Activity 11B: Deciding What to Prototype

This week we will turn our attention to Phase 3, which is our prototyping phase. This and the other upcoming activities are intended to help you solidify your understanding of prototyping and evaluation concepts and to give you something to apply directly to your work on the project. This first activity will focus on review, brainstorming, and planning to encourage your group to keep on track with our end of semester timeline that we have discussed in class.

Step 1: Group Members

Modifications for Remote Team Members

We are working to develop activities conducive to remote participation for this semester. If your team members cannot attend class today for whatever reason, here are some tips:

- Create a meeting in your group Teams channel and invite remote team members to attend virtually. They can participate in your group's discussion and actively contribute to your Google doc during class time
- Delegate tasks you cannot finish in class to your absent team members. If you are unable to collaborate on all sections in real time, you may assign out remaining work
- Please use the table in the following section to let us know how each team member will be participating in this activity today
- Note: The GTAs will review your notes in this worksheet regarding team member participation as well as user activity on the Google Doc. If team members are not contributing, they will be docked points. If there is a pattern of lack of contribution to the project reflected in activities and TMEs, non-participating team members will also be docked on project deliverables, up to and including receiving no marks if warranted. Please surface concerns about collaboration with your UTA coach or during office hours

Team Member Participation

Please list the members of your group and whether or not each group member was present today in the classroom for the activity.

Group member name	**Present? (Yes/No)**	**If absent, active remote participation? (Yes/No)**
Kashan Raza	Yes	
Harrison Gagnon	Yes	
Jordan Rudman	Yes	

Karthik Nair	No	Yes
Campbell Dalen	No	Yes

Step 2: Key Design Elements

As a team, reflect back on your previous deliverables as well as past class activities on design. Your system concept statement will also be informative here. Try to distill the key elements of your design in just a few bullet points. Focus on what differentiates your design from currently existing products. What are the absolute must-haves for your target persona?

- Local event list
- Guild interaction functions
- Character customization incentives
- GPS-enabled
- Community/group based activity tracker

Step 3: Brainstorm Design Questions

The key elements of your design that you identified above must be developed, and so these elements should be prioritized during prototyping to ensure they will meet user needs when implemented. For each key element you identified, brainstorm some key design questions. Your work on UX Goals will be informative here, but you will likely need to build on this activity a bit to develop questions relevant to each key design element.

- How easy is it for users to add events? (Ease of use)
- Are users able to comfortably create and edit guilds? (Ease of use)
- Are users satisfied with the customizability of their character? (Customer satisfaction)
- How straightforward is it to navigate to an event? (Fast learning)
- Does the GPS function always work with native GPS applications? (Error rate)
- Can a user decide not to share their activity information for privacy reasons? If so, how easy is it to access that option? (Customer satisfaction/Ease of Use)

Step 4: Consider your Options

To complete this phase effectively, your group members need to have a good understanding of the prototyping concepts and vocabulary covered in the textbook and lecture material. In your own words, please describe the following kinds of prototypes. Along with your definition, provide several sentences explaining what it would look like to create each kind of prototype for your system.

T-shaped: A prototype where each feature is implemented with low or ultra low fidelity, with one being more fleshed out (high-fidelity). For our system this would mean a low fidelity prototype for each key design element (GPS, events, main, and guild pages), with one of them being more

detailed. This could mean implementing all screens necessary to go through one feature completely.
Horizontal: A prototype where each feature is implemented with low fidelity. For our system this would mean implementing a low fidelity prototype that includes all of the key design elements.
Vertical: A prototype where one feature is completely fleshed out (high fidelity). In our system, it would likely be the guild feature that is well-developed with functionality like creation, joining/leaving, and creating/attending events.
Local: A very limited internal prototype used for fixing prototype issues identified by the team. This could be used in our system to fix issues we are having with a more complex feature like guilds or events.

High fidelity: A prototype with the nearly pixel-perfect representation of the design which implements most/all features to their fullest extent. It is very close to the final product. For our system, a high fidelity prototype would be a fully developed mobile application which is functional and implements all of its features. This fidelity would not be achieved by any of the prototypes above.
Medium fidelity: A prototype that implements most pages necessary to explore key design features, but doesn't go in depth enough to complete all actions. For our system, a medium fidelity prototype would most likely use the T-shaped format, and be completed using some online prototyping tool.
Low fidelity: A prototype which gives abstract impressions of design, in which the design details are not final. Our initial paper prototypes would be low fidelity, and would build on initial ultra low fidelity sketches created by each member. This low fidelity prototype would probably be horizontal.
Ultra Low fidelity: The initial rough designs/sketches of the prototype that are fast & disposable.

Step 5: Plan

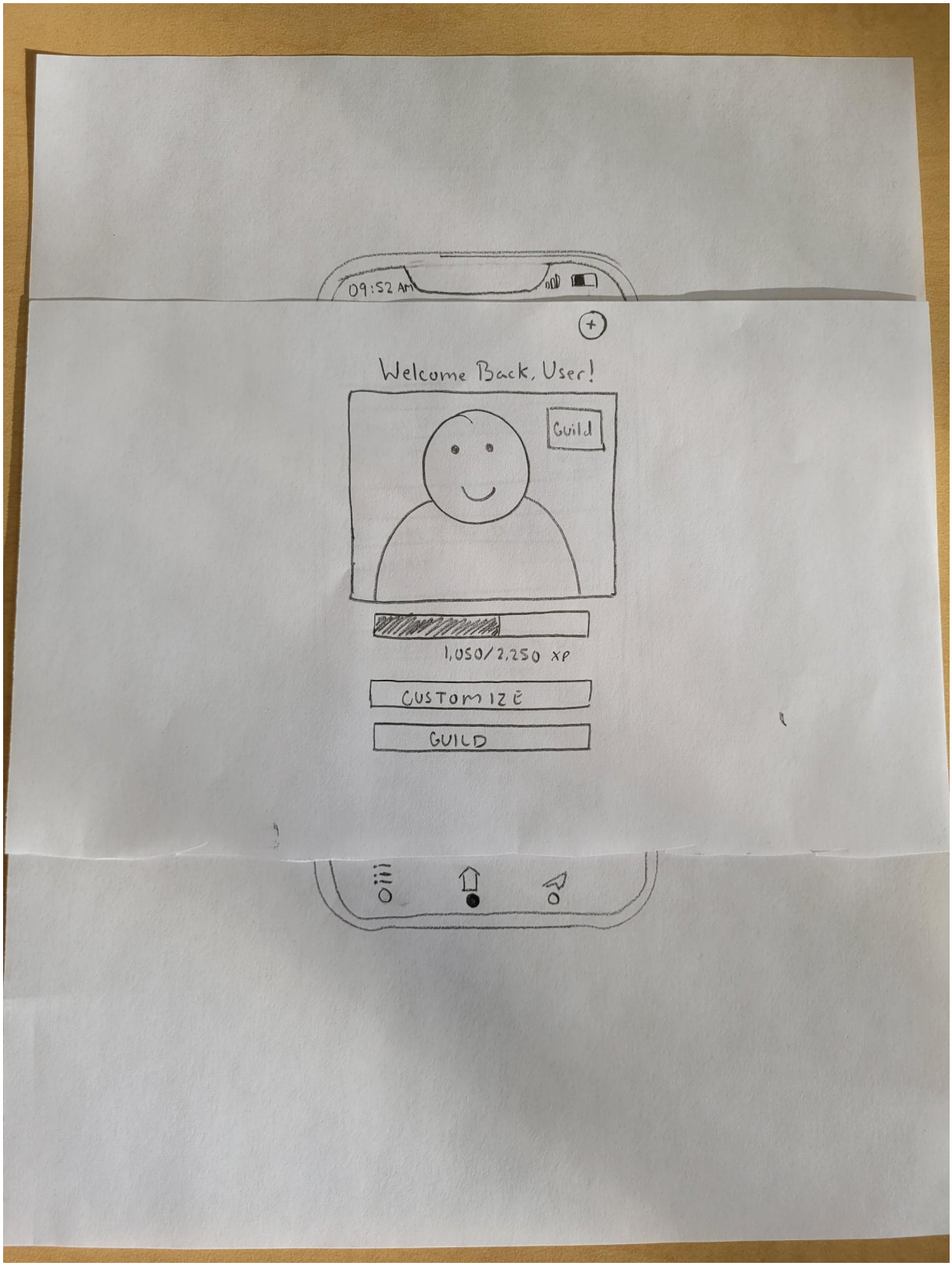
During this step, discuss your prototyping strategy with your group. Compare your design research questions with the different example prototype approaches you described above. You do not need to provide complete justification, but you need to show that you have considered the questions covered in the lecture for this week. For the sake of this activity, you will need to provide a few sentences to respond to each question.

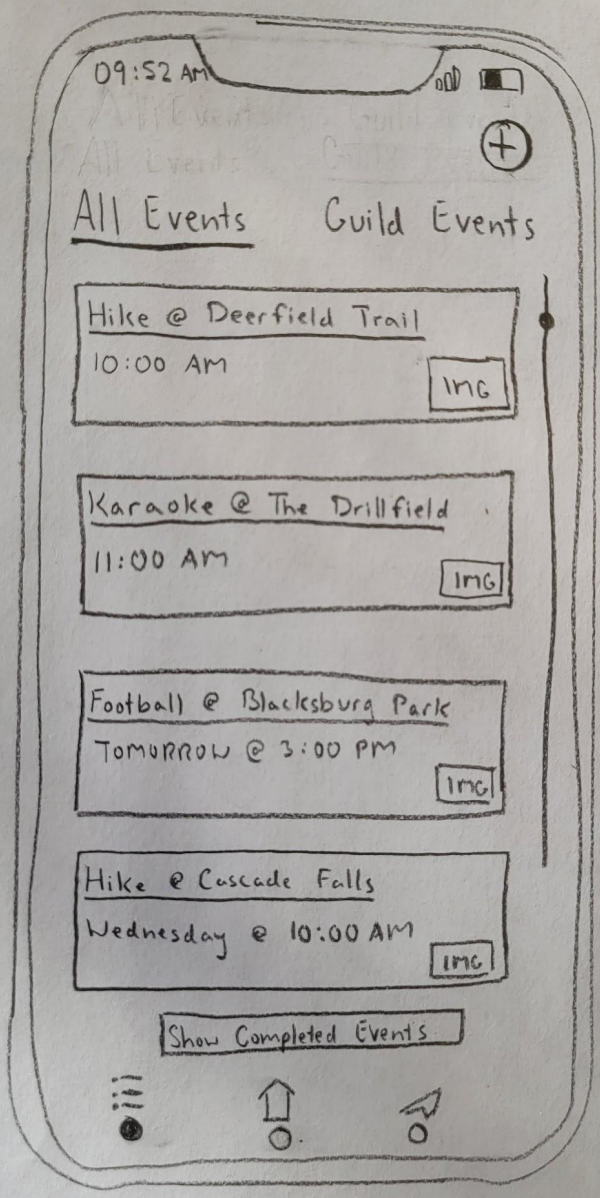
1. How broad and/or deep will our prototype need to be to address these questions? Why?
   Our prototype would need to be at least medium fidelity in order to explore all of our design questions, and would probably be T-shaped, with more than one feature being explored in detail. This is because some of our questions would require the user to explore multiple steps/pages within a key design element. For example, in order to judge how easy it is for a user to add an event, our prototype would have to explore this entire task, which includes multiple pages within the "events" page.

2. What features/task flows will need to actually be implemented? Why?
   Event creation and attending workflows need to actually be implemented by our prototype because they are the core task flows of CAMP and were identified as design requirements in Phase I.
3. How interactive will our prototype need to be? Why?
   Our prototype will need to be quite interactive. On the surface level, there is not much to the app. Most of the main features we added to the app require a pretty in depth level of interaction from the user and from other users to each other. So, in order to give an accurately represented prototype, it must have these abilities.
4. What method will you use to develop your prototype? Are any of the special methods we covered relevant to your project? Why?
   We would probably start our prototype by doing rapid ultra low fidelity prototypes to explore everyone's current ideas, before coming up with more refined versions. We could then move on to developing low-fidelity prototypes using the “paper prototype” model described in class. Finally, we would create a medium fidelity prototype using an online prototyping tool.
5. What tools will we use to develop and share our prototype? Why?
   We plan on using Marvel and/or Figma. Using these websites, we will be able to create medium-fidelity prototypes to showcase various features in the app.
6. What are some things we will definitely not implement in order to save resources and time?
   In order to save resources and time, we will not implement GPS functionality or any search functionality, but the pages for these features will still exist. We will also not implement the NFC feature used to add players to your guild. These are useful features for a final product but unnecessary to establish the foundation of the app for prototyping.

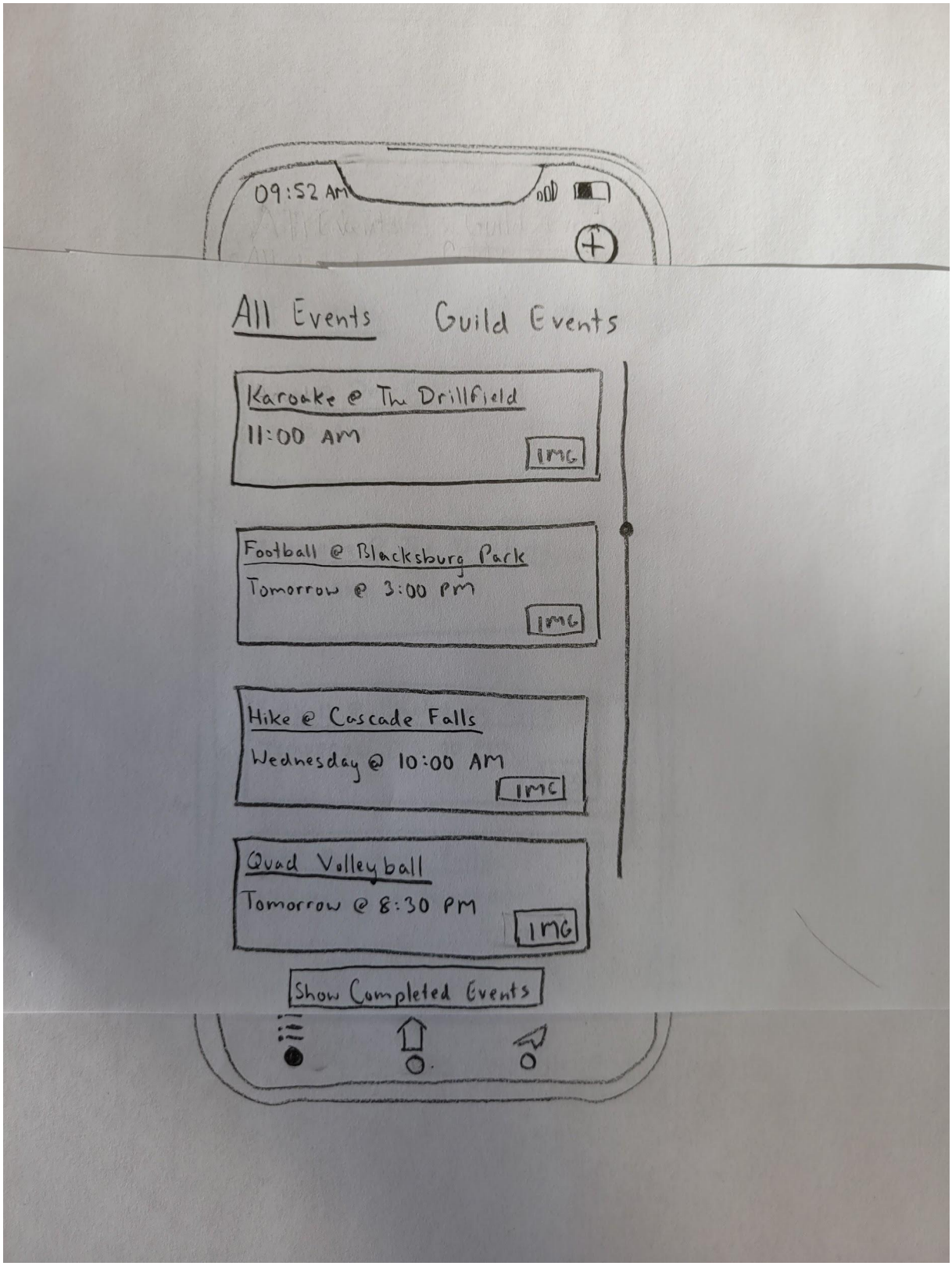
Step 6: Take a Crack at It

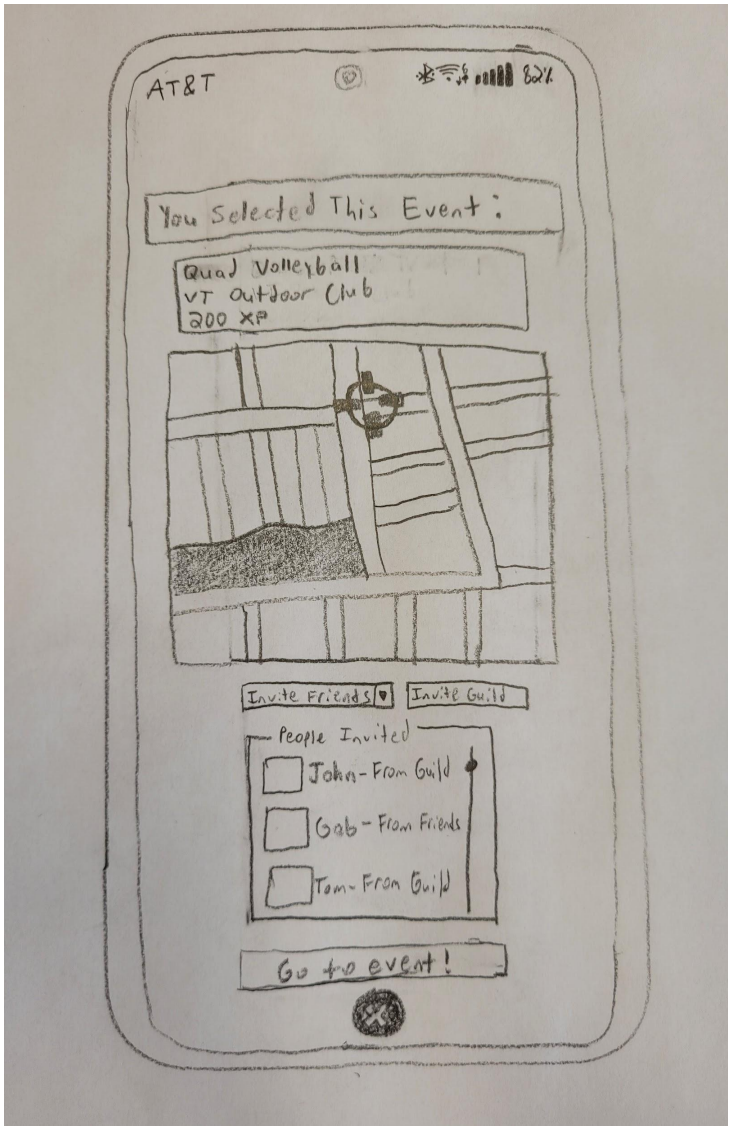
With your group, and based on your brainstorming and responses, develop a RAPID prototype using one of the methods we have discussed in class. Some materials will be provided for paper prototyping, but you can try out a tool or use something like Google Slides or Google Sheets if you need more interactivity. Spend around 15 minutes on your rapid prototyping, developing a few screens/transitions. Include 2 - 3 (or more) images of your rapid prototype here.

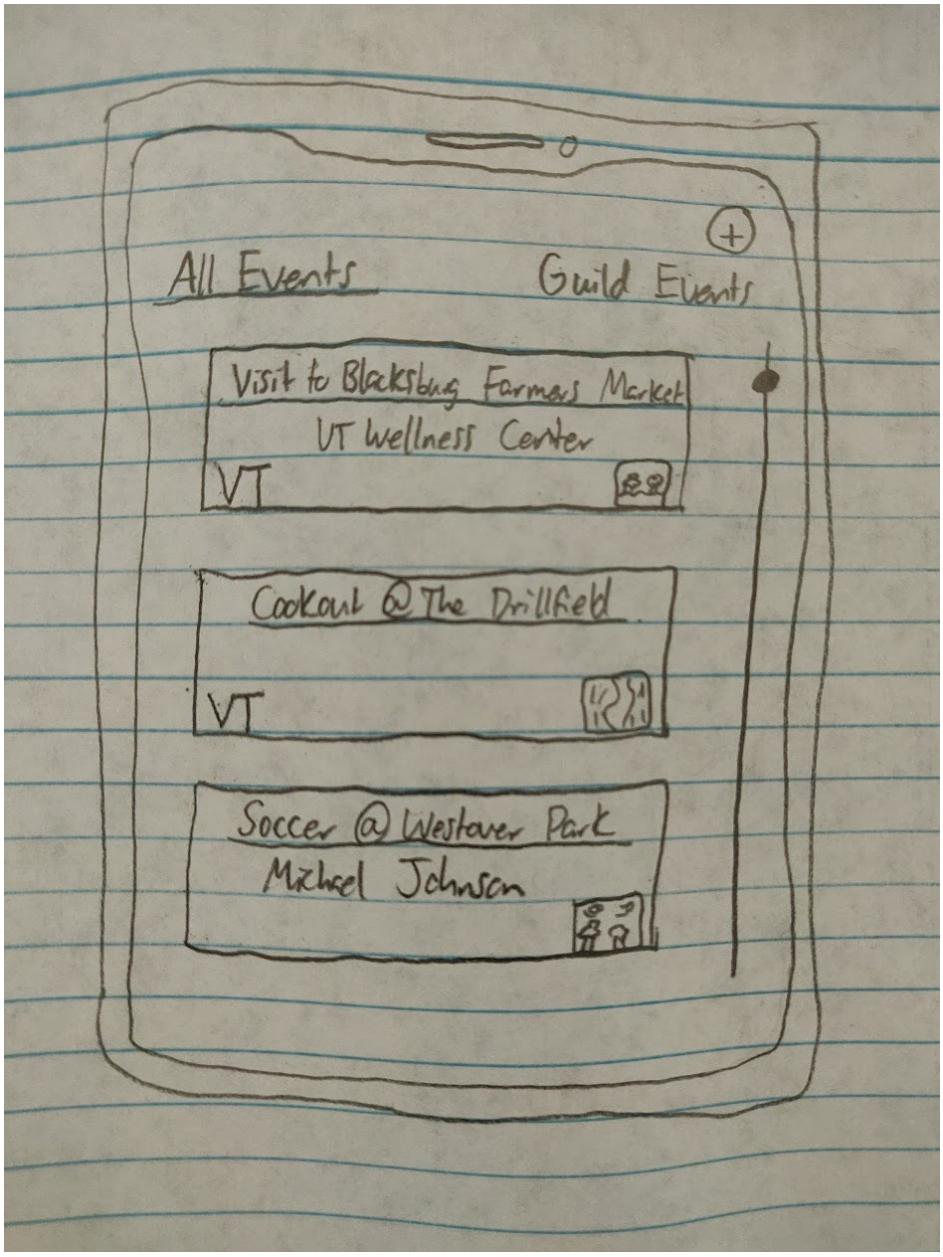

09:52 AM
Welcome Back, User!
Guild
1,050/2,250 XP
CUSTOMIZE
GUILD


09:52 AM
All Events
Guild Events
Hike @ Deerfield Trail
10:00 AM
IMG
Karaoke @ The Drillfield
11:00 AM
IMG
Football @ Blacksburg Park
TOMORROW @ 3:00 PM
IMG
Hike @ Cascade Falls
Wednesday @ 10:00 AM
IMG
Show Completed Events


6:30 PM
All Events
Guild Events
Event Name:
Quad Volleyball
Time:
08
30
PM
Location:
Ag Quad Ln, 24061
Add Event


09:52 AM
All Events
Guild Events
Karoake @ The Drillfield
11:00 AM
IMG
Football @ Blacksburg Park
Tomorrow @ 3:00 PM
IMG
Hike @ Cascade Falls
Wednesday @ 10:00 AM
IMG
Quad Volleyball
Tomorrow @ 8:30 PM
IMG
Show Completed Events


AT&T
82%
You Selected This Event:
Quad Volleyball
VT Outdoor Club
200 XP
Invite Friends
Invite Guild
People Invited
John - From Guild
Gab - From Friends
Tom - From Guild
Go to event!


All Events
Guild Events
Visit to Blacksburg Farmers Market
VT Wellness Center
VT
Cookout @ The Drillfield
VT
Soccer @ Westover Park
Michael Johnson