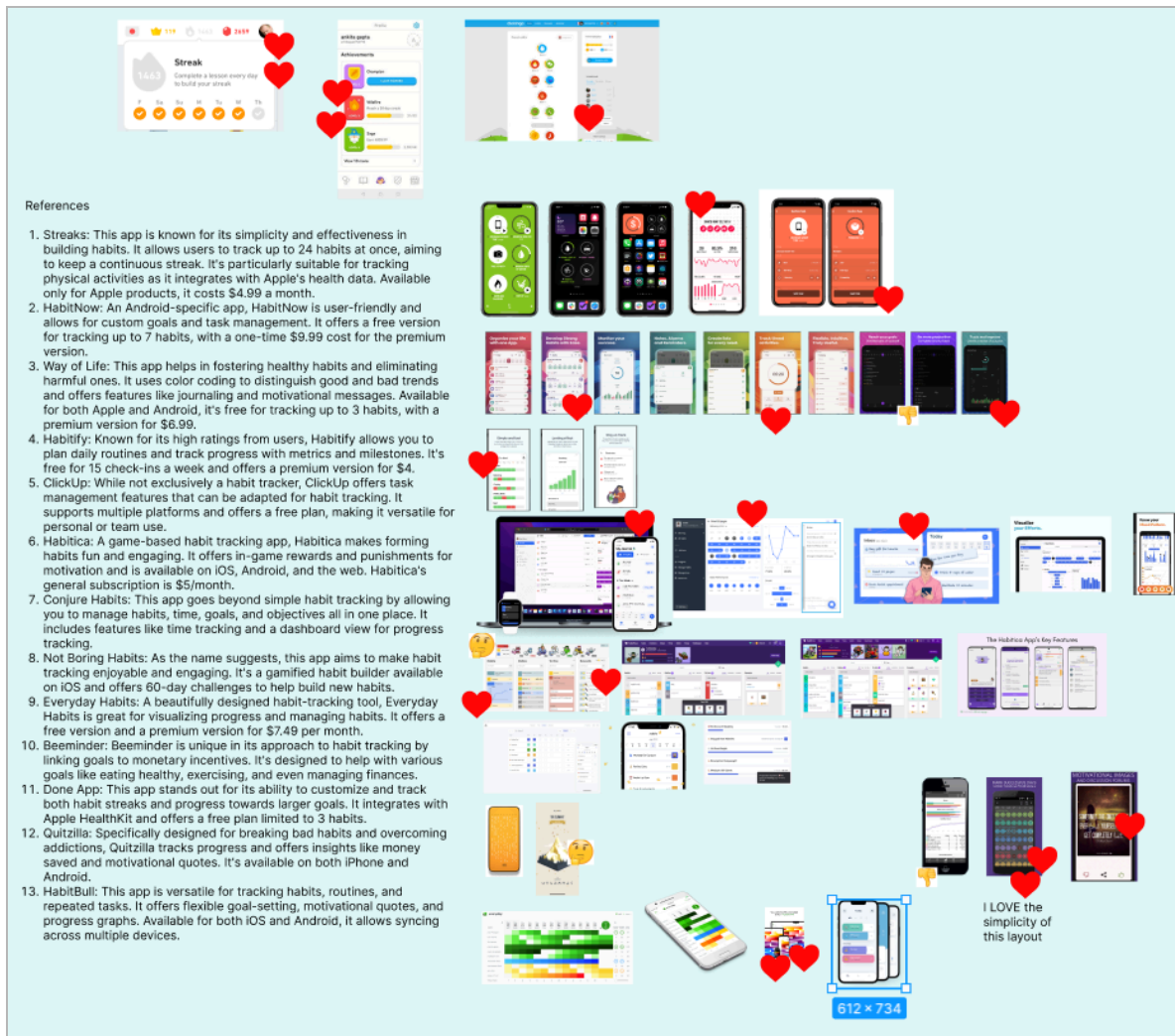
### Project Design

During our first Sprint, countless hours of effort were put into the design of our website, from both the front end and the back end.

Our use of [Figma](#) has been essential in collecting ideas for the design of the front end of our site. Led by Kacie and Elya, there were many discussions on what the site should look like, what features should be implemented, and how those features should appear on the website's pages. Below are some screenshots from Figma of the work done in front-end design.



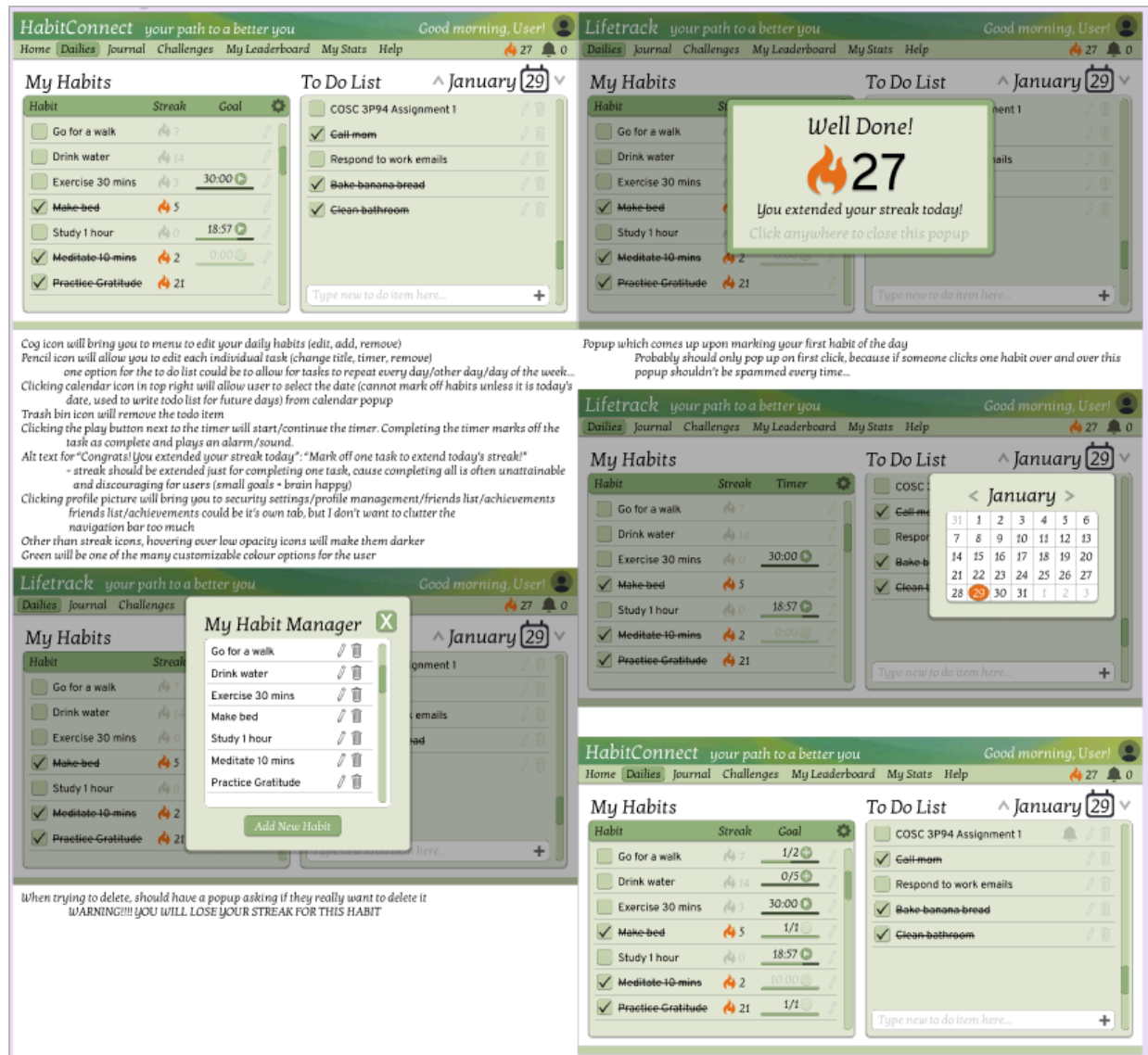
Original sketch ideas for some initial pages of the site.



*An exploration of current habit tracking websites and phone apps.*



*Website homepage (logged in user).*

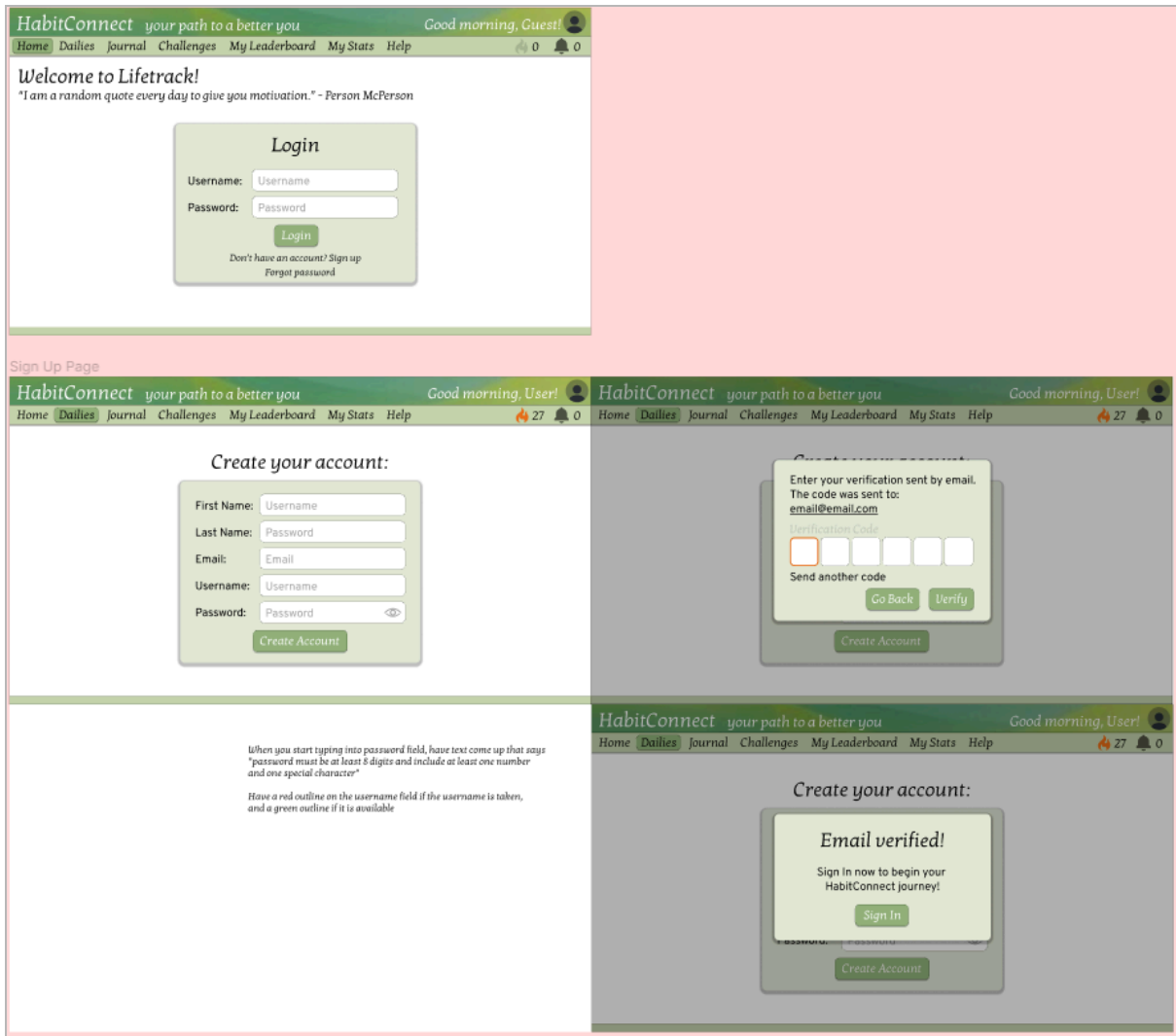


Design of 'Dailies' page, or the habit tracking page for the site.

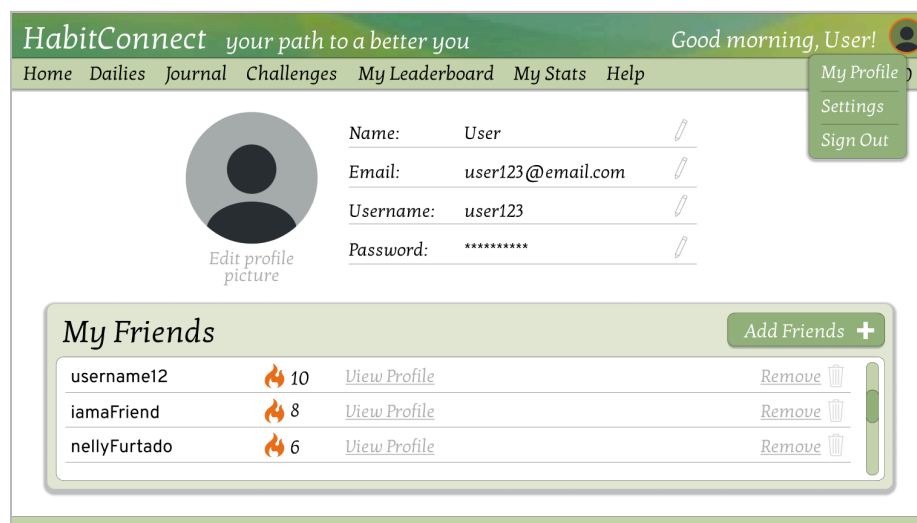
The grid contains eight popup boxes, each with a title bar and a close button (X).

- Top Row (Left to Right):**
  - Add To Do:** Fields for Name (COSC 3P94 Assignm...), Date (Feb 3rd, 2024), Repeat (Do not repeat), and Remind (No not remind). Buttons: Save & Close.
  - Add To Do:** Fields for Name (COSC 3P94 Assignm...), Date (Feb 3rd, 2024), Repeat (Do not repeat), and Remind (Remind the day before). Buttons: Save & Close.
  - Edit My Habit:** Fields for Name (Exercise 30 mins), Timer (00:30:00), Counter (30), Frequency (Every day), and Current Streak (3). Buttons: Save & Close, and a trash icon.
  - Edit My Habit:** Fields for Name (Exercise 30 mins), Timer (00:30:00), Counter (30), Frequency (Every day), and Current Streak (3). Buttons: Save & Close, and a trash icon.
- Bottom Row (Left to Right):**
  - Add New Habit:** Fields for Name (Exercise 30 mins), Timer (00:30:00), Counter (30), and Frequency (Every day). Buttons: Save & Close.
  - Add New Habit:** Fields for Name (Exercise 30 mins), Timer (00:30:00), Counter (30), and Frequency (Every day). Buttons: Save & Close.
  - Add New Habit:** Fields for Name (Exercise 30 mins), Timer (00:30:00), Counter (30), Frequency (Every week), and Day (Monday). Buttons: Save & Close.
  - Edit My To Do:** Fields for Name (COSC 3P94 Assignm...), Date (Feb 3rd, 2024), Repeat (Do not repeat), Remind (Remind the day before), and Status (Done). Buttons: Save & Close, and a trash icon.

'Dailies' page popup boxes for habit/to-do editing.



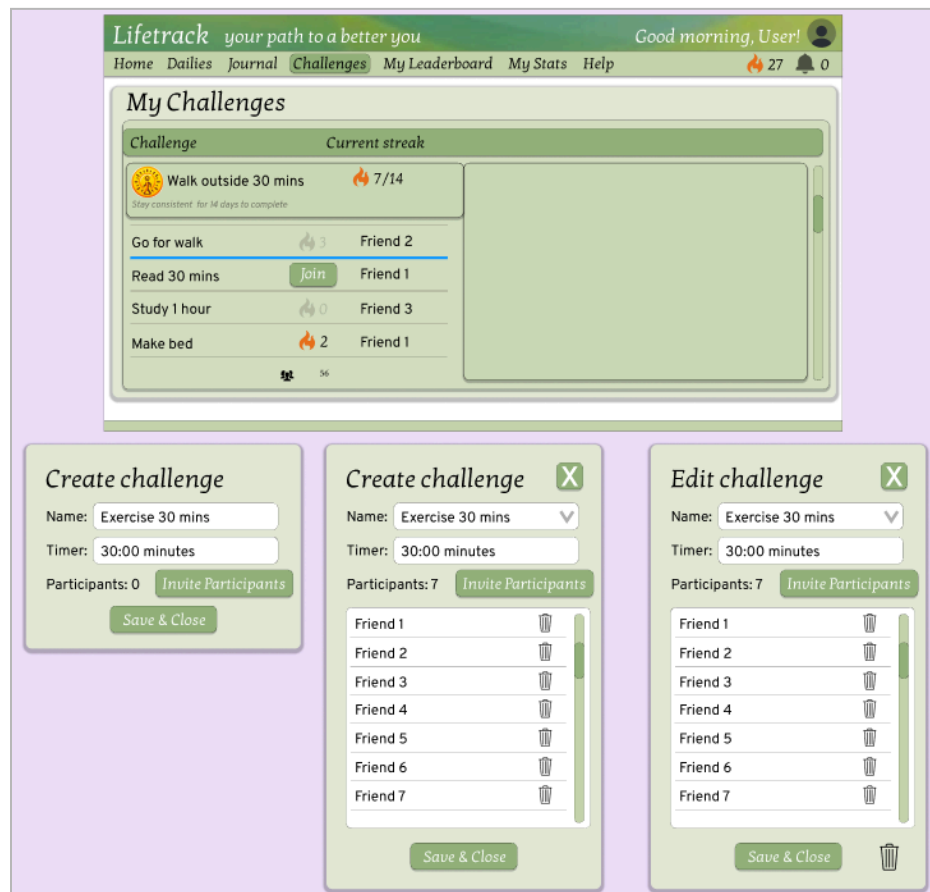
*Sign-up and login page designs.*



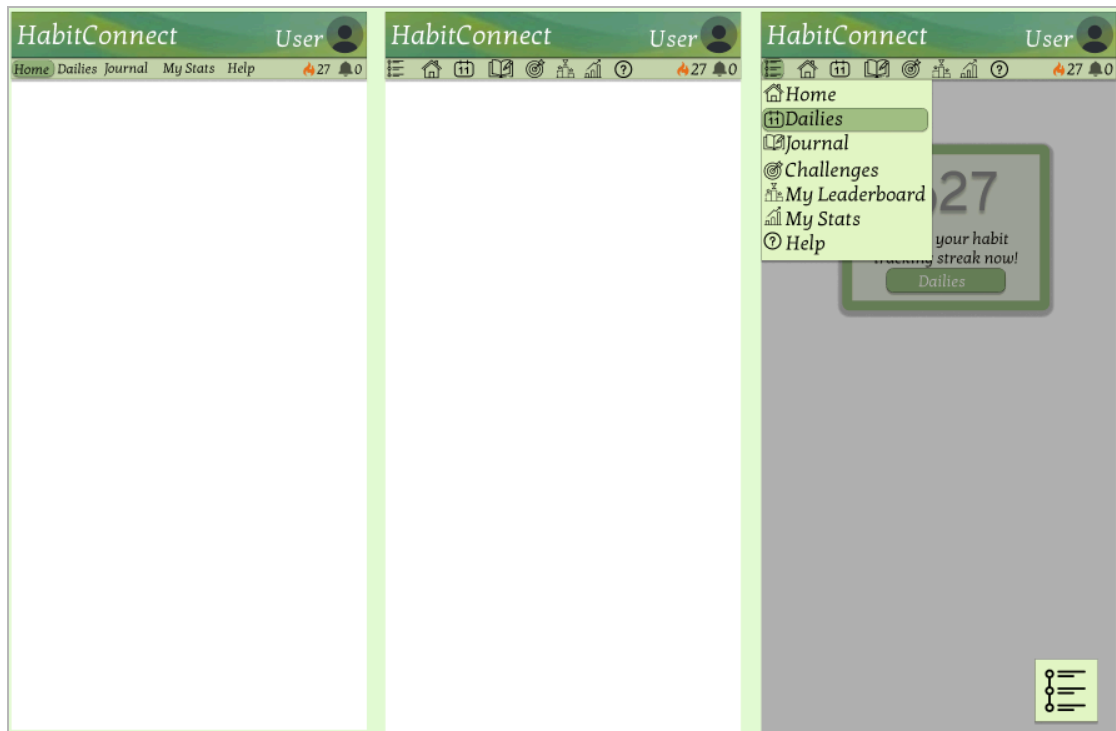
*User profile page design.*



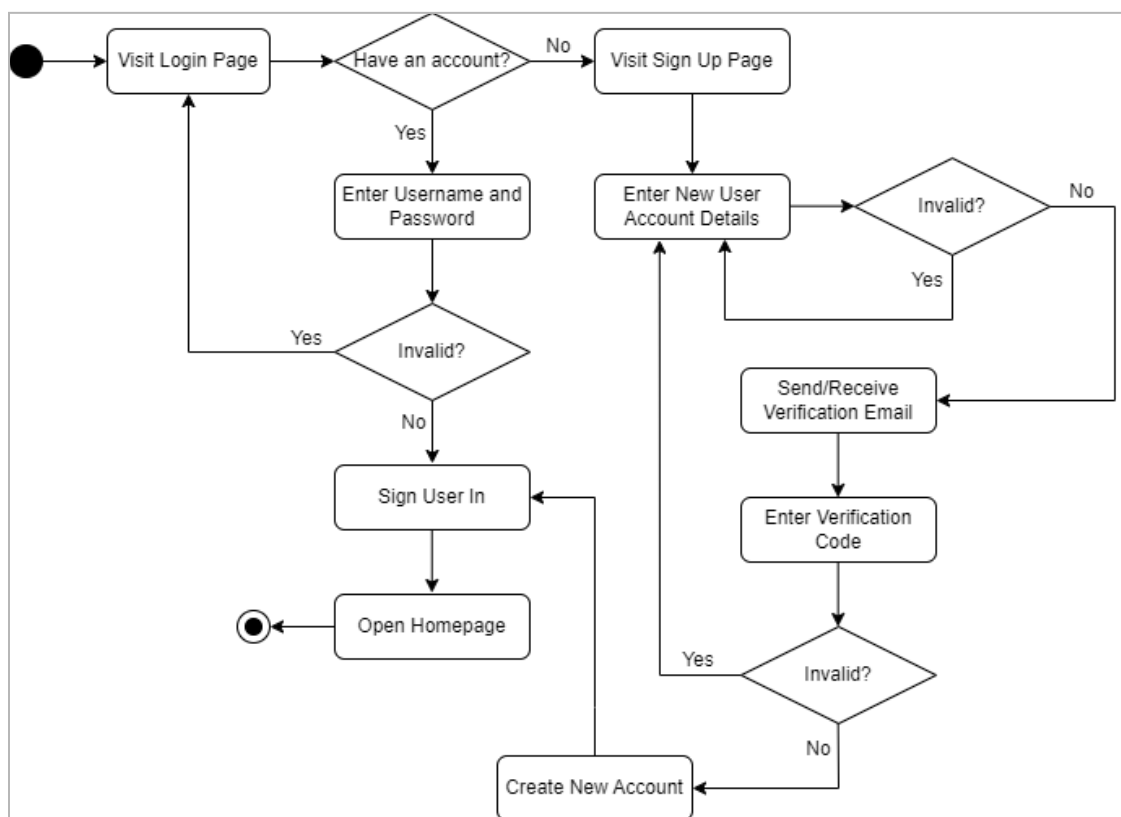
Leaderboard page initial designs (in progress).



Challenges page and pop-ups initial designs (in progress).



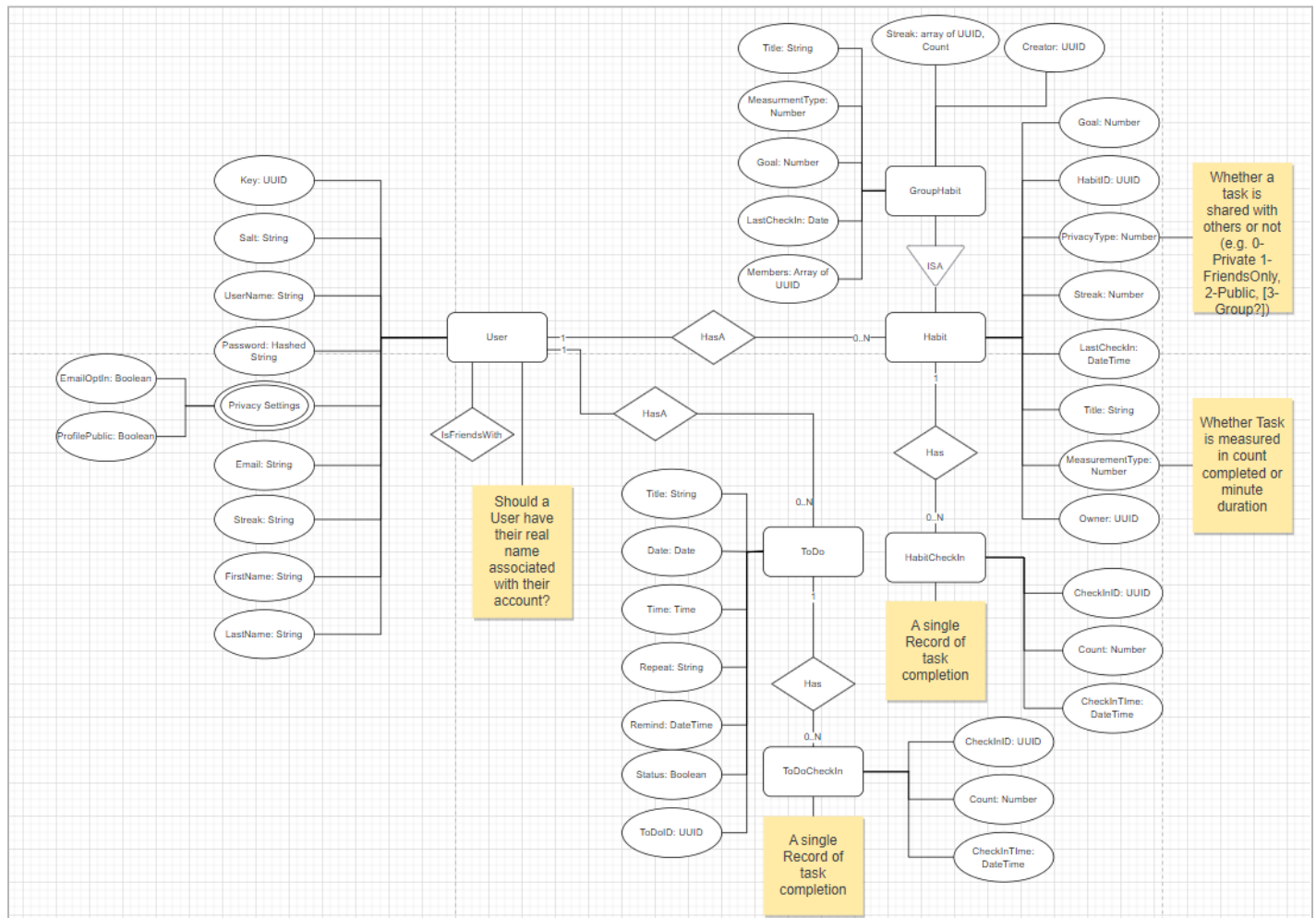
Initial mobile layout design ideas (in progress).



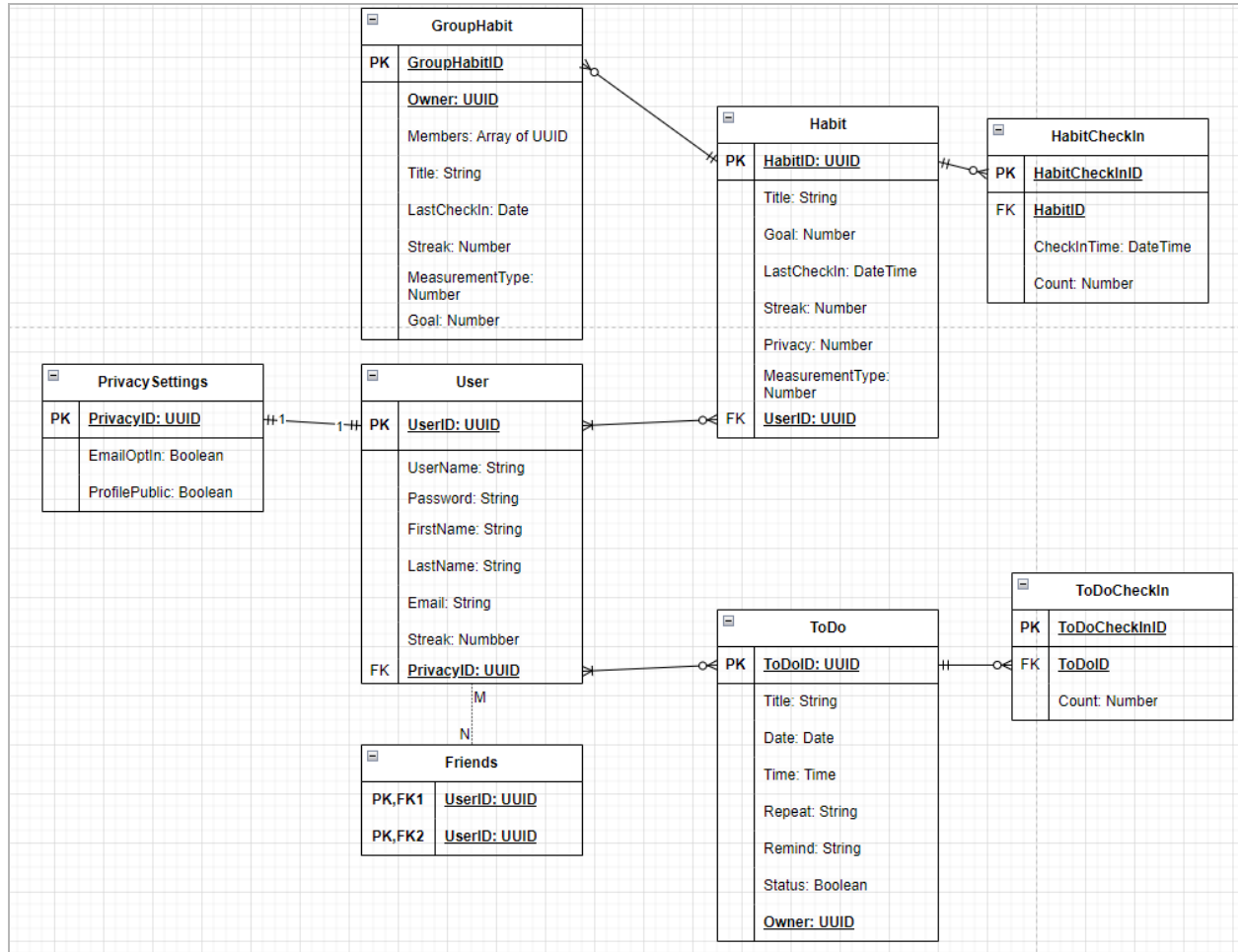
Sign in/sign up activity diagram (created with Draw.io).



Our back-end team, Lysa and Robert, have also spent time designing the back-end of the website, specifically focusing on the design of the tables in our database. Some of this work can be seen here:



ER diagram outlining objects interacting within the system (created with Draw.io).



Database structure design (created with Draw.io).

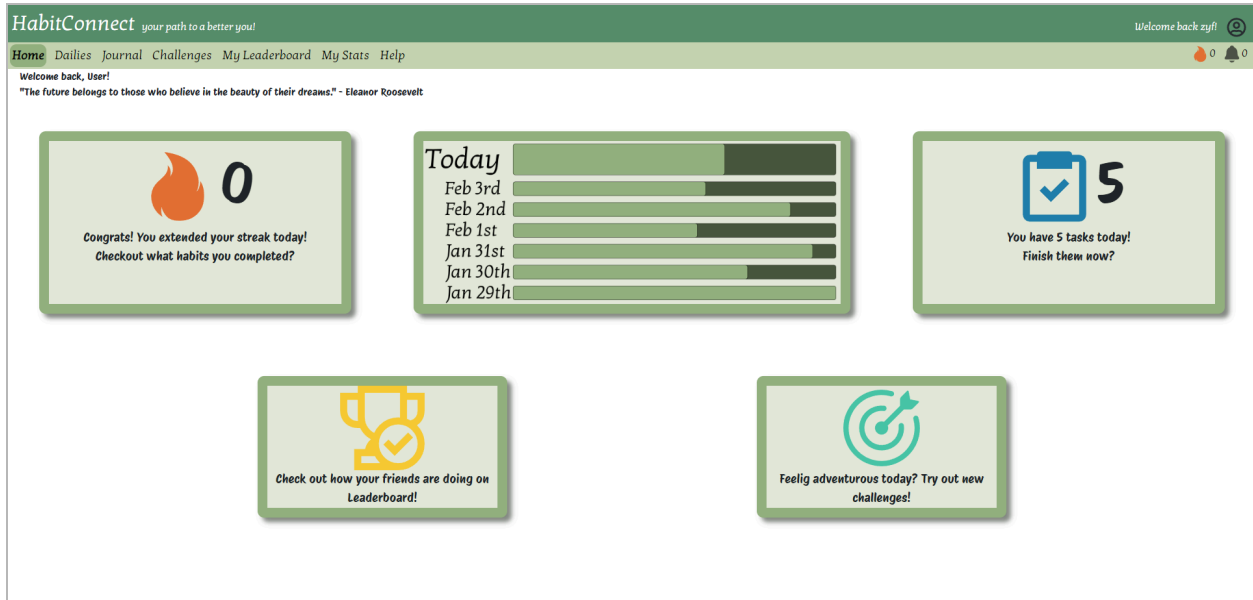
## Front-End

Front end has implemented many pages on the site thus far. Though many will have continual edits as we figure out formatting and fully implement the backend (as is typical for an agile process like the one we are following), the following are the pages that have been started by the team:

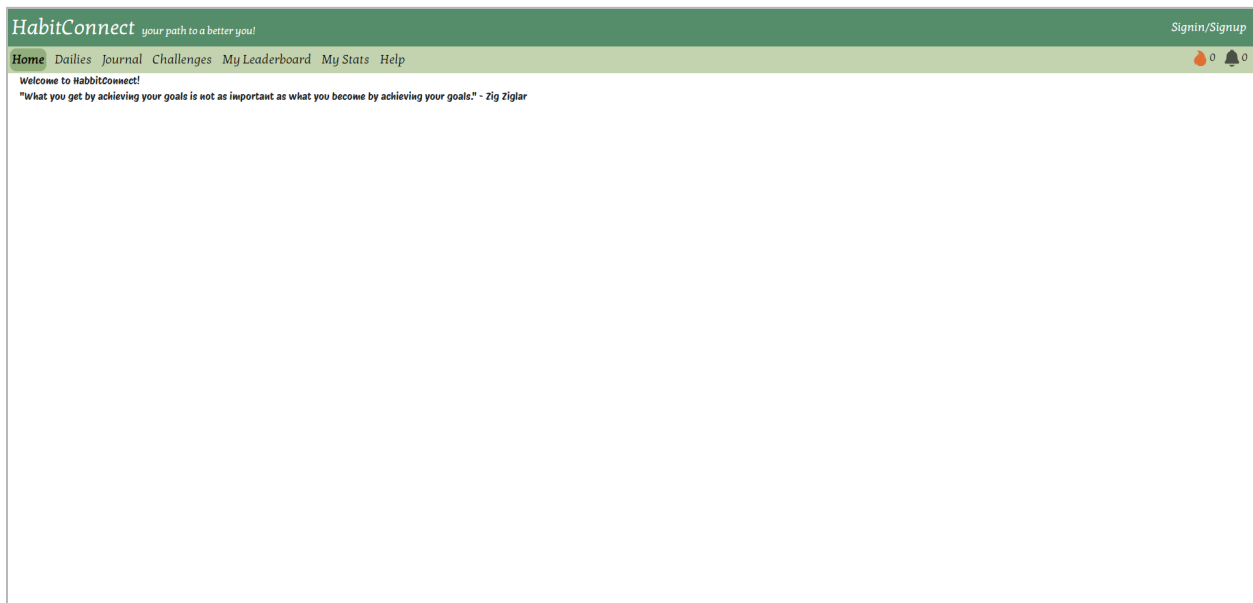
- Homepage
- Sign up page
- Login page
- User profile page
- Dailies page

Alongside the creation of these pages, there has also been much time and effort dedicated to designing reusable components to be used across all pages on the site. Yifan has taken the lead on making sure the front-end and the back-end work are connected smoothly, implementing the login and sign up features. Below are some screenshots of our site thus far:





Homepage (signed in, in progress). - Elya



Homepage (guest user, in progress) - Elya

HabitConnect

your path to a better you!

Signin/Signup

Home

Dailies

Journal

Challenges

My Leaderboard

My Stats

Help

0

0

Create Your Account!

First Name:

First Name

Last Name:

Last Name

Email:

Email

Username:

Username

Password:

Password

Create Account

HabitConnect

your path to a better you!

Signin/Signup

Home

Dailies

Journal

Challenges

My Leaderboard

My Stats

Help

30

0

Create Your Account!

Fill out this field

Enter the verification code sent to your email.  
The code was sent to

VERIFICATION CODE:

Verify

First Name:

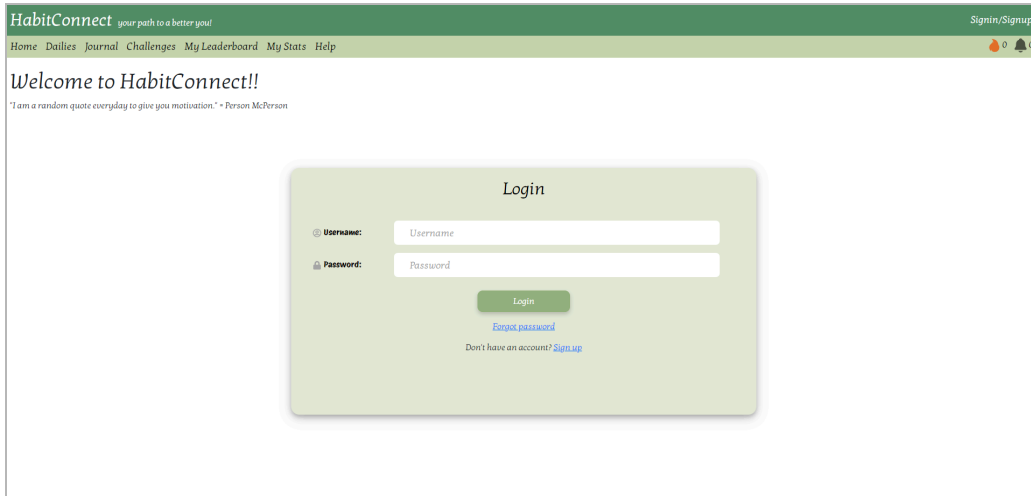
Last Name:

Email:

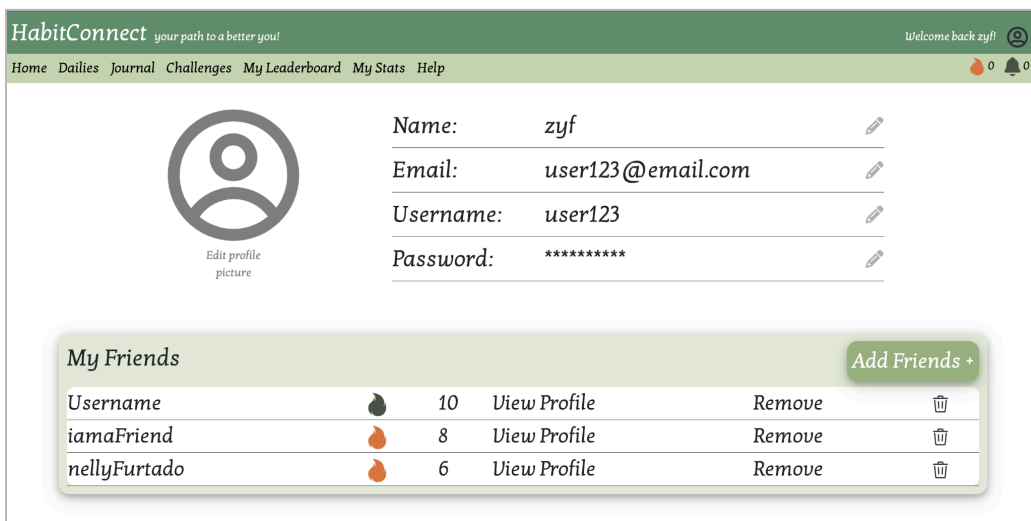
Username:

Password:

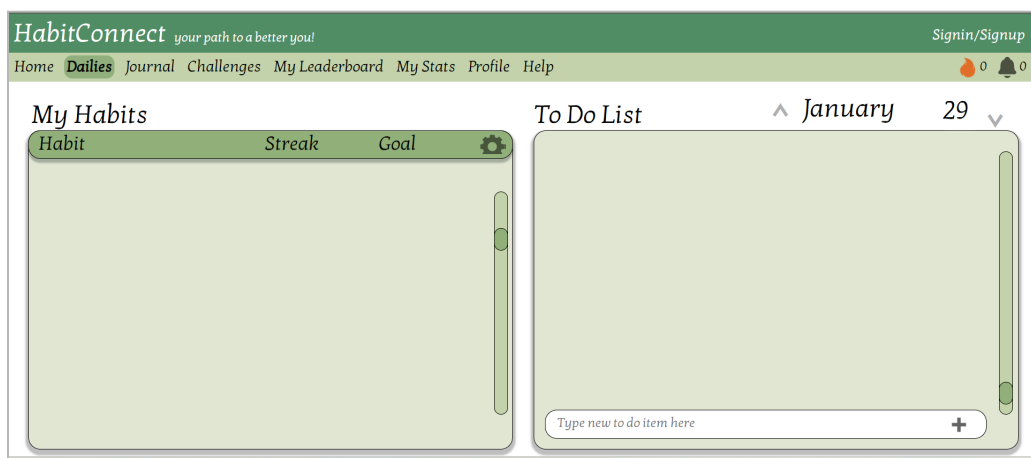
Sign up page (in progress). - Muiz



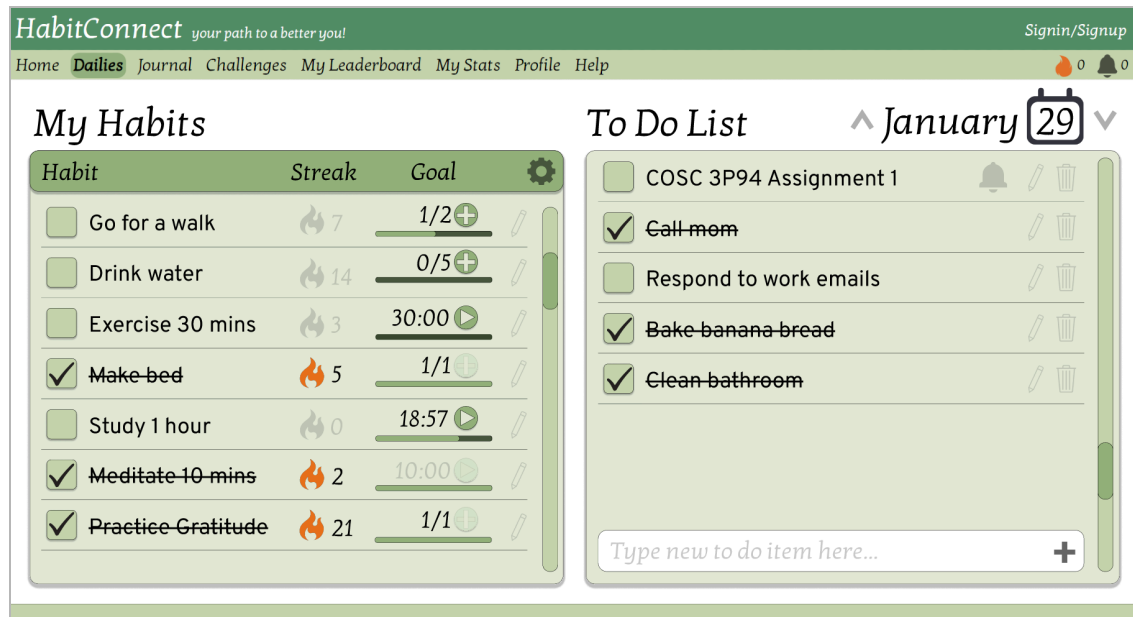
Login page (in progress). - Muiz



User profile page (in progress). - Elya



Dailies page as on main branch. - Max



*Dailies page as on Maxwell branch (in progress). - Max*

Front-end's next steps include finalizing pages started in Sprint 1, as well as implementing the 'dailies' page, for habit and to-do creation. During Sprint 2, the front-end team also hopes to complete the Leaderboards, Challenges and Settings pages.

### *Back-End*

The back-end team has focused their efforts on designing and implementing the beginning stages of our back-end work, with a focus on designing the database in a way that will allow for easy implementation of other components later on.

Lysa initialized the setup of the MongoDB database and created a login for everyone, as well as created a guide so everyone knows how to access the database. Lysa also created the User and PrivacySettings tables schemas in the backend (creating a router and controller for each as well). For the sign up function, the password is made secure, by adding a salt, then hashing the password and storing it in the database. She also made the Friends, ToDo, TodoCheckIn and HabitCheckIn schemas. Lysa also initialized the login and sign up functions in the back end. She is currently working on creating automated testing for the login and sign-up in the back end using Jest. Robbie has initialized the Habit table and created a router and controller for it. He also made backend requests for creating a habit and getting a user's habits. He also made it so that our server username and passwords are hidden so no one can access the database from our code on GitHub.

The back-end's next steps are to create get and post requests that the front end members need for the various pages they are beginning to implement. Here are some screenshots of the database tables as they are right now, with some test data:

Habit\_Tracker.ToDoCheckIn

31DOCUMENTSINDEXES

Documents

Aggregations

Schema

Indexes

Validation

Filter

Type a query: { field: 'value' }

Explain

Reset

Find

Options

ADD DATA

EXPORT DATA

1 - 3 of 3

ToDoCheckIn

	_id ObjectId	ToDoID ObjectId	Count String	
1	ObjectId('65d901f1b0482d...	ObjectId('65d9007cb0482d...	"1"	
2	ObjectId('65d90221b0482d...	ObjectId('65d900d3b0482d...	"5"	
3	ObjectId('65d9025eb0482d...	ObjectId('65d90121b0482d...	"10"	

Habit\_Tracker.PrivacySettings

41DOCUMENTSINDEXES

Documents

Aggregations

Schema

Indexes

Validation

Filter

Type a query: { field: 'value' } or Generate query

Explain

Reset

Find

Options

ADD DATA

EXPORT DATA

UPDATE

DELETE

1 - 4 of 4

PrivacySettings

	_id ObjectId	EmailOptIn Boolean	ProfilePublic Boolean	User ObjectId	
1	ObjectId('65d8fdffb0482d...	true	true	ObjectId('65cfd752107086...	
2	ObjectId('65d8fd2b0482d...	true	false	ObjectId('65d6a0aeda7525...	
3	ObjectId('65d8fe10b0482d...	false	true	ObjectId('65d8f0836f083e...	
4	ObjectId('65d8fe48b0482d...	false	false	ObjectId('65d8f28f97bfb...	

Habit\_Tracker.HabitCheckIn

21DOCUMENTSINDEXES

Documents

Aggregations

Schema

Indexes

Validation

Filter

Type a query: { field: 'value' } or Generate query

Explain

Reset

Find

Options

ADD DATA

EXPORT DATA

UPDATE

DELETE

1 - 2 of 2

HabitCheckIn

	_id ObjectId	HabitID ObjectId	Count Int32	CheckInTime Date	
1	ObjectId('65d905d071c4564...	ObjectId('65d7e7819d87735...	8	2024-02-23T20:46:07.762+0...	
2	ObjectId('65d9062871c4564...	ObjectId('65d7e7819d87735...	4	2024-02-22T20:15:07.762+0...	

Habit\_Tracker.Habit

21DOCUMENTSINDEXES

Documents

Aggregations

Schema

Indexes

Validation

Filter

Type a query: { field: 'value' } or Generate query

Explain

Reset

Find

Options

ADD DATA

EXPORT DATA

UPDATE

DELETE

1 - 2 of 2

Habit

	_id ObjectId	Owner ObjectId	Title String	Streak Int32	PrivacyType Int32	MeasurementType Int32	Goal Int32	
1	ObjectId('65d7e7819d87735...	ObjectId('65cfd752107086...	"Drink Water"	0	0	0	8	
2	ObjectId('65d7e9e5c46c402...	ObjectId('65cfd752107086...	"Morning Exercise"	0	0	0	1	

Habit\_Tracker.ToDo

31DOCUMENTSINDEXES

DocumentsAggregationsSchemaIndexesValidation

FilterType a query: { field: 'value' } or Generate query

ADD DATAEXPORT DATAUPDATEDELETE

1-3 of 3

#	ToDo	_id	ObjectId	Owner	ObjectId	Title	String	Date	String	Time	String	Repeat	String	Remind	String	Status	String
1		ObjectId('65d9007cb0482d...		ObjectId('65cfd752107086...		"Doctors Appointment"		"2024-02-23T15:00:00Z"		"2024-02-23T15:00:00Z"		"never"		"5 minutes before"		"done"	
2		ObjectId('65d900d3b0482d...		ObjectId('65cfd752107086...		"Visit mom"		"2024-06-23T15:00:00Z"		"2024-06-23T15:10:00Z"		"once a month"		"the day before"		"done"	
3		ObjectId('65d90121b0482d...		ObjectId('65cfd752107086...		"Feed dog"		"2024-02-23T15:00:00Z"		"2024-02-23T15:00:00Z"		"twice a day"		"5 minutes before"		"done"	

Habit\_Tracker.User

23DOCUMENTSINDEXES

DocumentsAggregationsSchemaIndexesValidation

FilterType a query: { field: 'value' } or Generate query

ADD DATAEXPORT DATAUPDATEDELETE

1-4 of 4

#	User	_id	ObjectId	FirstName	String	LastName	String	Email	String	Username	String	Password	String	__v	Int32	Streak	Int32
1		ObjectId('65cfd752107086...		"Lysa"		"Hannes"		"test@email.com"		"cristalKitty"		"\$2b\$10\$dXPEdYBdap9GpCyt...		0		0	
2		ObjectId('65d6a0aeda7525...		"Yifan"		"Zhu"		"Test123@gmail.com"		"zyf"		"\$2b\$10\$5Q40A8oJeSuOLV.K...		0		0	
3		ObjectId('65d8f0836f083e...		"Tester"		"OfTests"		"Tester@gmail.com"		"TheTester"		"\$2b\$10\$zImIYxaES39MSGJL...		0		0	
4		ObjectId('65d0f28f9f7bfb...		"John"		"Doe"		"JohnDoe@gmail.com"		"John"		"\$2b\$10\$0XGLwxECWyxPrjsU...		0		0	

Habit\_Tracker.Friends

41DOCUMENTSINDEXES

DocumentsAggregationsSchemaIndexesValidation

FilterType a query: { field: 'value' }

ADD DATAEXPORT DATA

1-4 of 4

#	Friends	_id	ObjectId	User	ObjectId	FriendsWith	ObjectId
1		ObjectId('65d8fb67b0482d...		ObjectId('65cfd752107086...		ObjectId('65d6a0aeda7525...	
2		ObjectId('65d8fbb2b0482d...		ObjectId('65d6a0aeda7525...		ObjectId('65cfd752107086...	
3		ObjectId('65d8fbe4b0482d...		ObjectId('65d8f0836f083e...		ObjectId('65d8f28f9f7bfb...	
4		ObjectId('65d8fc07b0482d...		ObjectId('65d8f28f9f7bfb...		ObjectId('65d8f0836f083e...	

Habit\_Tracker.GroupHabit

11DOCUMENTSINDEXES

DocumentsAggregationsSchemaIndexesValidation

FilterType a query: { field: 'value' } or Generate query

ADD DATAEXPORT DATAUPDATEDELETE

1-1 of 1

#	GroupHabit	_id	ObjectId	Owner	ObjectId	Members	Array	Title	String	Streak	Array	MeasurementType	Int32	Goal	Int32
1		ObjectId('65d8fb99835cb41...		ObjectId('65cfd752107086...		[]	2 elements	"Exercise"		[]	2 elements	0		30	



## **Sprint Progress**

Our only completed sprint, Sprint 1, was scheduled from January 17th to February 23rd. During this sprint, there were 34 tasks scheduled, of which we completed 24 and left 9 in progress, with 1 not started. The completed tasks had a total of 76 story points estimated between them. A comprehensive evaluation of the user stories and tasks completed during our first sprint, and the reasons for the lack of completion of our in progress task, can be found in the 'meeting-notes' folder on our GitHub page, titled [Sprint1Tasks.xlsx](#). This excel sheet was created during our Sprint 1 Review meeting.

## **Software Engineering Process**

As per the schedule outlined in our GitHub README file, we have completed one sprint as of writing this report. Accompanying our Sprint 1 Review meeting which took place on February 23rd and our Sprint 1 Retrospective meeting which took place on February 28th, we had 14 'daily' scrum meetings. These meetings consisted of discussing, delegating and prioritizing our weekly tasks, as well as ensuring that all design elements are being thoroughly discussed and approved by all team members. Meeting notes for all of these meetings can be found on our [GitHub](#) page in the 'meeting-notes' folder. Between scheduled meeting times, we are continuing to communicate through a constantly active Discord channel, where we keep each other updated about our current progress, and reach out when we need help.

We have been consistently utilizing [Jira](#) in order to assign tasks and track the progress of our first sprint. We completed 24/34 tasks scheduled for our first sprint, and are confident that we will continue to meet our deadlines to complete the project in the estimated timeframe.

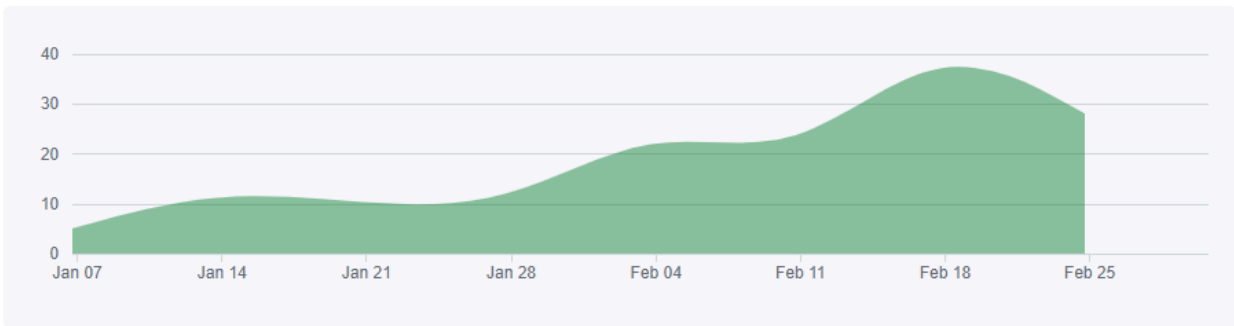
## **GitHub/Jira Logs**

Below we have included some insights from GitHub and Jira regarding our progress in implementing features on the site. We do, however, feel that many of these insights do not accurately reflect the amount of work put in by each team member. We encourage you to focus more on the "Contributions" section of this report, to see a more accurate representation of the work put in by each member of the group.

Jan 7, 2024 – Mar 2, 2024

Contributions: Commits ▾

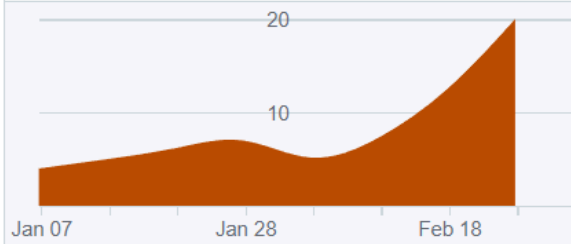
Contributions to main, excluding merge commits



**zyfeleven**

66 commits 383,019 ++ 347,231 --

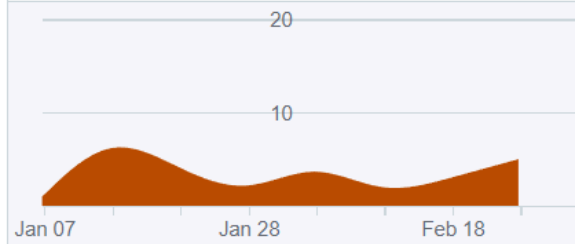
#1



**kphilippo**

28 commits 109 ++ 41 --

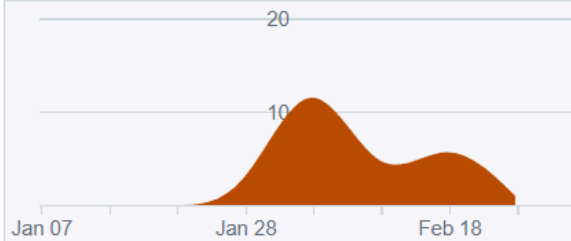
#2



**LysaHannes**

27 commits 10,083 ++ 1,477 --

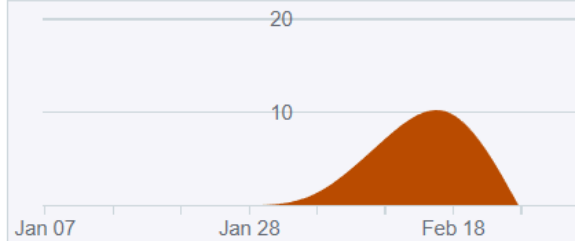
#3

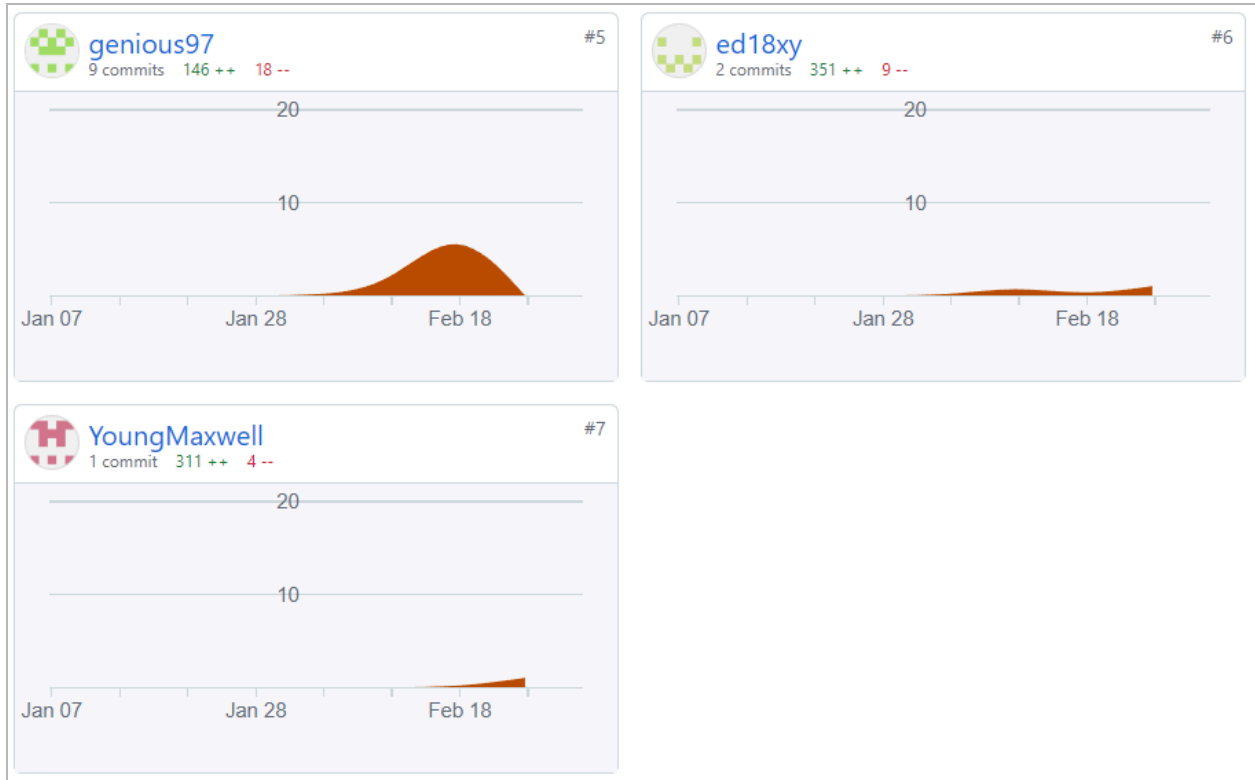


**mu1ze**

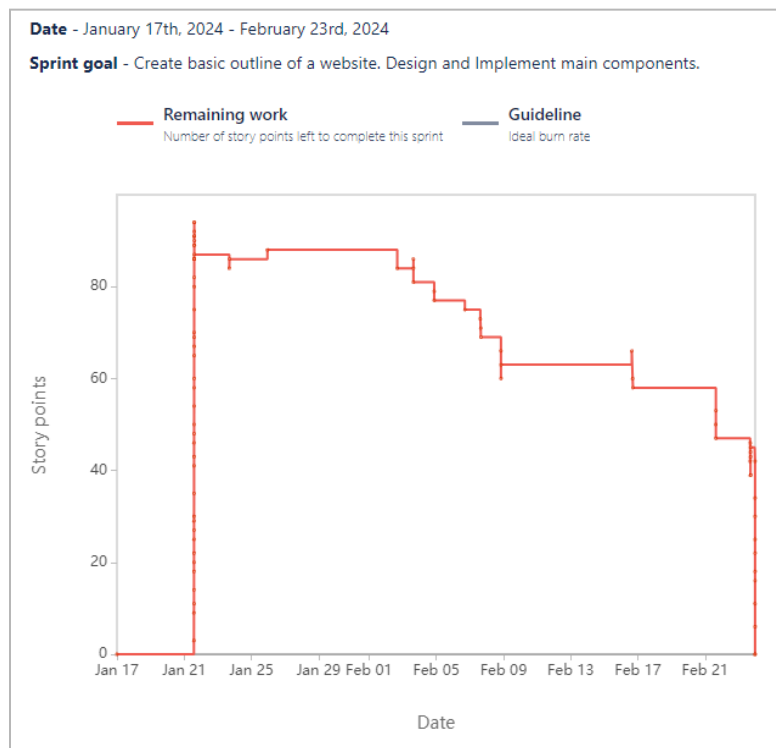
20 commits 2,770 ++ 1,841 --

#4





*Report of contributions to the main branch as of March 1st (GitHub).*



*Sprint 1 Burndown Report (Jira).*



*Sprint 1 Burnup Report (Jira).*

## Challenges

We have encountered many challenges during our first sprint, which have contributed to our learning of the software engineering process through this first sprint.

Firstly, we initially struggled with knowing each others' skills. Many of us did not know each other before the beginning of this project, so it took some time for us to get to know the skills and communication styles of all the group members. After many meetings and discussions, it became more obvious the natural roles each of us would take during our project, and this challenge became less of a struggle.

Another challenge we have faced during our time working on this project is managing the weight of this project with the responsibilities of our other classes. Many of us are in our final semester at Brock, and taking many upper year courses which are very demanding. As such, some group members were unable to contribute as much as others between our scrum meetings at different times during the sprint, in order to prioritize other assignments and tests. Even with this challenge we have been pushing through, and are even doing our best to try and front-load the semester with work on this project, since we know the later half of the semester will become more challenging in our other courses, and with exams coming up quickly. Our 2 meetings a week are doing a good job at keeping everyone accountable for the work they are contributing to the project, while not overwhelming the members.

One challenge we have faced during this sprint was with communication of tasks. Two of our members ended up working on one page of our site at the same time, which caused duplicated work and some frustration. It took more hours of work to combine the best parts of both members' code to make sure that neither of their effort was wasted. What we learned from this scenario was to be more clear about who is working on what and when. We now emphasize the importance of checking Jira first and foremost to see if a task is assigned to you, and we are using the Discord server even more frequently to update each other on the tasks we are working on.

## **Successes**

Though we did have our challenges getting started with this project, there are many successes we feel are important to celebrate at the end of our first sprint.

Though we may not have many pages created yet for our site, our work on designing many pages throughout HabitConnect has been extensive. This work means that we have a very clear vision for what we need to do for Sprint 2, and we will have a cohesive design as we work on implementing the remaining required features for this site.

We are also very proud of the amount of work we were able to put into the site during our first sprint. It was a slow start as we learned each other's strengths and communication styles, but we quickly picked up the pace and put ourselves in a great position to finish the project within the desired timeframe. Our goal was to work very hard on 4P02 before our other courses started to become more demanding, and we accomplished this.

Though we did not complete all of our tasks scheduled for the first sprint, we were very happy with the progress that was made towards completing our goals. All items that were left undone were either close to being finished, or were outside of the scope of Sprint 1 to begin with (which we did not realize until beginning the project. Going forward, we know we will have a better idea of what we are capable of completing within a single sprint.

Our Progress Report 1 meeting with Brendan also went very well. We were told that our presentation of our work was well formatted and that we are making good progress. This feedback boosted our confidence, and further solidified that we are heading in the right direction for this project.

## **Progress Report 1 Meeting Feedback**

We had our Progress Report 1 meeting with our TA, Brendan Park, on February 27th. We were encouraged by his confidence that we are on a good pace to finish our project within all necessary deadlines, and that he was happy about the format of our presentation with him.

Some feedback received about the state of our site involved ensuring that we are focusing on security of our passwords, making sure that all limitations for inputs are explicitly listed for all input boxes, a suggestion to use an API to check the validity of emails before sending an email verification code, and to make sure that if we are planning on hosting our site that we are considering this early in Sprint 2 so that it is not difficult to manage during Sprint 3. All this feedback, and actionable tasks/user stories stemming from it, have been added to Jira for Sprints 2 and 3.

## **Next Steps**

We will be completing our Sprint 1 retrospective February 28th, to discuss how our Scrum process went and if we need to make any changes to meeting times/length, how we are assigning tasks, our levels of communication, and more. We will also be having a meeting specifically dedicated to planning out Sprint 2, where we plan on completing all of the required features for the site as outlined in the course overview slideshow. This way, Sprint 3 can focus on testing, debugging, finishing touches, proper documentation, and the presentation of our final website.

As mentioned, Sprint 2 will mainly focus on finishing the required features as per the course outline. Features which still need to be implemented include the notifications system working properly, the user being able to edit their privacy settings, designing and implementing user analytics, and more. An updated, comprehensive list of all the user stories and tasks we are planning on resolving during our second sprint can be seen through our [Jira](#) page.

In addition to implementing the last required features, we will also be turning our focus to testing. We are planning on implementing many automatic tests within our code, and for all other aspects which cannot be tested in this way, we will be creating and running manual test cases to ensure that all requirements are working as intended.

## **Contributions**

We are happy that, apart from a few illnesses, all members were able to make it to most of our scheduled 'daily' scrum meetings. Below are the specific contributions made to the project, as reported by the individual members of the group:

### *Kacie Phillippo (6877591)*

- Led all 'daily' scrum meetings but one (was absent), directing conversation and ensuring that all members are contributing and all important topics are discussed before the end of the meeting time.
- Wrote and uploaded meeting minutes for all daily scrum meetings, the progress report meeting, all three 4P02 online tutorials, Sprint 1 Review meeting, Sprint 1 Retrospective meeting and the Sprint 2 Planning meeting.



- Led the designs of the Dailies, Sign In, and User Profile pages, as well as the site header/navigation bar and pop-up boxes for all pages. Design ideas were the basis for the site identity currently behind HabitConnect.
- Managed branch merging and version control on GitHub. Handled all pushes from the development branch to the main branch.
- Led the first progress meeting with the TA.
- Was the primary contributor to all content in Progress Report 1, compiling the group's work and doing the written work.
- Created sign in/sign up activity diagram.

*Muiz Odebiyi (6849509)*

- Collaborated on creating and inputting initial product back-log for 3 sprints.
- Implemented the sign in page with form requirements according to specifications.
- Implement the sign up page with a working form to collect user information.
- Designed email-verification popup in signup page (in progress).
- Change styling of navBar to be consistent with the rest of the pages, as per the designs.

*Elya Denysova (6667596)*

- Created Figma board for designing.
- Created Jira Scrum project for managing tasks.
- Collaborated on creating and inputting initial product back-log for 3 sprints.
- Researched existing software (apps and websites) similar to our habit tracker, sketched out initial ideas for the tracker.
- Collected screenshots that are the most relevant and contain interesting design ideas Presented for review for the entire team in Figma.
- Designed Login Page.
- Collaborated on the designs of Home and Dailies pages as well as pop-ups for Dailies page.
- Implemented Home and User Profile pages.
- Monitored Jira product back-log progress.
- Designed Mobile view of basic components and Challenges page (in progress).

*Lysa Hannes (6695100)*

- Designed the database with Robbie.
- Initialized the setup of the database.
- Created a couple tables in the database.
- Created User backend api (login and sign up) with routers and controllers.
- Make password storage safe with salt + hashing.

*Max Young (6769608)*

- Worked on implementing the Dailies page based on designs created.
- Added tables for the To Do list and My Habits.

*Yifan Zhu (7345671)*

- Implemented navbar and routings, created reusable API request functions in front-end.
- Provided possible front-end and back-end technical stacks for the team.
- Managed branch merging and version control on GitHub.
- Utilized React props and states in the front-end to convert static web pages to dynamic pages.
- Implemented user authorization system (sign-in, sign-up, sign-out) in front-end and integrated the system with our back-end.
- Created and continuously updated API document and libraries version control document.
- Set up automated testing for functions in the front-end.

*Robbie Pierik (6773832)*

- Designed the database with Lysa.
- Made our database info safe when pushing to GitHub.
- Created a couple tables in the database.
- Creating habit back-end API with routes and controllers.