

Vespula: Final Prototype & Process Book

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Prototype


Prototype Overview

<https://www.figma.com/proto/wMKsY0MSEAz0MGF5FQ4T7O/Vespula?type=design&node-id=0-1&scaling=scale-down&page-id=0%3A1&starting-point-node-id=1%3A2&show-prototype-sidebar=1>

i. Overview

There have been very minor changes from milestone 4 and this overview reflects that. The italicized text indicate where changes have been made.

Upon clicking the present (play) button in the top right corner of the screen, the user will be presented with a standard login screen (1). *All fields will be auto filled with dummy data when clicking on them.*



Vespula

Get connected.

Username


Password

LOGIN

or

[Create Account](#)

Figure 1. Login Screen



Vespula

Get connected.

Username

required field

Password

required field

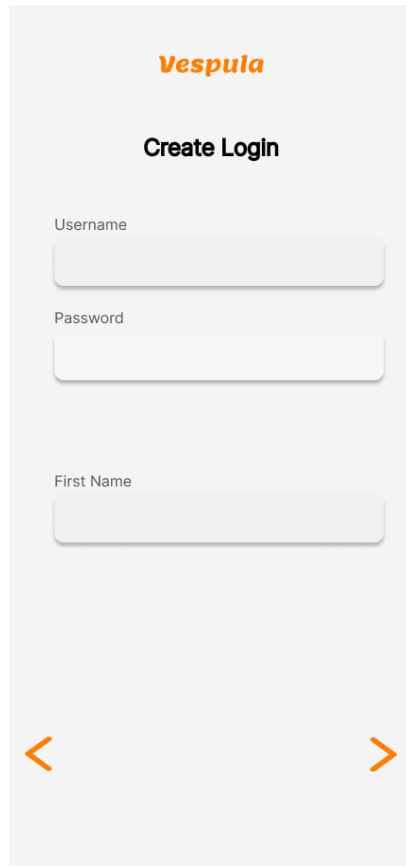
LOGIN

or

[Create Account](#)

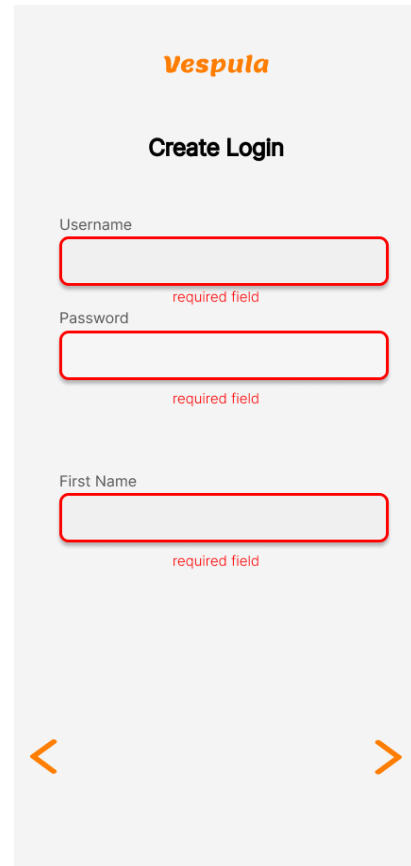
Figure 1.1. Login Screen Error

1. The user can either log in by clicking on the user and password text fields and clicking the button that says login (2), or create an account by clicking the text that says create account (1.1)
- If the user attempts to login without each of the text fields filled in, they will be presented with an error - wherein the empty text field will turn red to indicate for the user to fill that field out.
- 1.1. Upon clicking create an account, the user will be shown the create login screen. Similarly to the login (1) screen, if all fields are not filled the user cannot continue.



The image shows a mobile app screen for 'Vespula' with the title 'Create Login'. It features three input fields: 'Username', 'Password', and 'First Name'. Each field is a light gray rounded rectangle. At the bottom, there are two orange chevron icons, one pointing left and one pointing right.

Figure 2. Create Login Screen



The image shows the same 'Vespula' 'Create Login' screen as Figure 2, but with error messages. Each input field (Username, Password, and First Name) is outlined with a red border. Below each field, the text 'required field' is displayed in red. The orange chevron icons at the bottom remain.

Figure 2.1. Create Login Screen Error

1.2. Next, in the create account process, the user should find their university and select it.

1.3. Then, the user can fill out the personal information section. Here they can write their own bio, select their interest, tell their major and year and declare their personality type. This information will be displayed to other users when finding matches (this section clears out each time the tab is closed so its ok to continue to the next section)

1.4. Lastly, the user should add a profile picture by pressing the add photo text or the plus icon. The user cannot continue until they add a photo. When clicking finish creating profile text once a photo is added the user will be directed to the *explore page (2)*

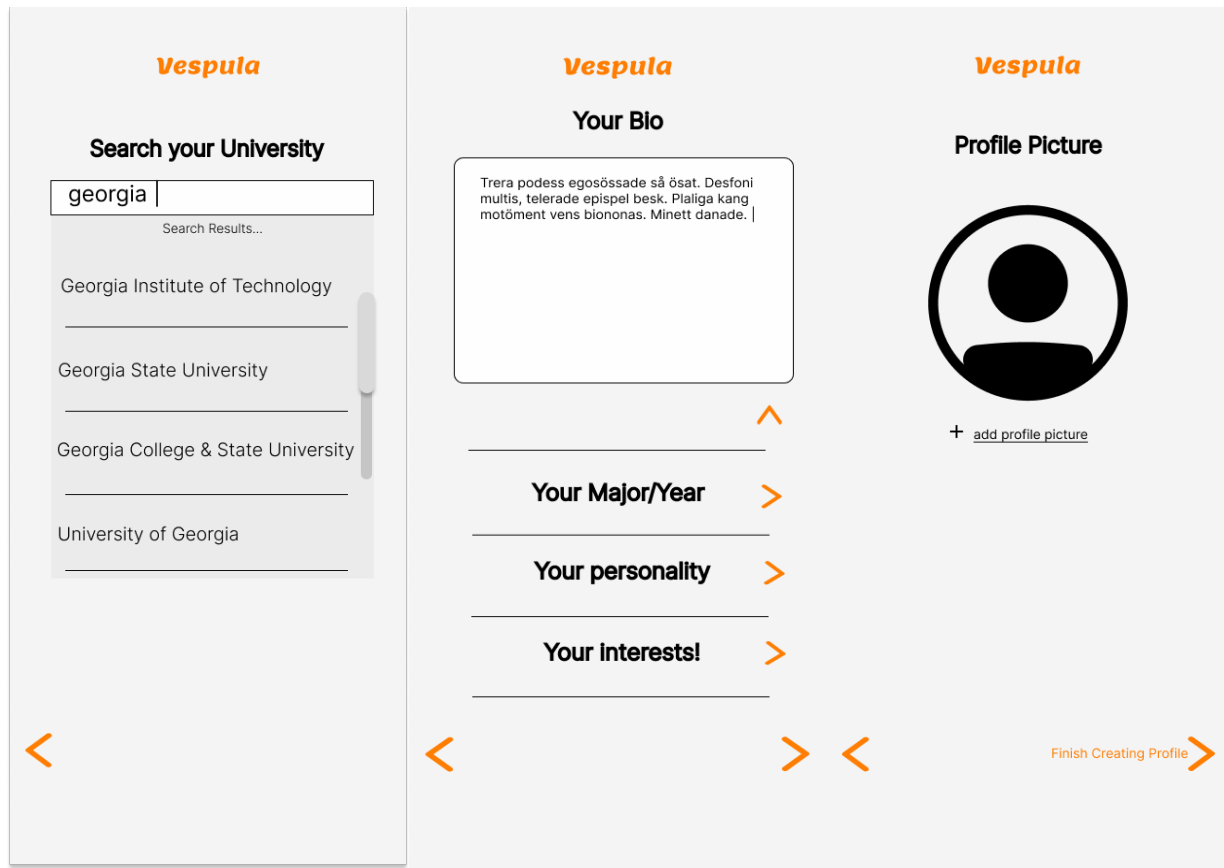


Figure 3. Search University

Figure 4. Account Information

Figure 5. Profile Picture

2. After logging in the user will be greeted with the explore screen, wherein they can find matches. If the user presses the check icon they will match with the person on screen and they can chat with that person. (3) If the press the x icon they will be directly to screen telling them there are no more matches in the area (in real world implementation there will be much more matches)

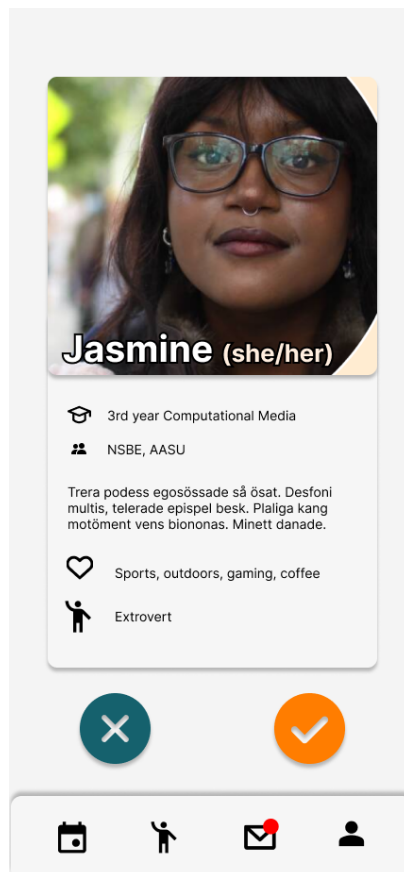


Figure 6. Explore Page

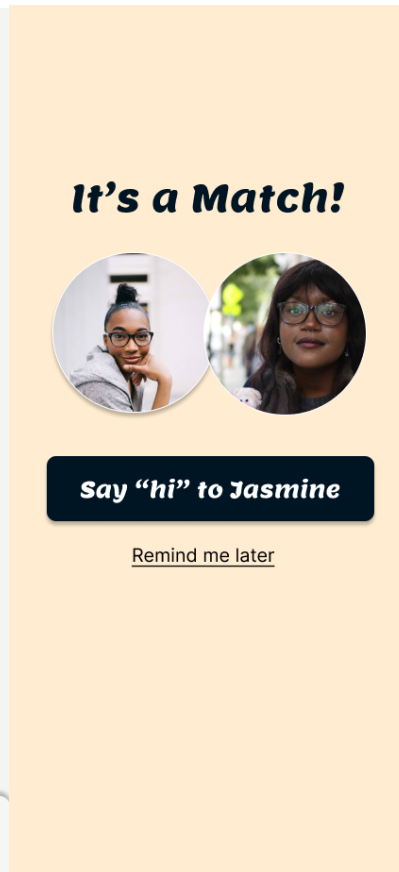


Figure 7. Match Screen

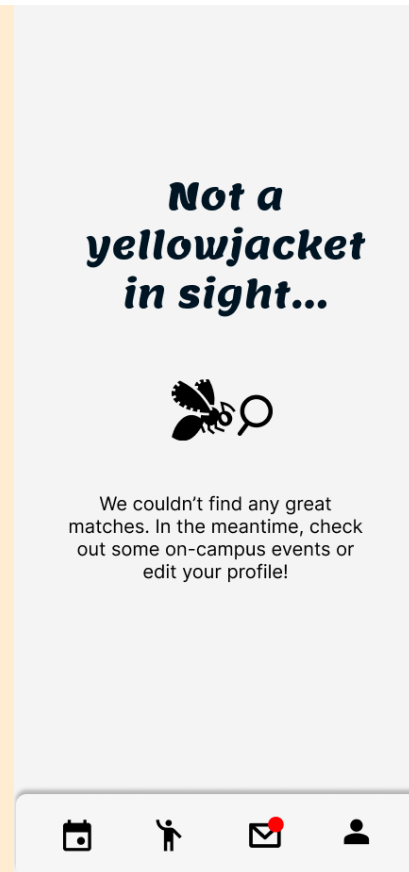


Figure 8. No More Close Users

3. To chat with people click on the icon that looks like a chat box. Now in the messaging page, the user can chat with their matches, chat with a created group (4), or chat with people that are RSVP'd (5.2) for the same event. To chat, click on the desired personal chat / group chat, click on the text field (a message will appear) and select the orange arrow that represents a send button.

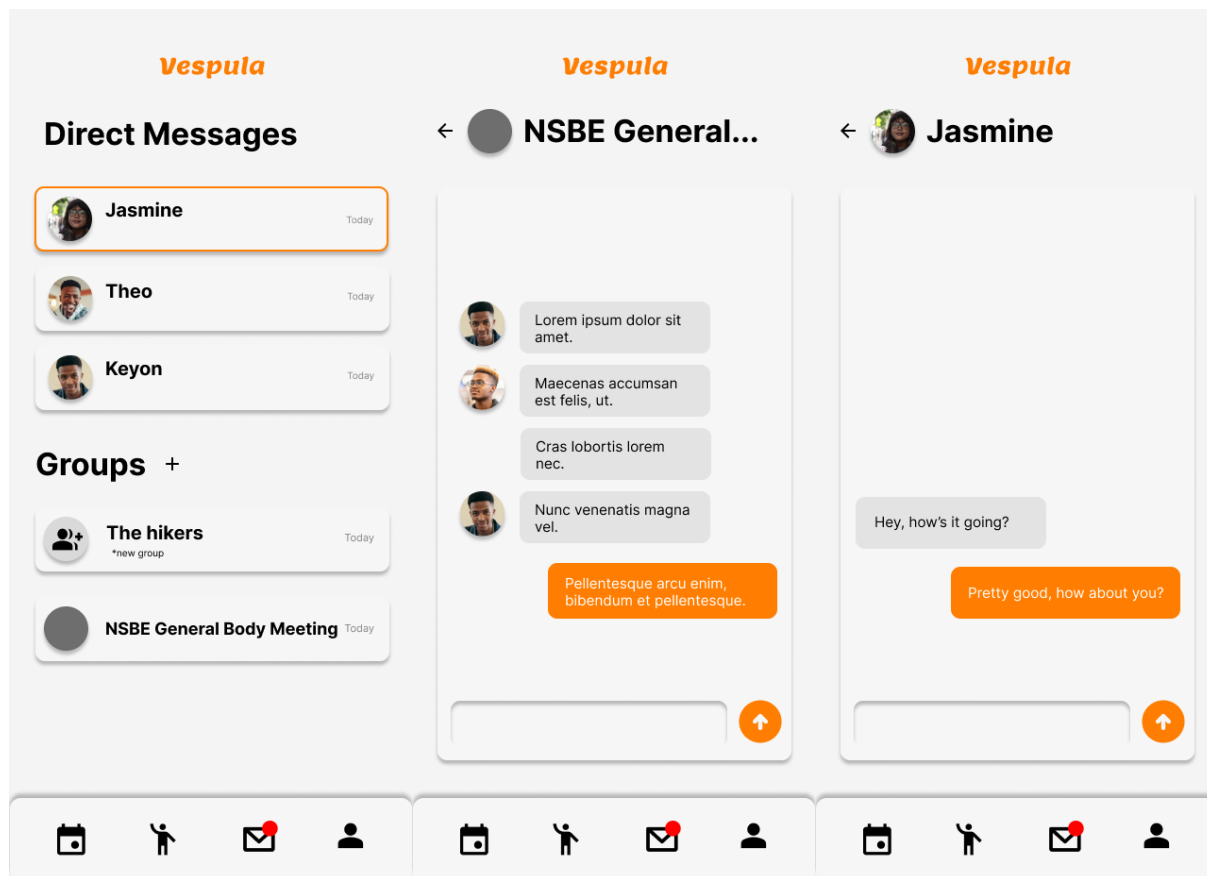


Figure 9. Messaging Page

Figure 10. RSVP'd Event Chat

Figure 11. Personal Chat w/ Match

4. To create a group, in the messaging page, navigate to the plus icon next to the text that says group. Once in the create group page, fill in the group name, add the desired matches (*by clicking on the minus/plus icons or the profile images*) and click the button that says create group. Once the group is created the user should see a new chat within the group section of the messaging page. The user can now chat with these matches (3)

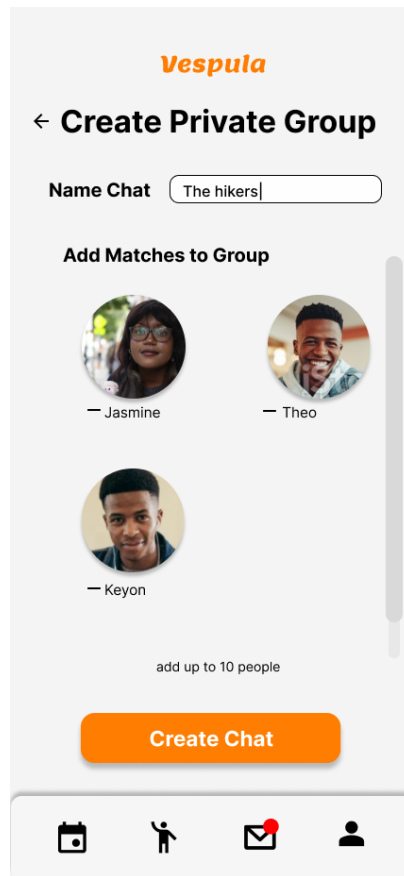


Figure 12. Creating a group w/ Matches

5. To view event listing click on the calendar icon in the bottom nav bar. The user should now see a list of upcoming event (on the prototype there's only one event listed)

5.1. To see all of the event's information click the button that says show full event

5.2. To RSVP for an event click the button that says RSVP now and confirm the rsvp. (*The event screen will now indicate when the user has RSVP with the red RSVP text and check icon*)

5.3. To add the event goers group chat to the user group messages click join group. The user can now chat with other users RSVP'd for the event (4)

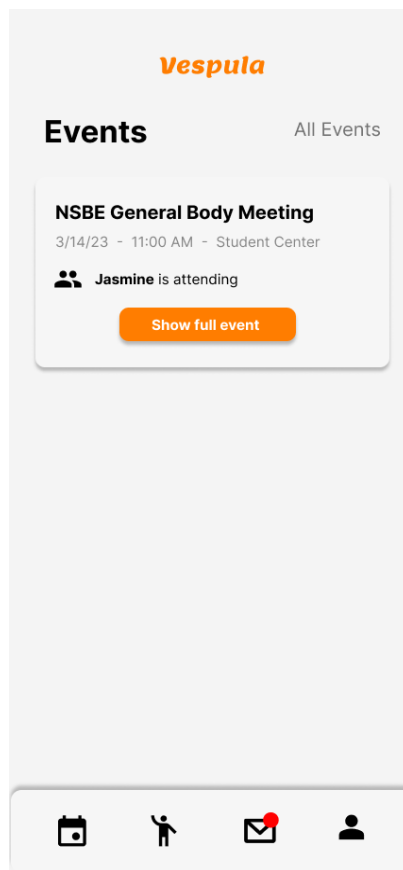


Figure 13. Event Listings Page

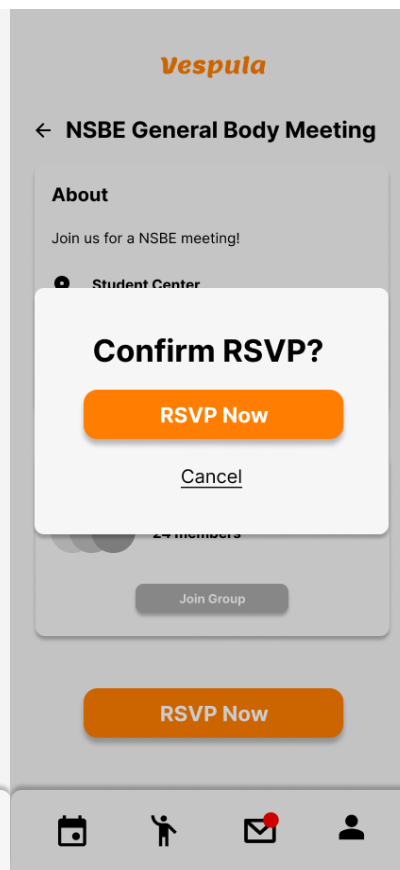


Figure 14. RSVP Confirmation

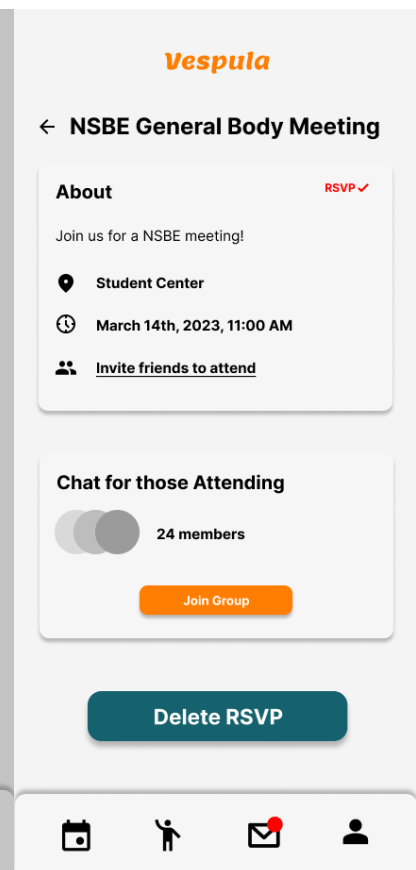


Figure 15. After Confirming RSVP

6. To view user profile information click on the far right icon in the nav bar.

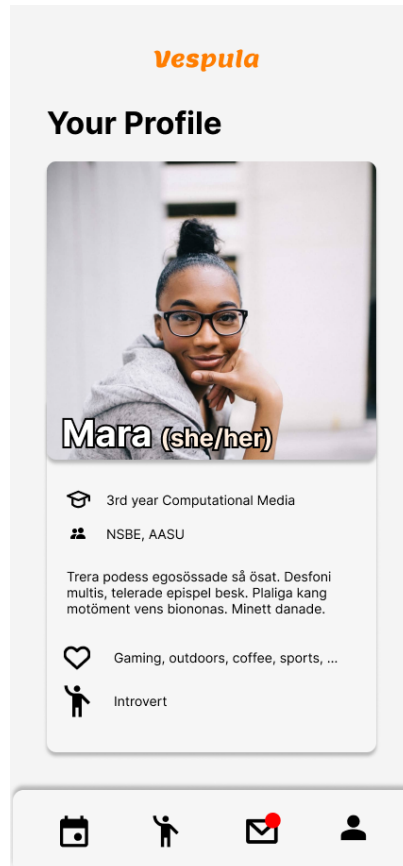


Figure 16. User Profile

7. To view explore page and match with other users (2), in the nav bar, click the icon of the person waving (*now has a heart icon to represent the person's interests*).

The following sections have had minimal to no alteration from Milestone 4. Therefore, their descriptions reflect minimal change:

ii. Design Concept Decision

We chose this prototype to implement out of all of the options we considered in the previous milestone because we believed it best addressed our problem space. With our primary goal being establishing a strong community for black students to feel comfortable in, we realized that this

design was our best option because its entire premise is socializing. The other prototypes we brainstormed did not have as strong of a motivator to use the app to connect with other black students as the people-matching feature of Vesputia. Additionally, it seemed to be the best way to implement all of our design requirements since things like attending events and messaging are intuitive follow-ups to matching with people. Seeing what events one's matches are attending and being able to discuss them with each other individually or in a group chat allows users to bring these relationships out of the app and into their real lives, addressing the concern we had about our other prototypes not fostering real connections. One final benefit of this app is that although the intended user group is black students, depending on the desired use case it can be easily expanded or modified to encompass any demographic, so there is no discrimination.

iii. Functional & Non-Functional Requirements

The 3 main functional requirements that were necessary for our prototype addressed within Milestone 3 were 1.) Enable Self Expression 2.) User Communication and 3.) Informative Regarding Social Outlets.

Our prototype addresses the functional requirement of enabling self expression through the "Create a Bio" feature that is present when the user creates an account for the application. This process requires the user to enter information about themselves such as personality type and interests which would later be displayed in their profile for other users to see when swiping for matches. This exchange of users letting their interest be known to others and vice versa allows for self expression to thrive.

The second functional requirement is addressed through the various methods of messaging within the interface. For instance, upon matching with other application users, users are able to

message with them one on one within the application. User's are also able to create group messages with multiple people that they matched with as well as join group chats of people attending the same event as them.

The last functional requirement of offering information regarding social outlets is addressed through the event listing tab within the interface. This tab will take users to a screen that will show them upcoming events on campus and all the necessary information to attend the events. In addition to providing information regarding the event, the user will also be able to RSVP to the event. Upon RSVPing, they can join a group chat with other users that also RSVPed to this event - which will also indicate information regarding who will be attending the event as well.

The 3 nonfunctional requirements mentioned within Milestone 3 were: 1) Usability 2) User Experience and 3) Security.

In efforts to address the first non-functional requirements, we aimed to use easily recognizable icons within the interface. For instance, the icon for the messaging screen is a chat bubble, the icon for the event screen is a calendar, the icon for the profile is the person, etc. These icons are commonly used and their meaning aims to be unambiguous which may allow for smooth usability. Clarity is also a principle that we aim to achieve throughout the interfaces as well.

With that, we aimed to be clear on what is a text or a button, and what should be entered within these fields as well as what the buttons do. An example of this would be within the create account section, the text explicitly tells the user what should be entered into the text field.

Another example of this sort of clarity is when RSVPing for an event - the text within the button directly tells the user to click it to RSVP.

We aimed to fulfill the second non-functional requirement through careful, and concise design choices. The application is quite visually appealing and follows the same design pattern throughout so that there is no jarring viewing experience for the user. Deciding on a set color scheme also aided in maintaining a visually appealing interface (see Figure 17).



Figure 17. Color Palette

We addressed the non-functional requirement of security through various decisions made. For instance, the application requires users to verify their university before they are able to match with other students. In potential later improvements/development of this prototype, we would likely make it so that the user must verify their enrollment status with their student email. This security feature is to assure the safety of the students. Other security measures present within this application is that both people must accept each other (press the check mark) to match with one another and start messaging. This way the user is in control of who they are communicating with. Later improvements/development of the prototype will allow users to unmatched with people they no longer want contact with. Security measures that we are unable to represent within the prototype that would likely be present within a real world implementation of this application are: data protection, with features such as end-to-end encryption, two-factor authentication, and secure server storage.

iv. Innovation

Vespula addresses both major facets of our problem. Black students sometimes encounter issues with finding community and information about events specifically by or for black students. This

design combines the strengths of pre-existing applications that partially address each of these issues and consolidates them into one simple interface. With a service like Bumble, users are able to swipe left or right on profiles to match or not match with other users. This is limited, however, to the fact that a user can only speak with individuals and never as a group. With Engage, users are able to search for and join on-campus groups and RSVP for events. Again, users lack the ability to reach out to other users on the site in ways other than attending events or directly contacting clubs via their social media or email. Vespula takes both of these app formats and consolidates them in addition to adding group chat functionality. The most innovative part of Vespula is the group chatting feature - neither Bumble nor Engage have a feature that many other social media apps like Discord and Instagram have. Vespula includes all of these features to maximize user interactivity and reduce the need for users to use external applications to access all aforementioned features.

v. How does this Design Concept Reflect Principles of Design Discussed in Class

The design principles are broken into 3 categories (Learnability, Flexibility, & Robustness) with each category having their own specific requirements to classify as one of the three. Below I have highlighted certain aspects of our design concept which satisfies one or more of the design principles discussed in class.

Learnability

Learnability is one of the principles of design we learned in class, especially for user interfaces that are supposed to be for new users who are not too familiar with the system. It's about making it easy for them to learn how to use the app effectively and efficiently. When designing our

interface, we took into consideration how to support the new users who are beginning to use it for the first time.

Let's start with our login screen, we can see that learnability is demonstrated in a couple ways. One way is through Predictability. The screen is designed to be predictable, which means that users can use their knowledge of past interactions to predict the effects of future actions within the app. For example, when a user clicks on the login button, they can predict that they will be logged into the system. Similarly, when a user clicks on the create account button, they can predict that they will be directed to the create login screen (Figure 2).

Another way that learnability is shown in our design concept is through how the buttons are designed for the user such as the login and create account buttons.

When a user attempts to login without filling in all the required fields, the borders of the empty text field will highlight red, thus indicating to them that they need to fill in that void with whatever information is necessary at that moment.

Our design concept also clearly reflects the familiarity which is a concept of Learnability.

Familiarity is all about helping the users in applying prior knowledge whether it be from other apps and websites, and to new system interactions. In our interface, the create account screen will require the user to find their university/college and select it, which should be a familiar process for many users who have filled out forms in the past that required them to do the same.

This should help them feel comfortable and confident while using our app. We also made sure to

make the buttons and icons as intuitive and familiar as we can in order to make it easy for users to understand how to use them.

Lastly, when creating an account, there will be screens requiring their personal information such as writing their bios or selecting their interests/hobbies. It should bring familiarity from apps such as social media platforms or dating apps that they may have previously used. The familiarity would be due to those apps typically asking their users to provide personal information about themselves to better curate their user experience when using the app, furthermore making the user feel more comfortable using the interface and promoting learnability.

Flexibility

The second design principle is flexibility. Now flexibility refers to the ability of an app to adapt to the users' needs and preferences by allowing them to exchange info and use the system in multiple ways such as enabling dialogue initiative, task migratability, user pre-emptive and system pre-emptive modes, and multithreading, along with a couple other features.

In our design concept, we designed the interface to where the app requires users to log in, create a profile, search for matches, chat with other users, RSVP for events, view user profiles, and many other functionalities. Each and every one of these features were designed to be flexible so that our app can cater to the diverse and ever-changing needs of our users.

As an illustration of this, our login screen (Figure 1 & 1.1) offers users the flexibility to either log in or create an account with ease simply by clicking on their respective buttons as displayed on their screen. In the attempt that the user attempts to log in without filling in all the necessary fields, an error will pop up with message saying “Required Field” which will indirectly ask them to fill in the text box with whatever is required incase they might have missed it, thus this will make sure that users can access the system in different ways, depending on their needs such as creating an account in order to get started.

Similarly, Figure 3, 4, & 5 allows users to select their university/college that they currently attend and fill out personal information, such as their bio, share their interests, major, year, and their unique personality traits. This information will be displayed to the other users when seeking for potential matches, which will then enable users to exchange information with the system in multiple ways. In order to give our users a full experience of what our app has to offer, we require users to add a profile picture before completing their profile making sure that the user is really who they say they are when it comes time to meet in person.

Adding on to these features, our app enables and encourages users to chat with their matches, create groups, RSVP for events, and explore other peoples user profiles, all of which allows for flexibility in how users use the app. For example, users can engage in one-on-one chats with their matches privately, engage in group chats, or event-specific chats, depending on their needs. They can also create groups and add matches to the group, enabling them to exchange information and use the app in different ways.

Robustness

Finally, our design concept's interface helps users successfully achieve their goals and tasks by providing clear instructions and feedback at every step of the way. For example, if the user attempts to log in without filling in all the required fields, they will be given an error message showing them which field needs to be filled in. Similarly, when creating a group, the user is required to fill in the group name and add the desired matches before they can create the group. This helps ensure that the user completes all the necessary steps to achieve their goal.

Secondly, our design provides observability by helping users evaluate the system's internal state based on what is perceivable in the interface. One example of this is if the user has no more matches in the area, they'll be directed to a screen which will tell them so. This will allow users to understand the system's current state and take the appropriate action, such as expanding their search area or changing their preferences in order to get a desired outcome.

Lastly, our design concept incorporates recoverability by allowing our users to correct and recover from errors they have made within the app. For example, if the user forgets to add a photo of themselves when creating their profile, they won't be able to continue until they add a photo (preferably a selfie or headshot). Similarly, if the user attempts to log in without filling in all the required fields, they will be asked to fill in the missing fields. This helps prevent errors and allows the user to recover from them easily if they do occur, thus continuing their usage of the app.

vi. Prototyping Tools

To develop or prototype we used Figma. This is a website created for collaborative interface design. While prototyping in Figma, we utilized the plugin Iconify for the majority of our application icons as well as Lorem Ipsum for some filler text.

Process Book

Milestone 1 : Gathering Insight

Questions Answered in this Section: *Who are you designing for? What is the context?*

We are creating a social wellness app specifically for black undergraduate students of all genders between the ages of 18 and 24 currently attending the Georgia Institute of Technology. The context is the challenging environment faced by black college students pursuing higher education, including stress from academics, limited support, systemic racism, and societal pressures that affect their mental well-being and academic performance. The app aims to provide resources, connect them with a supportive community, and encourage them to prioritize their mental health. The user goals include having a space to connect with others who share similar backgrounds, attending in-person social events with other individuals on their campus, and feeling comfortable in a space where they can freely socialize. The outcomes sought are improved mental wellness, academic performance, and a sense of belonging for black students at Georgia Tech. The app is designed to address the need for culturally sensitive and inclusive approaches to mental health care among black college students, using the technology of smartphones and mobile apps to offer accessible and convenient resources and support.

Milestone 2: Applying Insight

Questions Answered in this Section: *How did you gather insight about those people in that place?*

To gather insight about the user group we were designing for, we initially performed some additional secondary research. We gravitated towards a focus on clubs and organizations for

black students since it was an intuitive way to build a sense of community and social wellness for the targeted audience, so we looked for research to support this. After this, we began putting a heavy emphasis in identifying our user groups' needs and interests. We did this by conducting sixteen user interviews as a team on black students. In these interviews we asked questions intended to gauge how the students connect with other students and the type of people they got along best with. Additionally, we asked if the students had ever used an app to connect with people before and if so what features they liked about them or wished they included to begin brainstorming design requirements.

The major takeaway of our research was that although everyone had a different approach to connecting with people on campus, there were several common trends in the responses they gave. One trend was many students' dependency on apps and online platforms for socializing with people due to their busy school schedules. Additionally, a lot of the students described that they are most comfortable in environments with people similar to them and sometimes feel left out if they are in the minority of a group in any way. On top of this, they demonstrated interest in events organized for people with common interests as a way to socialize and meet new people. Finally, they emphasized how an app intended for connecting purposes needs to have an inclusive and user-friendly design while also containing important features like profiles, messaging, and events for it to be effective.

To organize all of the information we received from our interviews, we created affinity diagrams with appropriate categorizations of responses. This helped us get a clearer picture of the results. To further interpret the data, we created personas based on primary and secondary stakeholders.

The primary stakeholders were clearly the students, but in order to determine secondary stakeholders, we did more research and found that university professors can have a significant role in the social wellness of minority students, so we chose them. Lastly, we created task analyses and storyboards of how people currently handle the problem we chose to address based on the responses to our interviews. These generally involved using existing messaging or social media apps, the school's official website, or hearing about organizations or events through word of mouth. These information gathering and visualizing techniques were essential in proceeding to the next steps of coming up with design ideas.

Milestone 3: Design Considerations

Questions Answered in this Section: *How did you distill that insight into the material to drive your design? What kinds of design ideas did you consider? Which did you discard? Why did you discard them?*

This milestone we began prototyping for our interface. Milestone 3 included a process wherein we: 1.) Identified 5 legacies 2.) Identify the design requirements for our future prototype 3.) Brainstormed prototype ideas 4.) Created wireframes, scenarios for each prototype idea 5.) Created an assessment for each prototype idea and 6.) Created a Poster presentation.

The legacies that we described were discord, instagram, Engage, Bumble, and Groupme. These interfaces were chosen based on the user research done within Milestone 2. This research indicated that many of our target users are utilizing these applications currently to help solve the central problem. Within this section we highlighted the advantages and disadvantages of utilizing

these interfaces. Emphasizing the pros and cons of these interfaces help us narrow the what to include and not include within the design requirements of our potential prototype.

For the design requirements we produced 3 functional and nonfunctional requirements. The functional requirements that we declared were: Enable Self Expression, User Communication, and Informative regarding Social Outlets. These requirements were decided upon through identifying our target users' needs within the user research as well as accessing the shortcomings of the legacy interfaces, as described above. Having these particular functional requirements distills user research insights within our future design. As a whole, these requirements were chosen to encourage the user's ability to make valuable social connections on their campus. The nonfunctional requirements were: Usability , User Experience, and Security. These requirements are the standard expectations of most interfaces.

We brainstormed 10 ideas for our final prototype. When brainstorming ideas, we assured that each idea took into account the functional requirements that explained above. Through abiding by these functional requirements, many of the brainstormed prototypes included the following features: biography creating, messaging/commenting, and club/event listing.

For each prototype we first created a wireframe or user scenario of some kind to give an idea of how the app will look and function. We then went on to create scenarios. We included 4 user scenarios descriptions and then explained how certain prototype ideas would be useful within these scenarios. The prototypes that were more generalizable to multiple scenarios gave us a better idea on where they should be ranked.

The assessment section is where we evaluated how effective each prototype is with addressing the central problem space. Some of the prototypes' had functionality that focused on club and event listing (Prototypes 2, 4, 5,6,7) and others focused more on personal hobbies and expression (Prototypes 3,8,9,10). These ideas were ultimately discarded because they were too specific and niche. We found that the first prototype (Vespula) perfectly balanced the required functionalities. The most promising features of Vespula included its familiarity and its simple interface. Many users may have prior experience with dating style apps. On the other hand, a lot of the other prototypes created within our brainstormed ideas had interfaces that were independently created by our teammates, which is good for originality but may present issues in regards to general familiarity. This prototype also stood out against the others because it offered a better one on one experience which addressed the need for students to conveniently find other students. This allows those who prefer online methods of finding community a simple platform to do so. For these reasons, we ranked this prototype as the best as it addressed the majority of our problem space. We decided Prototype 4 was the second best prototype because its interface addressed the struggle that our target users have with using current interfaces: how overwhelming and unappealing they can be. This prototype stood out because it does the work of seeking out interest-based clubs for the user. The user not having to use varying different methods of trying to find clubs- which was an issue we noticed in our research, may alleviate this overwhelming feeling when being confronted with too many options.

The poster creation was the last requirement for this milestone. Within this poster section we described our top 2 best prototype ideas. We ultimately ended up choosing Vespula (the first

prototype), and clubU (the second prototype) due to the reason explained within the section above.

Milestone 4 & 5: Evaluation and Iteration

Questions Answered in this Section: *How did you evaluate your design and iterate on it?*

Milestone 4

The main focus of this milestone was selecting a prototype that most effectively addressed our requirements and goals and expanding upon its design through a series of evaluations.

Selecting Vespula. We selected Vespula for its strong socialization features and for how effectively it addressed our problem space. Swiping on potential matches provides a much more direct feedback system for meeting people than some other prototypes we proposed, like prototypes that were more similar to forums, which would have been less personal and more resource or event-based than we would have wanted. The ability to create group chats and explore events upon matching with people provides a streamlined way of addressing the issues we previously identified with students needing to socialize on either a small or large scale and also discover event information. The app is flexible enough to be used with any group, not just black Tech students as our original target group intended. Vespula addresses our functional and non-functional requirements (refer to Prototype section iii) more effectively than other prototype ideas.

Heuristic Evaluation. Evaluation of our design began with a heuristic evaluation (the form can be found at <https://tinyurl.com/wellnessheuristic>). We found that the heuristic with the highest average disagreement rating - meaning that evaluators thought it was the least properly addressed - was “user control and freedom.” Three out of our four evaluators mentioned that there should be an easier way to exit tasks such as logging in, matching with another user, creating groups, and navigating between account creation screens. Our next least successful heuristic was “recognition rather than recall,” meaning that actions and elements should be easily visible to the user. One evaluator commented that it should be easier to recall commonalities between the profile and matching phase, potentially highlighting things like common interests. Another noted the icon for interests was not entirely clear, and that there are potentially more suitable icons for interests than our checkmark.

Our most successful heuristics were “aesthetic and minimalist design,” “match between system and the real world,” and “consistency and standards.” For the first, feedback included that there are small changes that could be made with spacing, color, and font that could be fixed. For the second, we received feedback asking us to add more confirmations for actions. A specific piece of feedback suggested adding a more visible indicator that the user has successfully RSVPed for an event than just the color of the button changing. For the last heuristic, feedback included that the signs for activities like logging in are not entirely clear.

User Studies. We asked our four participants consisting of three non-black Tech students and one non-black, non-Tech student to complete five tasks related to our application. We selected this group as they were all students that, although not black, could give insight into the usefulness of the app from a student perspective, which still addresses a part of our target group.

Findings. Our participants generally thought the application was intuitive and resembled applications they have used in the past. Findings and feedback are outlined below by task.

Task 1: Account Creation and Logging In

Users attempted to click the text rather than the arrow buttons when filling out the information required for creating an account. Our 3rd participant suggested that it would be helpful when creating an account to indicate to the user which sections that they already completed, like a progress tracker. Our 4th participant commented about the general organization of this section and suggested compartmentalizing certain topics in the create account section better (i.e. grouping major and year with university information).

Task 2: Matching with Another User

Participants commented that it was very reminiscent of applications such as Tinder or Bumble.

Task 3: RSVPing for an Event

Participants completed this section of the study with ease. Some participants were confused about not being able to join a group before RSVPing for an event. The 3rd participant suggested providing feedback for RSVPing. The 4th participant suggested more clarity regarding what the group chat was for. He noted it was unclear if the group chat was for the event or the organization.

Task 4: Chatting with a Match

This task was completed with relative ease. The 4th participant suggested adding a functionality where if the user clicks on their match's picture within the chat, then they are taken to the profile of that person.

Task 5: Creating a Group Chat with Matches

Some participants suggested we should provide a larger surface area for smaller buttons/icons as some users had to click several times before they were able to align their cursor with the button. The 4th participant suggested not making the group chat name optional as well as making it easier for the user to add matches to the chat.

Potential Solutions. We brainstormed several potential solutions to the issues brought up by both our heuristic evaluation and our user studies.

- ❖ Having accessible back buttons on every screen with a sequential process and/or having an easier way out, such as clicking anywhere to exit the match screen rather than just on the text, would allow for higher navigability through the app.
- ❖ Having a separate section above the potential match's interests that detail the current user and the potential match's common interests would allow for more distinction between the two elements.
- ❖ Changing the check mark icon to an icon more commonly associated with "likes", such as a heart or some other icon with a heart inside of it, would increase familiarity for the user.

- ❖ Adding confirmation screens similar to the RSVP confirmation screen across more parts of the application as well as stronger indicators for successfully completing a task would make the completion of actions more clear to the user.
- ❖ We could add a temporary popup that would appear at the bottom right corner of the screen and indicate that the RSVP was successful, but this would be slightly complicated to add in our current design. Instead, we could add a checkmark or some other extra icon to the RSVP screen to more obviously indicate that the user has successfully RSVP'd.
- ❖ It might be in the best interest of the user to give a larger surface area to click on when interacting with components on the screen (opening/closing tabs and buttons).
- ❖ We can ensure that all screens clearly display to the user the action they are taking and confirmation of that action by having visual indicators like check marks or written confirmations (e.g. “successfully logged in”).
- ❖ Regarding confusion with not being able to join a group chat before RSVPing for an event, the solution may be to not show the “join group chat” button at all until the user has already RSVP'd.
- ❖ Adding a distinction between organization and group chats using a distinct section much like the Direct Messages vs. Group Messages section could help with clarity.
- ❖ Ensuring the spacing of elements is consistent on each page, as some pages have slightly different spacing than others, and ensuring that the color and font of each page follows the color palette in Figure 17, would help with consistency and having a more polished look.

Milestone 5

In Milestone 5, we used the feedback from Milestone 4, our user studies, and our heuristic evaluation to make some changes to our interface.

Visual Changes. One of the pieces of feedback we received was on the clarity of the “interests” icon. A participant from the heuristic evaluation noted that the icon may be better suited as something other than a checkmark, which is typically not associated with likes or interests. We took this feedback into account when altering the icon to be a heart, which more strongly represents a “like” on other applications. Another critique that we got from the user study is that some would prefer to receive feedback when RSVPing for an event. We addressed this by adding a confirmation in the form text and a check mark indicating that the user RSVP’d for a specific event.

Navigation Changes. Another significant piece of feedback was clarity in navigating to other screens. We found from the heuristic evaluation and from several user studies that users wanted to exit the match screen by tapping on the background, as it felt more intuitive to do so than tapping a small “remind me later” button. After completing the create account task, the app now directs the user to the explore page rather than the login page. This change was made in response to comments made stating that typically when creating an account for an application, the user is automatically logged in.

Unchanged Elements. Several pieces of feedback were not expanded upon for a few reasons. We based changes to our application on suggestions that typically more than one user made

and/or those that we also found to be potential issues going into the evaluation or studies. For this reason, some suggestions that were mentioned by only one participant were not prioritized when changes to the app as they were not wholly representative of what a majority of participants thought.