Organice

Tanvir Youhana, Justin Siu, Md Islam, Refat Monjur

***Abstract*—We want to create a website that helps students study. Using flashcards and timely reminders of to-do lists and calendars, students can achieve academic success. We have looked through different works that already exists such as Quizlet and some aspects of Notion, and have taken inspiration from them. Using Figma, we created a rough foundation of how our website would operate, along with an early rendition of our UI/UX. We plan to develop our application throughout the Spring term, and aim to deploy by April 22, 2022.**

I. Introduction

GIVEN a semester long period, we will be creating a flashcard-based website that will aid students of all ages. Studying is a key component in order to succeed in academic life, and flashcards are an effective way to memorize information for upcoming exams and tests. There will be additional components such as a calendar and to-do list for the user to further organize their academic journey.

A. Problem

Academic success stems from memorization. An ideal way to achieve this is with flashcards and good study habits. There are not many flashcard mediums that are easily accessible and customizable for people to use. Mainly for students who need a space to study and organize their academic study-flow.

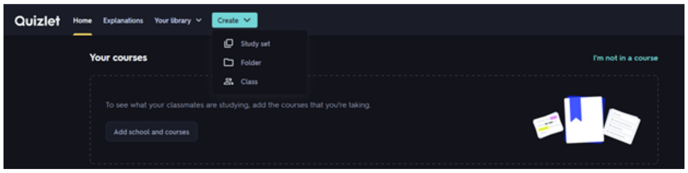
B. Solution

We want to create an efficient medium for studying/learning/memorizing using flashcards. Providing the users with a variety of flashcard templates for different scenarios. With additional features that assists with time management, using to-do lists and calendar reminders.

II. Previous Work

A. Quizlet

Quizlet is a website/application that is used to create and share flashcards for classes. Quizlet used to be only limited to creating and sharing flashcards, however, recently they integrated the website Slader into their platform to allow anyone to look up textbook solutions from classes. However, Quizlet is still not a website that offered other features that are needed to further organize a students studies.



To see what your classmates are studying, add the courses that you're taking.

Fig. 1. Feautures of Quizlet

The figure above shows a screenshot from the Quizlet app. It is very similar to our app. Quizlet is a website/application that is used to create and share flashcards for classes.Recently, it has also become a place where you can find textbook problem solutions with its recent merge with slader.com. To access the features of Quizlet one need to make an account first.

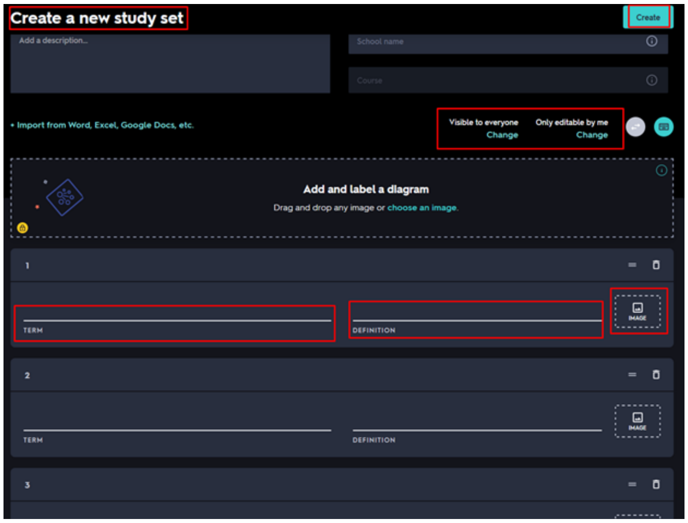
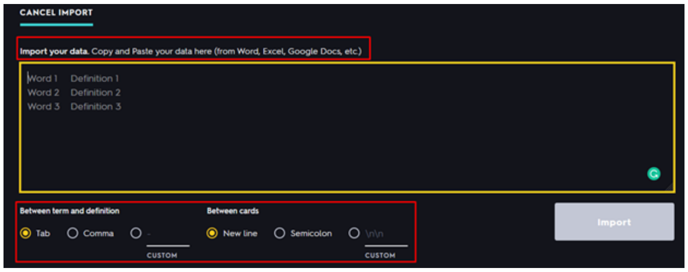


Fig. 2. Creating study deck and feautures on Quizlet



Import your data. Copy and Paste your data here (from Word, Excel, Google Docs, etc.)

Between term and definition: ● Tab ○ Comma ○ - CUSTOM

Between cards: ● New line ○ Semicolon ○ \n\n CUSTOM

Fig. 3. Importing from other sources

The screenshots above show some of the features of Quizlet. One can create a study set and configure it to be public or private. They have layout with the option to add images, this is available for premium members only. User can also import things from word document or excel and add descriptions.

B. Notion

Notion is a website/application that offered a wide range of modules that are used for different types of lifestyles, including the student life style. With Notion, you get a To-do list page and a calendar page that you can add tasks to. You can also add files to the calendar or the Todo List.

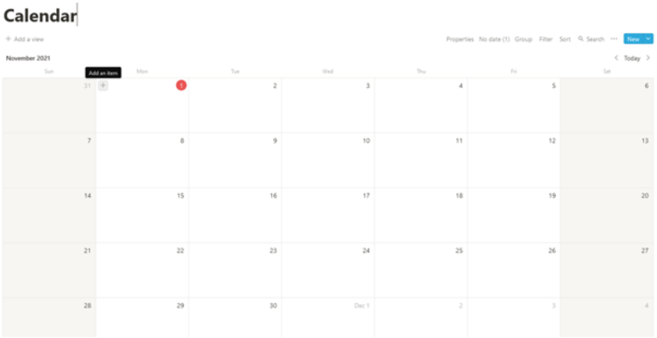
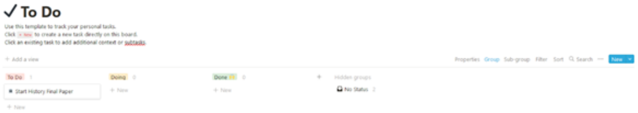

Calendar
+ Add a view
Properties No date (1) Group Filter Sort Search New
November 2021
Add an item
Today
Sun Mon Tue Wed Thu Fri Sat

Fig. 4. Notion Calendar


✓ To Do
+ Add a view
Properties Group Sub-group Filter Sort Search New
To Do 1
Doing 0
Done 0
Hidden groups
No Status 2
Start History Final Paper
+ New

Use this template to track your personal tasks.
Click + New to create a new task directly on this board.
Click an existing task to add additional context or subtasks.

Fig. 5. Notion Todo list with progression

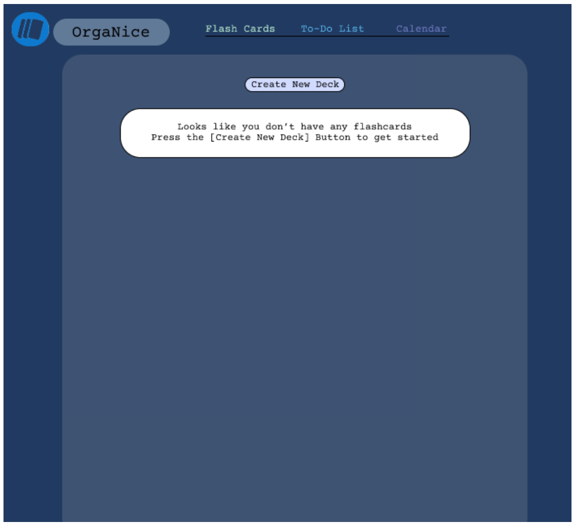
The figures above showcases some of the features of notion that is similar to our website. Notion has a to-do and a calendar features. The calendar allows the user to add event along with uploading files to a specific date. The to-do features allows ones to add new item to to-do list and see the progression of the to-do. The progression of the to-do will not be implemented in our application.

III. Our Solution:

We want to create an efficient medium for studying/learning/memorizing using flashcards. Providing the users with a variety of flashcard templates for different scenarios. With additional features that assists with time management, using to-do lists and calendar reminders.

A. Flashcards

This is the main feature of our website. It will be fully responsive with the core flashcard features such as creating a deck of flashcards, adding/deleting flashcards from the deck, and studying the flashcard deck. The principle feature that makes us different from the rest is the variety of different flashcards to add to the users' decks. This is to garner a larger audience of users, meaning more variety leads to different uses for the flashcards. For example one flashcard version would be used for the simple question and answer, and another version would be used for term and definition. When creating the flashcards the user is able to set certain parts of the card hidden during the study session. When the users enter the study session they can choose what deck of flashcards they want to study. The flashcards will come up in a random order. There will be three button displayed unobtrusively labeled; Reveal, Next, Missed. Reveal, shows the covered information of the flashcard for the user to check if they got it correct. Next, moves on to the following random flashcard in the deck. Missed, is used when the user got the answer incorrect, which places the flashcard to the back of the study session queue, allowing the flashcard to appear again. Once the user completes all the flashcards, they are shown a complete screen with stats on how they did during the study session, along with a home button to return to the flashcard page.



Looks like you don't have any flashcards
Press the [Create New Deck] Button to get started

Fig. 6. Flashcard page

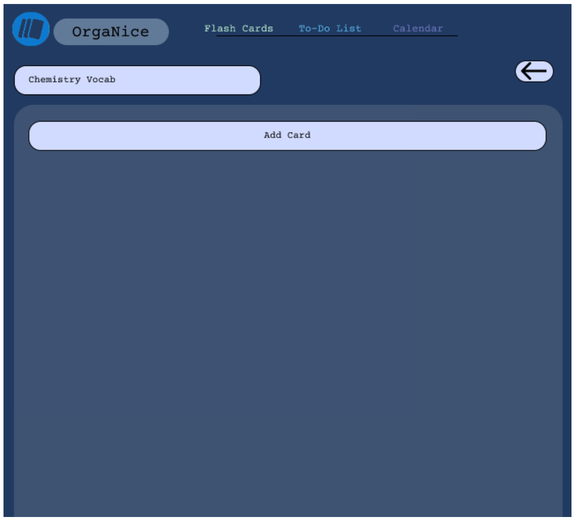
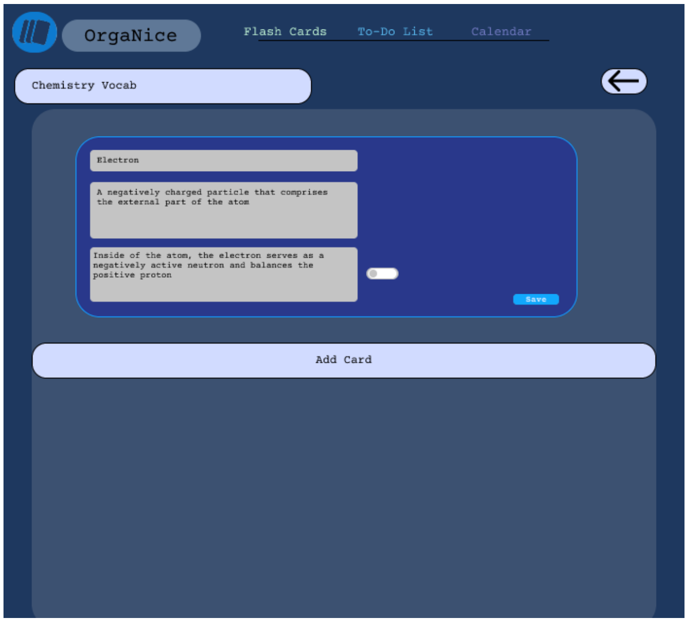


Fig. 7. Creating a new deck

Figure 6 illustrates the prototype of our flashcard page for a new user. Since the person is a new user, they do not have a deck of flashcards. If a existing user who has a deck comes to flashcard section, they will see their flashcards upon logging in. Figure 7 shows the process of adding a new flashcard.

The figure above shows the process of adding a new flashcard to the deck.



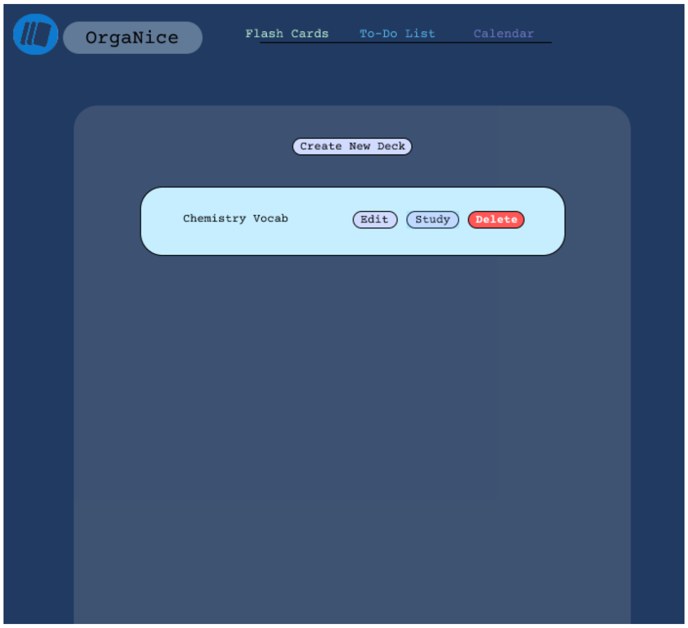
Chemistry Vocab

Electron

A negatively charged particle that comprises the external part of the atom

Inside of the atom, the electron serves as a negatively active neutron and balances the positive proton

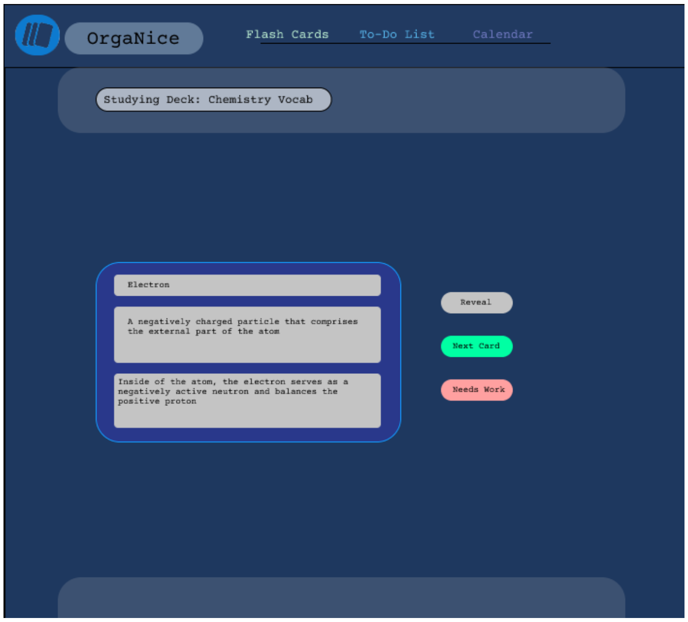
Fig. 8. Adding card to the deck



Chemistry Vocab

Fig. 9. Option to study, edit or delete deck

After user creates their deck, the deck will be shown as the above figure. They would then have the option to edit, study or delete their flashcard deck.



Studying Deck: Chemistry Vocab

Electron

A negatively charged particle that comprises the external part of the atom

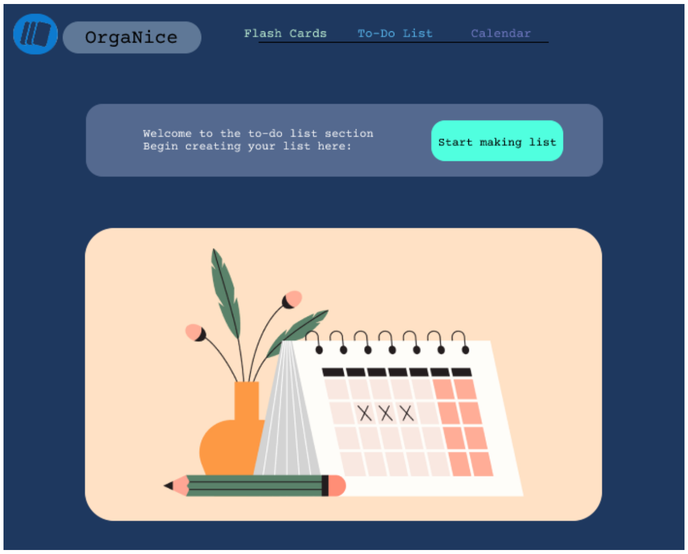
Inside of the atom, the electron serves as a negatively active neutron and balances the positive proton

Fig. 10. Studying a deck

When a user decides to study the following deck, they would select the study button, and they would be directed to a new page. The information on the card will be hidden for studying, and user can reveal the information on the card when they studied the card to see if they were right on the information. After the user finishes studying the current card, they can choose to move on to the next randomized flashcard. When the user decides they need to work more on the current card they are on, they would select the button which makes the current flashcard appear again during the study session.

B. To-do List:

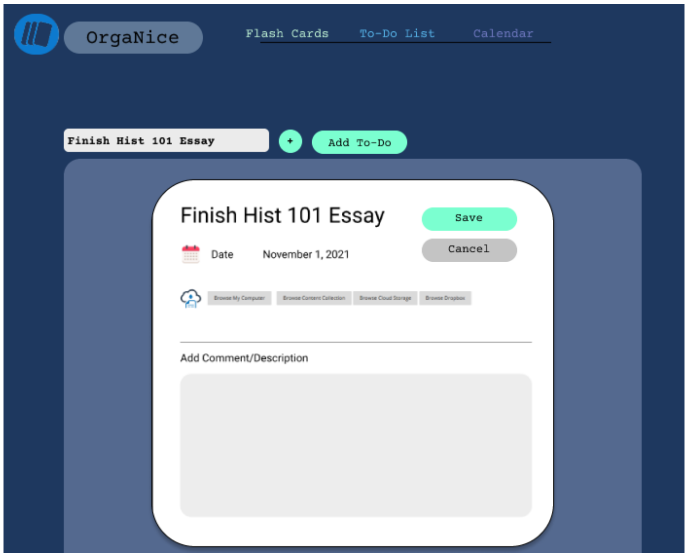
The To-do feature is an add-on feature that allows for a user to plan out what they are going to be doing in the coming days or weeks. This feature includes a page where you will have all your to do shown. When adding a to do you have the option of uploading any files that are associated with that to do. This will further help with making sure you are organized and have all the files you need for a given task in one page without the hassle of going through different folders to look for your files. The user will also have the option to edit, and delete their to do. They can also choice there scaling to be able to view their to do in a one day, seven day or a month long period. With this to do feature the user is able to plan out all they have to do.



Welcome to the to-do list section
Begin creating your list here:

Fig. 11. To-do page

Upon going to the to-do page, user is welcomed with this screen. This screen will show the users to-do list. However, for a new user, they will not have anything to their list, so they will have to start making list.



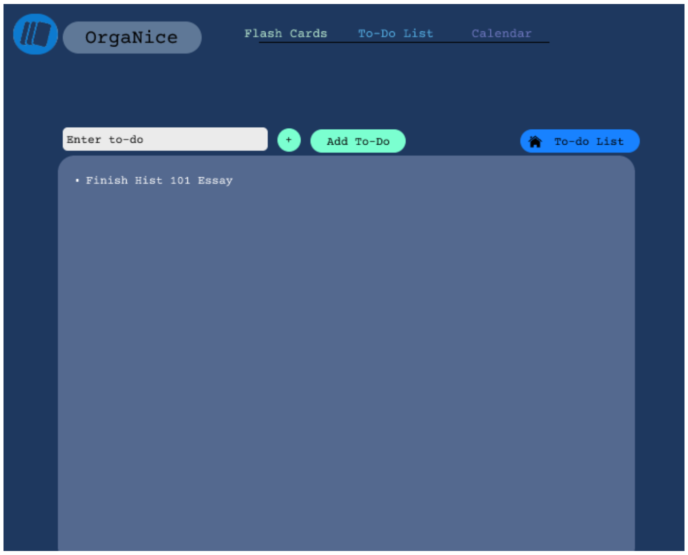
Finish Hist 101 Essay

Date November 1, 2021

Add Comment/Description

Fig. 12. Adding item to the list

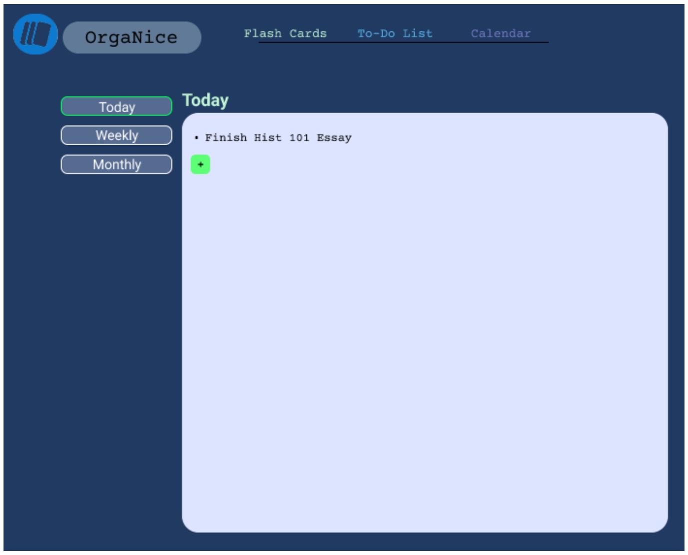
Once the user starts making a list, they are welcomed with this screen screen. They can add properties to the to-do such as set a reminder, upload a file or add comments or description.



- Finish Hist 101 Essay

Fig. 13. After adding to-do to the list

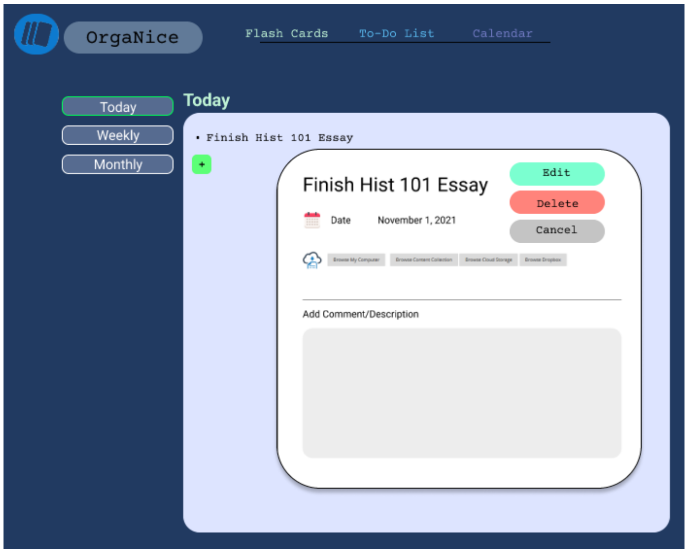
Once user successfully adds a item to the list, the list will be shown as such.



- Finish Hist 101 Essay

Fig. 14. List of to-do

Once user has to-do list, they will have this to-do screen. On the left, the list is organized by Today, Weekly, Monthly based on users due dates.



• Finish Hist 101 Essay

Finish Hist 101 Essay

Date November 1, 2021

Fig. 15. Editing to-do list

The user will be able to edit their list by editing the content of the to-do, or deleting the item from list, or change due dates.

C. Calendar:

The calendar feature of the website will remind the user of all their upcoming tasks/assignments. The user can add reminders to each day of the week accompanied by comments and descriptions. This also includes an individual feature where it allows the user to attach/upload their desired file(s) to each reminder. The user also has the option to added an event to their calendar as well. This event tab comprises of a title for the event, what course it is for, start and end date and time, as well as the option to make the event an all day event. The calendar is also integrated with the to-do component, so that all the to-do will become reminders on the calendar section of the web application. Also, all reminders set on the calendar will appear on the to do section as well.

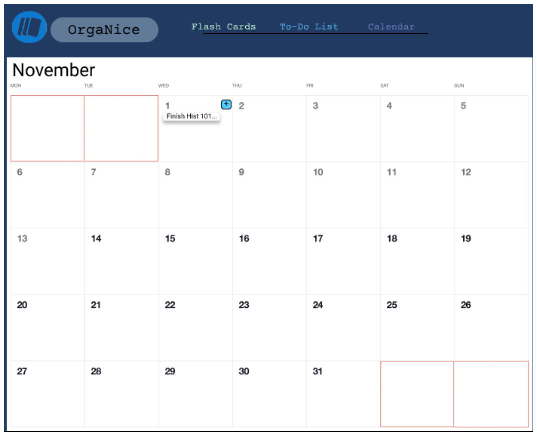
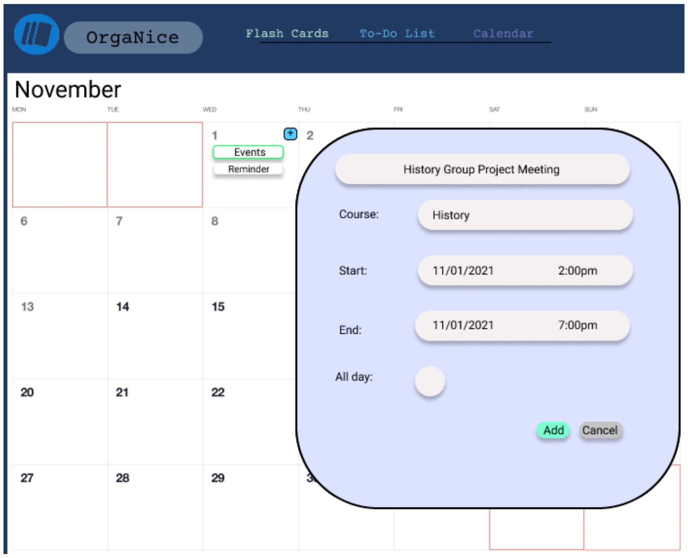


Fig. 16. Calendar Page: Calendar page showing to do from to do page

The figure above shows the calendar and the added to do from the to do page. This integration between the to do page and the calendar is a key feature of the calendar page. There is also a plus icon that can brings a popup.



History Group Project Meeting

Course: History

Start: 11/01/2021 2:00pm

End: 11/01/2021 7:00pm

All day:

Fig. 17. Adding an event to the calendar

This figure above show the popup window for the events tab of the calendar page after clicking on the plus icon. The user has added a history group project with a starting and end date and time.

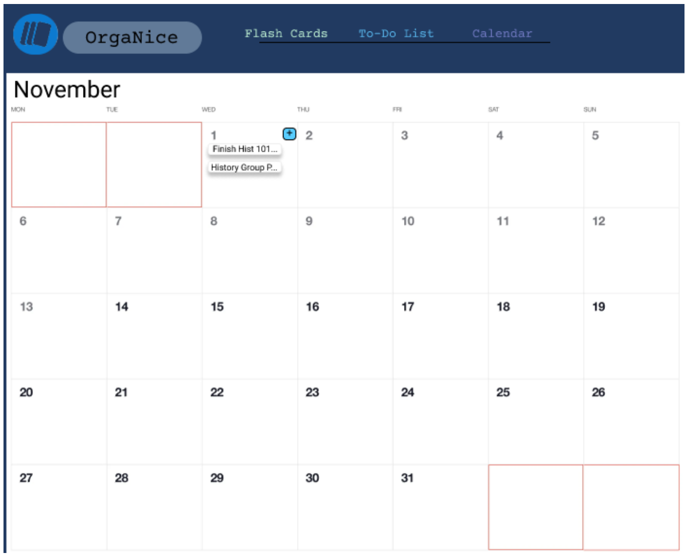


Fig. 18. Event and to do appears now on the calendar

The figure above shows us that after clicking the add button for the popup event tab, we see the new event added to the calendar. The user will also be notified of this event when it is to start so they don't forget about the event.

IV. Wireframes:

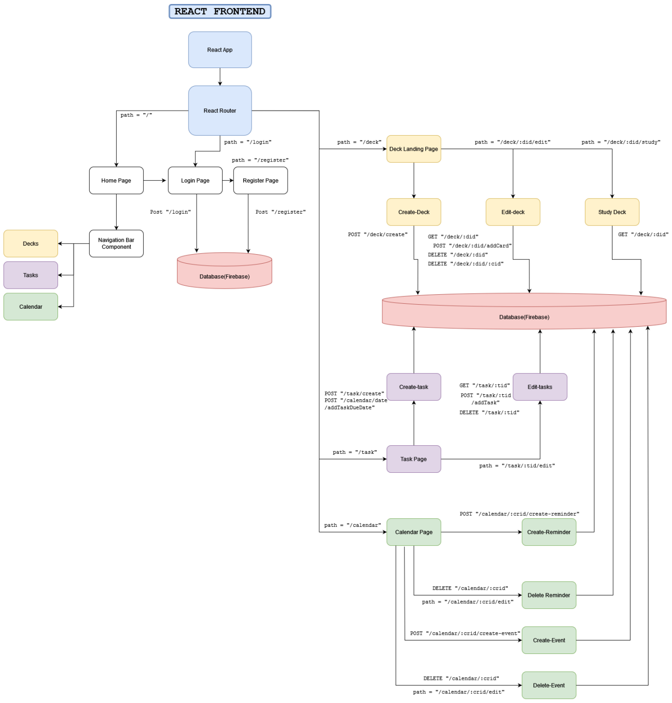


Fig. 19. Whole wireframes

The complete wireframe diagram is shown above with the paths for each pages.As well as connection to the firebase database.

1) frontend: Frontend Wireframes

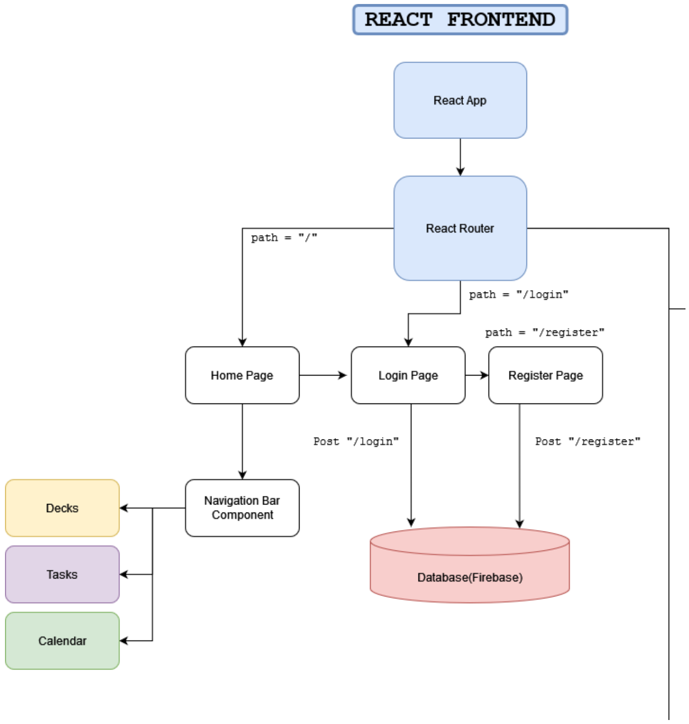


Fig. 20. Front end wireframes

The frontend wireframe consists of all the paths that will show each page when a user logs into the page and navigates around the web application.

2) Backend: Backend wireframes

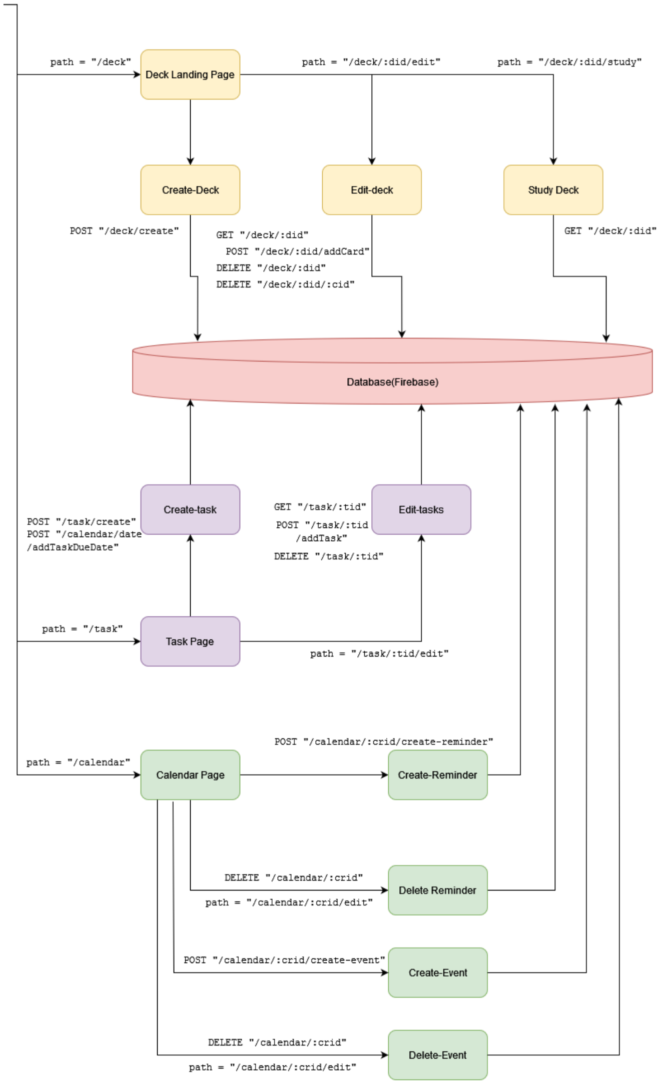


Fig. 21. Backend wireframes

The backend wireframe shows us all the paths as well as all the POST, GET, DELETE paths for each component and them being connected to the firebase database. We also see that to access all these components, the user would need an ID which is shown in each path.

V. MVP: Minimum Viable Product

- An operational login system with Google. The User can sign up to our website using their Gmail.
- Flashcard section with working creation component. The User will have the ability to create, edit, and study the flashcards they have created.
- To-do List section that allows users to add, delete, edit to-dos that they have to do as well as add or remove files as well as download.

- The calendar section will include a calendar that shows all the to-dos. One can also add items to the to-do list from the calendar.
- In addition you can also add events, reminders, focus time, and appointment slots to the calendar. (change names of tabs)
- Works across multiple browsers
- Web Push Notification that notifies the users.

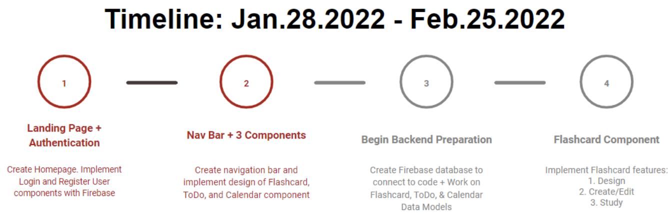
VI. Scenario:

A. Student scenario:

My name is Candice and I am a Biomedical undergraduate student looking for a way to study, specifically my Anatomy class. There is this name that's been thrown around my friend group a couple times when it comes to studying, called Organice. I looked it up and it seems to be a flashcard website which would be perfect to help me study. I sign up with my Gmail, and I start making my flashcards. They offer a variety of different flashcard templates which would be useful to me as I need to add images, terms, definitions, and examples all in one flashcard. There is also a study button that runs through all my cards to help me study. I see that there's more to the website such as a calendar and to-do list. I'll just add my group study sessions and due dates of assignments here. This website also seems to allow uploading of files to specific dates. I'll just upload my English composition paper that's due Monday so Organice can remind me to submit it.

The demonstration: Demo of the proposed App link

VII. Timeline


Timeline: Jan.28.2022 - Feb.25.2022

1 Landing Page + Authentication
Create Homepage. Implement Login and Register User components with Firebase

2 Nav Bar + 3 Components
Create navigation bar and implement design of Flashcard, ToDo, and Calendar component

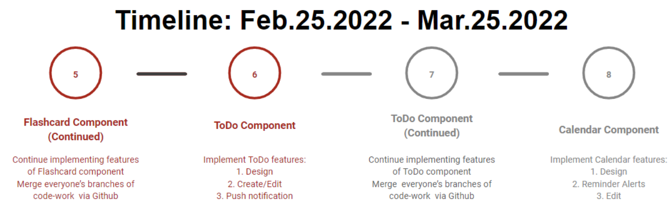
3 Begin Backend Preparation
Create Firebase database to connect to code + Work on Flashcard, ToDo, & Calendar Data Models

4 Flashcard Component
Implement Flashcard features:
1. Design
2. Create/Edit
3. Study

Fig. 22. Timeline of Weeks 1-4

A. Weeks 1-4:

The timeline above shows which aspects of the application we'll be working on each week. We'll be focusing on the Homepage for the first week. Use Firebase to implement the Login and Register User components. We'll work on the navigation bar in Week 2 along with the design of the Flashcard, ToDo, and Calendar components. In Week 3, We'll begin prepping for the backend in Week 3, when we'll create a Firebase database to link to the code and work on the Flashcard, ToDo, and Calendar Data Models. In week four, we'll work on the flashcard components, including design, creation/editing, and study.


Timeline: Feb.25.2022 - Mar.25.2022

5 Flashcard Component (Continued)
Continue implementing features of Flashcard component
Merge everyone's branches of code-work via Github

6 ToDo Component
Implement ToDo features:
1. Design
2. Create/Edit
3. Push notification

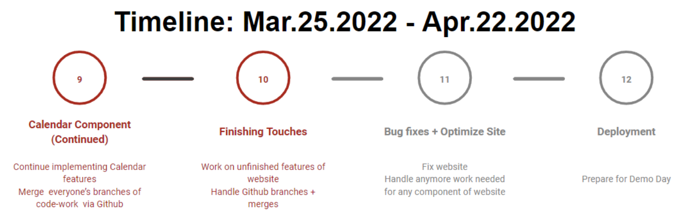
7 ToDo Component (Continued)
Continue implementing features of ToDo component
Merge everyone's branches of code-work via Github

8 Calendar Component
Implement Calendar features:
1. Design
2. Reminder Alerts
3. Edit

Fig. 23. Timeline of Weeks 5-8

B. Weeks 5-8:

On week 5, we'll continue to implement Flashcard component features and merge everyone's code-work branches via Github. The ToDo Components will be worked on in weeks 6 and 7, where we will add ToDo functionality such as design, create/edit, push notification, and then merge everyone's code-work branches via Github. The calendar component will be worked on in Week 8, when we will integrate calendar features such as design, remainder alarms, and editing.


Timeline: Mar.25.2022 - Apr.22.2022

9 Calendar Component (Continued)
Continue implementing Calendar features
Merge everyone's branches of code-work via Github

10 Finishing Touches
Work on unfinished features of website
Handle Github branches + merges

11 Bug fixes + Optimize Site
Fix website
Handle anymore work needed for any component of website

12 Deployment
Prepare for Demo Day

Fig. 24. Timeline of Weeks 9-12

C. Weeks 9-12:

Week 9 will be spent continuing to build calendar features and merging everyone's code/work branches via Github. Week 10 will be spent wrapping up and putting the finishing touches on the website, working on any unfinished features, and managing Github branches and merges. we'll start fixing bugs and optimizing the website.Week 12 is the final week, it's time for deployment and we have to prepare for demo day,

VIII. Implementations:

In comparison to what we originally proposed, the real result differs. Our proposal is inferior to the current website. We changed the website's structure and appearance to improve the user experience. This provides the user with a pleasing User Interface.

A. Tech stack used:

1) Frontend: We utilized the ReactJS framework for our front-end as proposed along with other supporting libraries for React such as bootstrap (for layout and colors), MaterialUI (for buttons, and icons), FullCalendar (for the backbone of the calendar), and SweetAlert2 (for customizable notification), and React Notification (for customizable notification). Along with the supporting libraries of React for designing, we heavily used css to customize pages, and components to our specific needs.

2) Backend: For backend, we used NodeJS for the runtime environment, installing and executing codes. We used firebase firestore for database, firebase authentication for authenticating users, and Firebase storage for uploading files and images.

3) Deployment: To deploy the website, we used AWS Amplify to host both the backend and the frontend. We tried other options such as firebase hosting and Heroku but decided to use AWS as the website loaded faster and ease of using it. However, there were some limitations that we faced hosting in AWS, it does not load an animated video that we initially had on the flashcard component.

B. How data is stored:

Below is a model of the structure of the data:

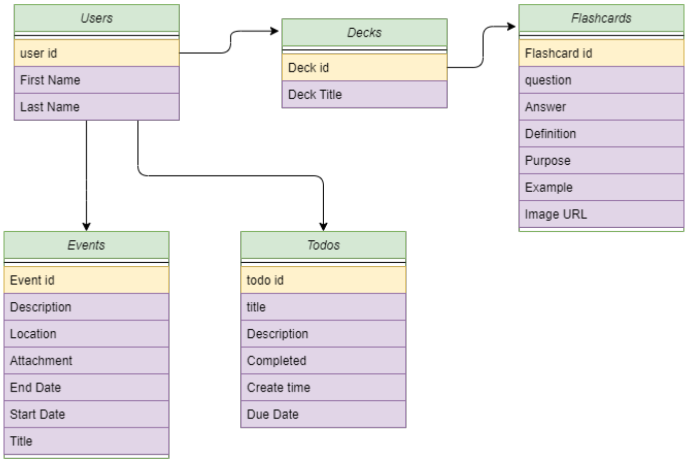


Fig. 25. Database Model

IX. Results

Organice: link to the application

A. A Brief Scenario

As you can see the homepage has a navigation bar for all the components along with brief descriptions for each one. This allows the user to read up on our website before using it. The design is simplistic and clean so it does not scare off new users. The User would land on this page and will be prompted to login. They would go through a login page where they can sign up for just sign in with their google email.

The User would then be sent to the homepage of a logged in user. This page presents the user with various buttons direct them to the different components our website has to offer. They are also presented with direct info from all the components so they do not have to individually go to them if they need certain information. To-dos are listed along with deck names, events and reminders.

The user would now go to the to-do list and list down all their tasks that they plan to do. Here they can given an input field with the option to add the time and description along with the inputted task. These tasks are filtered on the tabs on the left, which can be organized as daily, weekly, and monthly depending on the due date the user set the task to.

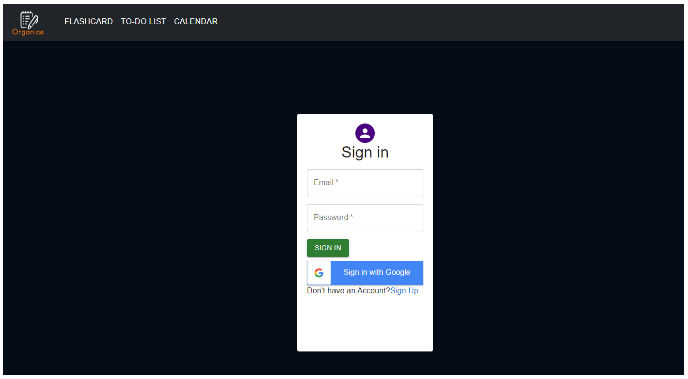
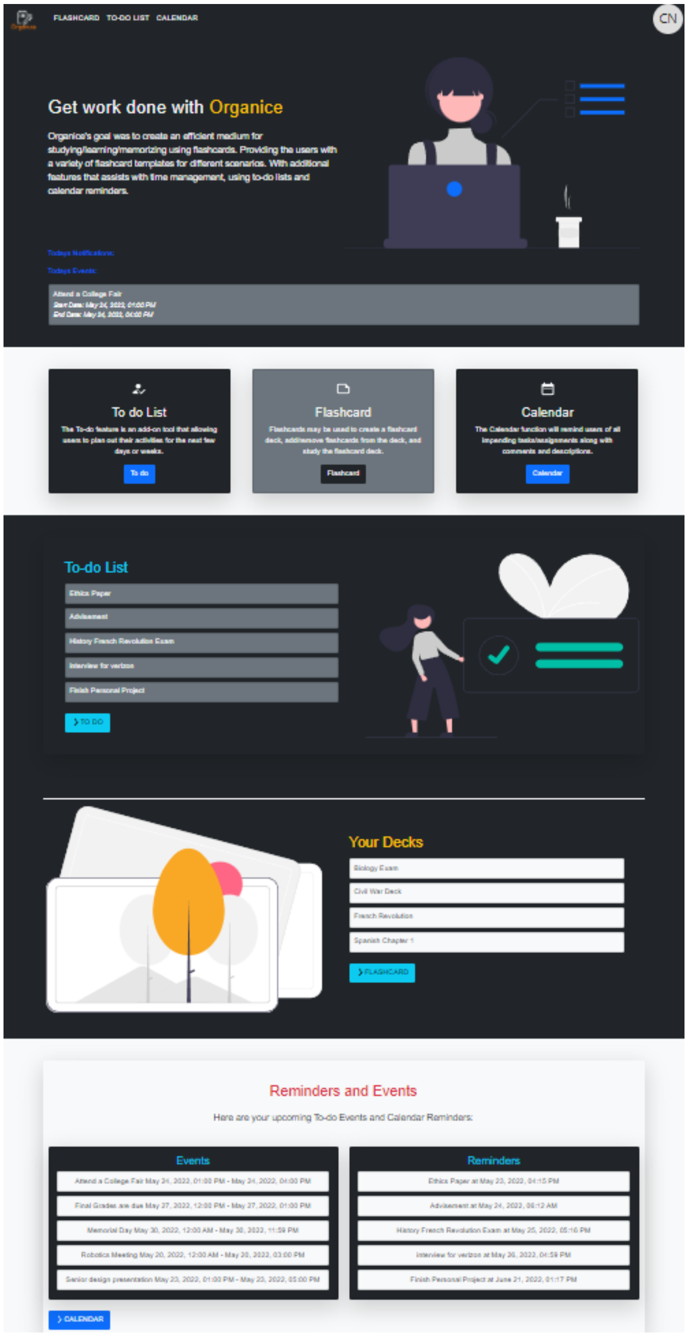


Fig. 26. The Organice Login Page



Get work done with Organice

Organice's goal was to create an efficient medium for studying/learning/memorizing using flashcards. Providing the users with a variety of flashcard templates for different scenarios. With additional features that assists with time management, using to-do lists and calendar reminders.

Todays Notifications:

Todays Events:

Attend a College Fair
Start Date: May 24, 2022, 01:00 PM
End Date: May 24, 2022, 04:00 PM

To do List

The To-do feature is an add-on tool that allowing users to plan out their activities for the next few days or weeks.

Flashcard

Flashcards may be used to create a flashcard deck, add/remove flashcards from the deck, and study the flashcard deck.

Calendar

The Calendar function will remind users of all impending tasks/assignments along with comments and descriptions.

To-do List

Ethics Paper
Advisement
History French Revolution Exam
Interview for verizon
Finish Personal Project

Your Decks

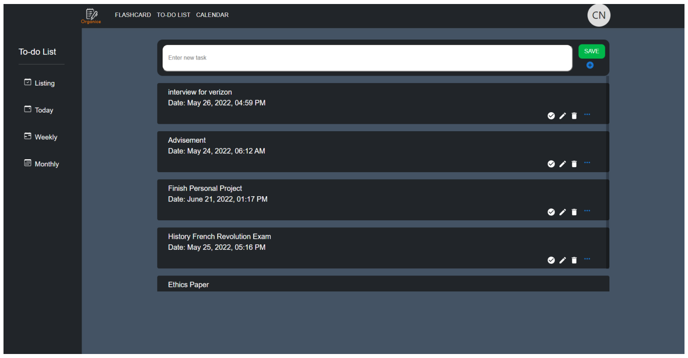
Biology Exam
Civil War Deck
French Revolution
Spanish Chapter 1

Reminders and Events

Here are your upcoming To-do Events and Calendar Reminders:

Events	Reminders
Attend a College Fair May 24, 2022, 01:00 PM - May 24, 2022, 04:00 PM	Ethics Paper at May 23, 2022, 04:15 PM
Final Grades are due May 27, 2022, 12:00 PM - May 27, 2022, 01:00 PM	Advisement at May 24, 2022, 06:12 AM
Memorial Day May 30, 2022, 12:00 AM - May 30, 2022, 11:59 PM	History French Revolution Exam at May 25, 2022, 05:16 PM
Robotics Meeting May 20, 2022, 12:00 AM - May 20, 2022, 03:00 PM	Interview for verizon at May 26, 2022, 04:59 PM
Senior design presentation May 23, 2022, 01:00 PM - May 23, 2022, 05:00 PM	Finish Personal Project at June 21, 2022, 01:17 PM

Fig. 27. Final Organice Homepage Dashboard for a logged in user



Enter new task

interview for verizon
Date: May 26, 2022, 04:59 PM

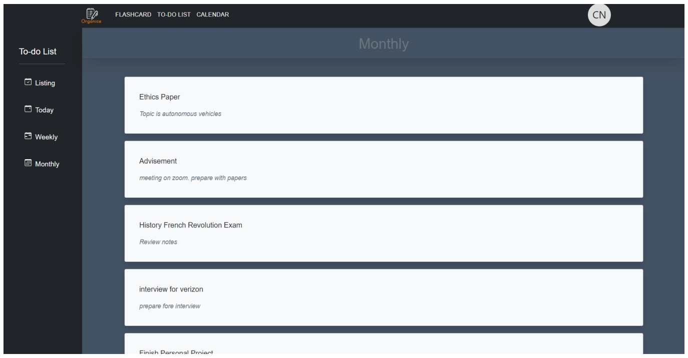
Advisement
Date: May 24, 2022, 06:12 AM

Finish Personal Project
Date: June 21, 2022, 01:17 PM

History French Revolution Exam
Date: May 25, 2022, 05:16 PM

Ethics Paper

Fig. 28. Organice To-do list component page



Monthly

Ethics Paper
Topic is autonomous vehicles

Advisement
meeting on zoom. prepare with papers

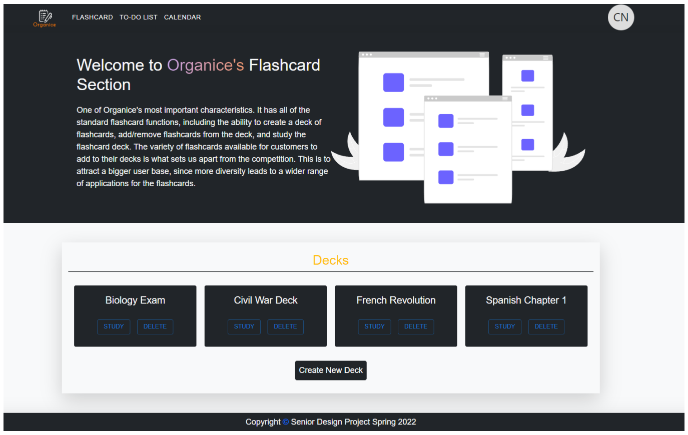
History French Revolution Exam
Review notes

interview for verizon
prepare fore interview

Finish Personal Project

Fig. 29. Organice To-do list Monthly component page

Afterwards when the user finishes inputting the tasks they want to add to the website, they then move on to the flashcard component. Assuming they have a future exam or test coming up or even wanting to learn a new language, they can utilize the flashcard component of the website.



Welcome to Organice's Flashcard Section

One of Organice's most important characteristics. It has all of the standard flashcard functions, including the ability to create a deck of flashcards, add/remove flashcards from the deck, and study the flashcard deck. The variety of flashcards available for customers to add to their decks is what sets us apart from the competition. This is to attract a bigger user base, since more diversity leads to a wider range of applications for the flashcards.

Decks

Biology Exam

Civil War Deck

French Revolution

Spanish Chapter 1

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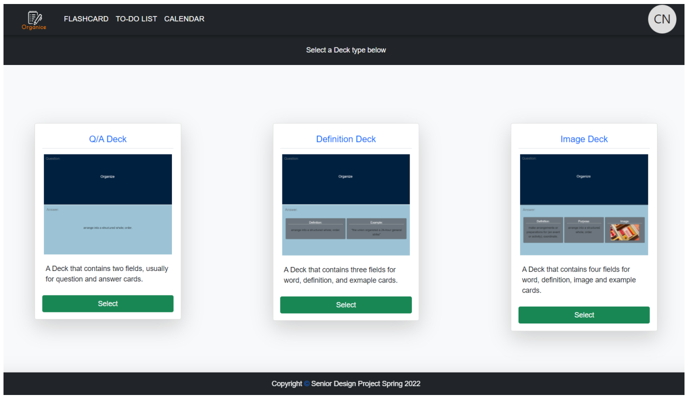
Fig. 30. Organice Flashcard component page

The user will met with a brief introduction of the flashcard page along with a button to start creating new flashcard decks. If they already have decks they will be shown above the 'Create New Deck' button. In the scenario when the user wants to create a new card deck, they will be prompted with three different variation of card deck types. Each with differing number of fields to enter. The leftmost option will have cards with two fields, the middle option will have three fields while the right has three fields and an option to add an image.



Select a Deck type below

Q/A Deck

A Deck that contains two fields, usually for question and answer cards.

Definition Deck

A Deck that contains three fields for word, definition, and exmaple cards.

Image Deck

A Deck that contains four fields for word, definition, image and example cards.

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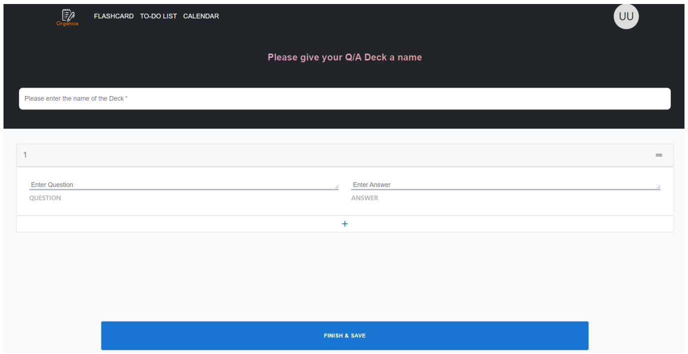
Fig. 31. Organice Flashcard Select Deck component page

Next the user will be moving on to the card input page. They then enter their deck title along with how many cards they want to add with their respective information. Once they finish they can press the 'finish and save' button to complete the flashcard deck creation.



Please give your Q/A Deck a name

Please enter the name of the Deck *

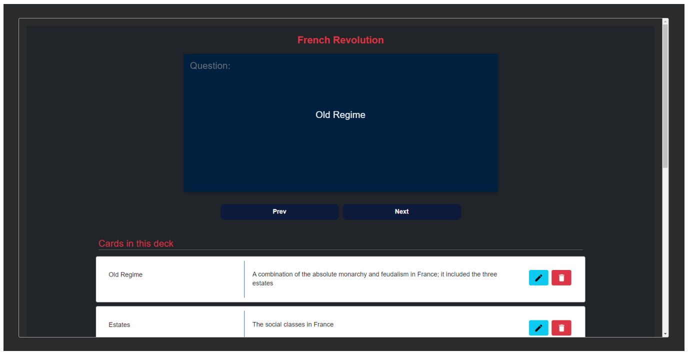
1

Enter Question
QUESTION

Enter Answer
ANSWER

Fig. 32. Organice Flashcard Card Input component page

They are then brought back to the flashcard component page where they will see their newly created deck. They can study it and have the option to edit or delete a card they desire.



French Revolution

Question:

Old Regime

Cards in this deck

Old Regime	A combination of the absolute monarchy and feudalism in France; it included the three estates
Estates	The social classes in France

Fig. 33. Organice Flashcard Study component page

Moving on to the calendar component, the user can see their tasks from the to-do component and has the option to add more tasks and events onto the calendar. They can select the time, date, and even add documents pertaining to that event when they need to. The Calendar even has a daily, weekly, and monthly view to see each even in different styles.

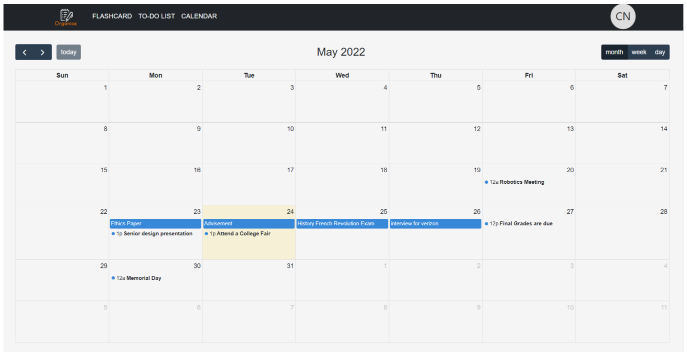


Fig. 34. Organice Calendar component page

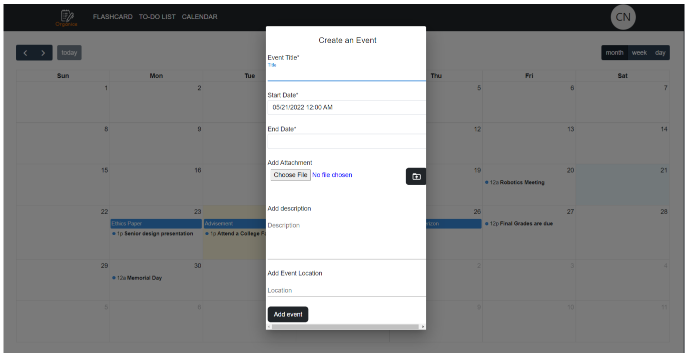


Fig. 35. Organice Calendar event

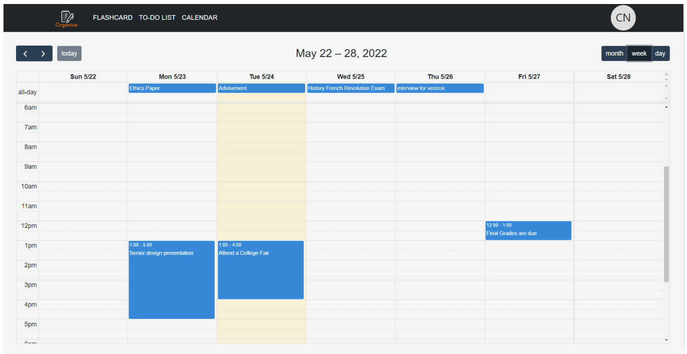


Fig. 36. Organice Calendar Weekly View

When the User goes back to the homepage, they are able to view all the component information all in one page. From the to-do list tasks, to the flashcard decks, and to the calendar reminders and events.

Below are images of our components which show the improvement of the user interface. Firstly here is the homepage of the website:

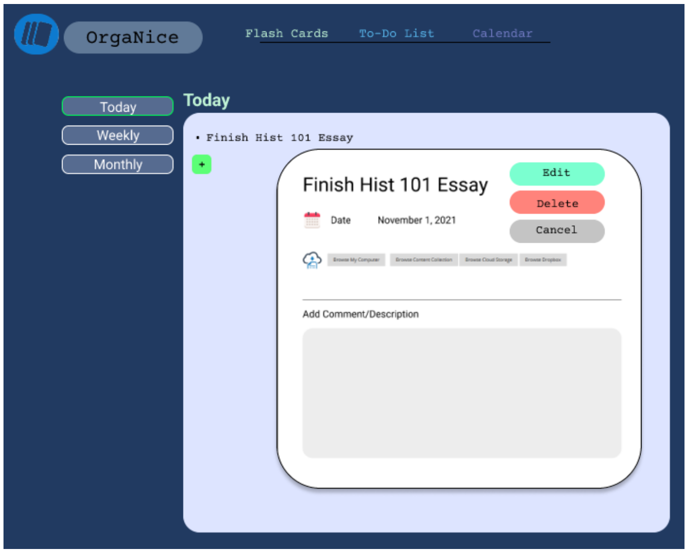


Fig. 37. Proposed to do list

The initial to-do list that we presented is shown in the diagram above. However, as you can see in the image below, our actual to-do list design worked out far better.

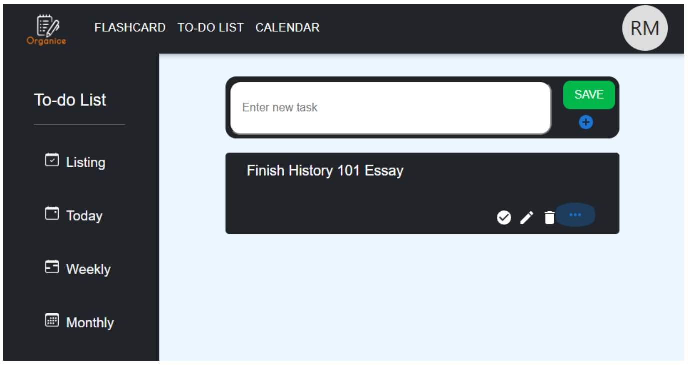
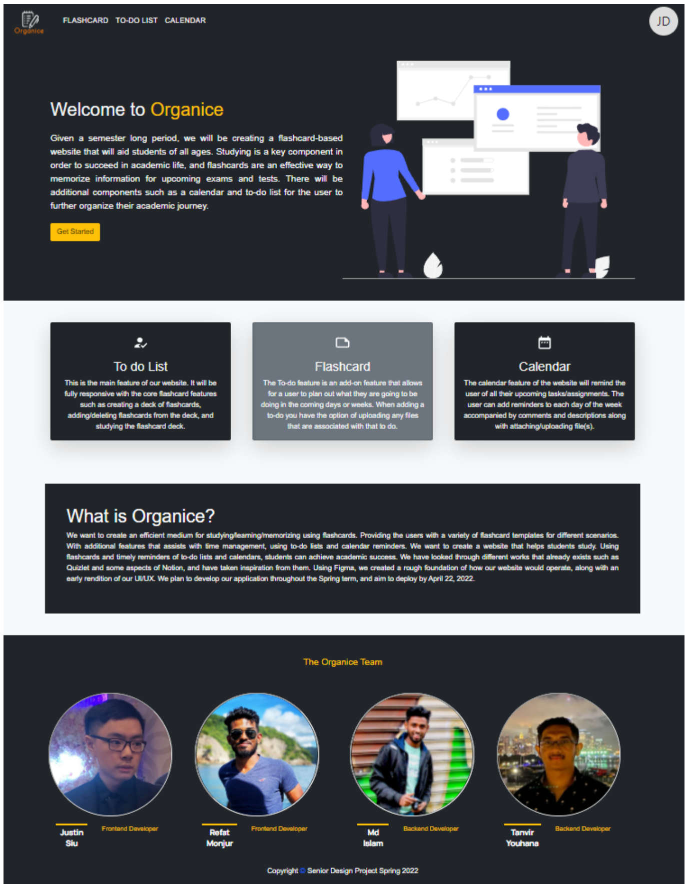


Fig. 38. Final Organice to do list

B. Evaluation

We evaluated our product by going through many scenarios and populating the users' profiles with realistic data to see how well our web application holds in a real world environment. We clicked every button and tested the consistency when changing pages. We even had our friends to be users and test our website for themselves. This was crucial since they did not work on the website, they would not know how it works on the back-end. They were content with our product in the end and managed to go through the entire website without any hiccups.

Our product came out how we expected. Given that the team did not have prior web development experience before, we were able to learn throughout the semester and create a decent web application. It has a working back-end with all the functionality that we have proposed in our MVP. The front-end is consistent and flows well throughout the web application. Furthermore, it has all three key components fully functional. Although there can be many improvements that can be made



Welcome to Organice

Given a semester long period, we will be creating a flashcard-based website that will aid students of all ages. Studying is a key component in order to succeed in academic life, and flashcards are an effective way to memorize information for upcoming exams and tests. There will be additional components such as a calendar and to-do list for the user to further organize their academic journey.

To do List

This is the main feature of our website. It will be fully responsive with the core flashcard features such as creating a deck of flashcards, adding/deleting flashcards from the deck, and studying the flashcard deck.

Flashcard

The To-do feature is an add-on feature that allows for a user to plan out what they are going to be doing in the coming days or weeks. When adding a to-do you have the option of uploading any files that are associated with that to do.

Calendar

The calendar feature of the website will remind the user of all their upcoming tasks/assignments. The user can add reminders to each day of the week accompanied by comments and descriptions along with attaching/uploading file(s).

What is Organice?

We want to create an efficient medium for studying/learning/memorizing using flashcards. Providing the users with a variety of flashcard templates for different scenarios. With additional features that assists with time management, using to-do lists and calendar reminders. We want to create a website that helps students study. Using flashcards and timely reminders of to-do lists and calendars, students can achieve academic success. We have looked through different works that already exists such as Quizlet and some aspects of Notion, and have taken inspiration from them. Using Figma, we created a rough foundation of how our website would operate, along with an early rendition of our UI/UX. We plan to develop our application throughout the Spring term, and aim to deploy by April 22, 2022.

The Organice Team

Justin Siu Frontend Developer
Refat Monjur Frontend Developer
Md Islam Backend Developer
Tanvir Youhana Backend Developer

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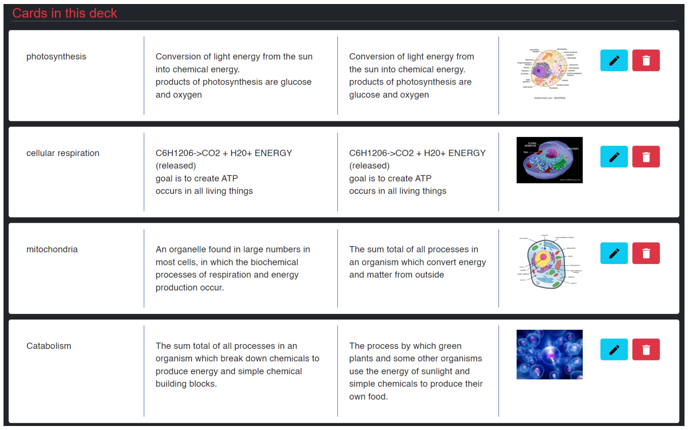
Fig. 39. Final Organice Homepage

such as improving the user interface and user experiment, our product came out well.

C. General Limitations

One of our restrictions is that the video preview we generated for flashcard does not play when we utilize the hosting website on AWS. Locally, though, everything worked flawlessly. Another drawback is that when a page is updated using the browser's refresh button, the user data is not loaded. Throughout the endeavor, we faced various obstacles. Designing effective flashcards with a positive user experience (UX) was one of our initial difficulties. We had functional flashcards, but the design was flawed, which we later fixed. Uploading photos was one of our most difficult tasks. The right picture would not upload to the Firebase database due to a bug. The previous image would be uploaded and display onto the page instead. Eventually we managed to fix this issue.

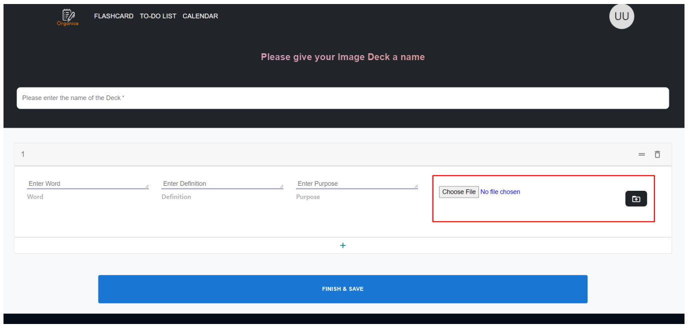
Another challenge we encountered was making a interactive calendar which synced with the to-dos and reminder/notifications. The limitations that we had can be addressed if we had more time. Throughout the final stretch of the semester there have been many outside conflicts with schedules and real life problems. This made the application development slow down and denying us from tackling the limitations.



Cards in this deck

photosynthesis	Conversion of light energy from the sun into chemical energy. products of photosynthesis are glucose and oxygen	Conversion of light energy from the sun into chemical energy. products of photosynthesis are glucose and oxygen	
cellular respiration	C6H1206->CO2 + H20+ ENERGY (released) goal is to create ATP occurs in all living things	C6H1206->CO2 + H20+ ENERGY (released) goal is to create ATP occurs in all living things	
mitochondria	An organelle found in large numbers in most cells, in which the biochemical processes of respiration and energy production occur.	The sum total of all processes in an organism which convert energy and matter from outside	
Catabolism	The sum total of all processes in an organism which break down chemicals to produce energy and simple chemical building blocks.	The process by which green plants and some other organisms use the energy of sunlight and simple chemicals to produce their own food.	

Fig. 40. Working Images in Deck



Please give your Image Deck a name

Please enter the name of the Deck *

Enter Word
Word

Enter Definition
Definition

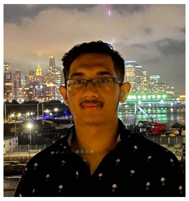
Enter Purpose
Purpose

No file chosen

Fig. 41. Upload Image Section during Flashcard Creation

X. Conclusion

Coming into the new semester and working on the website, we came across many challenges and developed our website over the past couple of months. Our application, ”Organice” was created to help students and individuals who want a medium to study with the components of flashcards, to-do lists and calendar. With notifications to remind the user of upcoming events and tasks and the calendar and to-do list working hand-in-hand with one another our users are able to organize their studies. The things that are left to explore are user interface improvements and implement more components to the website such as a note taking and a educational resource tab. The opportunities we see in the future are overtaking our competitors and be the place to go to for organizing notes, tasks and events.



Tanvir Youhana Computer Engineering Undergraduate student at The City College of New York. Backend developer. Interested in full-stack development, 3D printing and hardware engineering. Area of interest include networking, data science, cryptography, and artificial intelligence.

Justin Siu Computer Engineering Undergraduate student at The City College of New York, Grove School of Engineering. Front-end and back-end developer on Organice project. Interested in application development, machine learning, Human-Interface Machine (HMI) development, and data analytics. Incoming Wabtec Corporation Engineer intern. Hobbies consists of video games, hiking, and blender 3D model creation.

Md Islam Computer Engineering Undergraduate Student at City College of New York. Interested in web development, working on Back-end.

Refat Monjur Computer Engineering Undergraduate student at The City College of New York. Frontend developer. Interested in Software Engineering, working on Front-End.