

CPSC 481 - Team K - Stage Four

Teaching Assistant: Philmo Gu

Tutorial Section: 02

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Instructor: Lorans Alabood

Team Members:

Evan Argenal-Garcia (Evaluator)

Brett Gattinger (Evaluator)

Ahmed Hasan (Evaluator)

Mohit Parmar (Reviewer)

Malik Mohsin Raza (Reviewer)

Github

<https://github.com/mperror/cpsc481-TeamK>

Portfolio

<https://mperror.github.io/cpsc481-TeamK/>

Project Description:

Our project will be an event organization application intended for use on iOS and Android mobile platforms. The application will allow registered users to create, browse and find events in their local area or anywhere around the world. An intuitive and interactive map interface will be central to the app, allowing users to explore and learn about what events are going on in their region or city as well as how best to get there. Event planners will be able to create and work with highly customizable event pages that can be tailored to variable levels of detail in order to provide potential participants with all the information they need to engage in the event. The Search system will allow users to explore a selection of events in their area based on a variety of search factors such as time, distance, event capacity, event type, organizer profiles and so on. To further enhance the power of the search system, events will be defined and categorized by tags as selected by event creators.

Updated List of User Tasks**Vertical Tasks**

Four Major Tasks:

- Find an event
 - Users will have access to a straightforward search functionality.
 - Users will have relevant events displayed on their homepage map.
 - Users can interact with a homepage map that would show their current location in relation to nearby relevant events.
- Create an event
 - Users will have access to a variety of attributes (such as the category of the event) to define their events with and make them easy to find.
 - Users will be required to provide basic information about their event (date, time, location, description).
- Manage an event
 - Users will have the option of deleting an event they have signed up for.
 - Users can view upcoming events that they have signed up for.
 - Users can view status information about the event.
- Manage profile and settings
 - Users can view basic information about their profile such as their name and age.
 - Users can change their privacy and application settings.
 - Users can identify if a profile is verified or not.
 - Users can view endorsements that have been given by other users.

Horizontal Tasks

- View user's social media accounts on their profile page
- Like events on the event view page
- View filters when searching for events
- Log into the application
- Log out of the application
- View events similar to one currently being viewed*
- Chat and connect users with the event host to facilitate a conversation*
- View directions of how to get to the event*

* Tasks will be implemented in stage five

Heuristic Evaluation Discussion**Process:**

The goal of our evaluation was to gauge the usability of our app and find elements in its UI design that were confusing or unclear. We first got a feel for the app and saw how everything flowed. Then three of us individually utilized Nielsen's ten usability heuristics as a guideline to come up with a scenario and tasks to evaluate our four main tasks for issues and success areas.

Scenario: The long weekend is coming up and Samantha wants to find some new activities to do. She is new to the city and she decides to download Xplore and registers with the hope of finding a dance competition event.

The qualitative part of the evaluation was performing a walkthrough of the system with each of us identifying what we think was a problem. With this, we identified several areas of improvement in the app's functionality. At this point, the evaluation was subjective, and we had to turn this evaluation into quantitative data. So, we had two testers who rated the severity of the problems from 0 to 4. From those ratings we prioritized the major problems for our next iteration.

Based on the heuristic evaluation, the team will focus on iterating our prototype in this stage by doing the following:

- Implement consistent colouring of buttons and design
- Implement error messages for when the user wants to create an event but leaves fields empty
- Indicate that horizontal scrolling is possible in the manage events sections
- Implement more navigation options so user does not have to always reset

Review & Findings:

There were many positive findings but also some major negative ones which needed to be fixed before moving on. The important things to note were that we did not have any issues that were classified as a level 4, which would indicate a usability catastrophe. The usability heuristics 'visibility of system's status', 'matching between system and real world', and 'recognition rather than recall' had several positive findings that were compliant with the heuristic principles and enhanced the experience with our app. We found that there were plenty of indicators to let the user know what is happening when they do major tasks like signing up for an event, and the familiar icons and simple language made it fairly easy to use the system. Our negative findings lied with the 'consistency and standards', 'error prevention' usability heuristics. In our iteration we decided to implement consistent colouring of buttons and our main design in terms of layout of the buttons and text boxes. We also implemented error messages for when the user is creating an event but accidentally leaves critical fields empty.

Reflection & Decisions

What went well for this stage was how we were able to frequently meet up after reading break to deal with the time crunch. We were able to work around everyone's schedules and kept in constant communication. Since we worked hard on stage three with our low-fi prototype, we were able to take those ideas and build on them, utilizing them as a foundation rather than starting from scratch. We also reviewed feedback from stage three to better understand the objectives of the stage. What went poorly was that Figma was initially difficult to learn and this slowed down the progression of the project. We also did not use all of Figma's features effectively which may have led to many inefficiencies during our prototyping sessions, creating more work for ourselves than we needed. We also did not have sufficient meetings early on in stage four and this led to a time crunch near the end which complicated our workflow and stressed us out. In terms of what we would do differently, we would have planned more time to learn Figma by watching video tutorials and using additional online learning resources. We also would want to start our initial meetings earlier in the stage in order to prevent time crunches at the end.

Appendix

Evan's Evaluation

Rule of Thumb	Is this rule being applied? How so?	Is this rule violated? How so?	How can this rule further improve usability, utility and desirability?	Severity (Reviewers)
1. Visibility of system status	Yes, there are plenty of indicators to let the user know what is happening when they do major tasks such as signing up for an event or getting confirmation in some menus.	No, the user is aware of the system status at all times.	Possibly a couple of more confirmations such as when signing out, but other than that there are already confirmations when they are needed.	2 - minor usability problem 1 - cosmetic problem
2. Match between system and the real world	Everything is understood in plain english and I was never guessing what was happening on the screen. It's very similar to Google Maps, meaning I know how to use it fairly well already.	No, this is a very common application, so there was nothing that was hard to understand.	There is no improvement necessary here as the rule isn't violated.	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability problem
3. User control and freedom	Yes, in all of the screens you could get to other screens freely with the help of the bottom bar.	No, the user seems to have complete freedom to navigate around on all screens.	There is no improvement necessary here as the rule isn't violated.	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability problem

4. Consistency and standards	There were a lot of consistency issues, so this rule wasn't being applied.	There were some screens that were inconsistent at least with the color schemes. Also there were back buttons on some screens but not all of them.	A simple fix would be to color the buttons similarly, and to have back buttons on most menus so there's a feeling of consistency.	1 - cosmetic problem 1 - cosmetic problem
5. Error prevention	I never ran into any errors, and due to the nature of the app, when something cannot be done, it just won't let you do it.	It was slightly violated in the sense that there were no error messages when there should have been, such as empty fields on creating events.	Possibly more error messages when something doesn't work when the user thinks it would.	2 - minor usability problem 1 - cosmetic problem
6. Recognition rather than recall	As mentioned above, since this application is very similar to how Google Maps works, I have not had any issues navigating or understanding what each icon means.	This rule was not violated because of the amount of recognition utilized in the app, lowering the learning curve.	There is no improvement necessary here as the rule isn't violated.	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability problem
7. Flexibility and efficiency of use	The app is mostly straightforward and efficient, but there were some tasks such as creating events where it was not very efficient.	There are some screens such as creating events that have a lot of screens to go through and don't feel efficient, but there are also a lot of options to select.	Possibly putting everything into one screen could help speed up this process, or skipping some selections altogether. This isn't a practical solution though given the nature of this task.	2 - minor usability problem 2- minor usability problem

8. Aesthetic and minimalist design	This design borrows heavily from Google Maps, meaning it's fairly minimal to begin with.	In some areas, it didn't feel consistent aesthetically such as clashing colors. Some areas seemed to appear as if they were developed by different people based on the colors.	Overall a good design, but some colors could be fixed so it's consistent all throughout the entire application, and not just in certain sections.	1- cosmetic problem 1- cosmetic problem
9. Help users recognize, diagnose and recover from errors	When an event is cancelled, the user would be properly notified not to go.	I never saw any error messages, yet I never encountered any situation where an error message would be warranted, so I'm inconclusive with this one.	If there were more situations where errors are likely to occur, adding those messages would be good.	2 - minor usability problem 2 - minor usability problem
10. Help and documentation	The steps necessary to complete tasks such as creating events is very straight forward, and the menus provide a fairly easy layout to navigate and understand.	There is no documentation provided, so if I ever did need help, I'm not sure how I would get help.	Some sort of documentation or even a help section would be nice, although given how straightforward the app is, I don't think it's warranted.	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability issue

Brett's Evaluation

Rule of Thumb	Is this rule being applied? How so?	Is this rule violated? How so?	How can this rule further improve usability, utility and desirability?	Severity (Reviewers)
1. Visibility of system status	Yes, When users navigate the app, the bottom nav bar changes colors of icons to indicate the user's in-app location. Also, whenever users make selections those selections change color.	No. The app communicates well with its user, letting them know what they have triggered and what is available to them to trigger	By giving feedback to the user we can help keep the user informed about the current state of the app. It helps the user navigate the app geometrically and temporally.	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability problem
2. Match between system and the real world	Yes, when the user goes to create an event the order of attributes they need to specify appear in a natural and order. Also, when the user is making their event, they can select from categories that are familiar to them	No, there isn't anywhere in this system where this rule is particularly violated. The purpose of our application is concrete and simple enough that it is easy to match the design of the app with the real world.	By matching the design of our app with user's world we help to make it more approachable and easy to learn	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability problem

3. User control and freedom	Yes, selections available to the user trigger overlay screens to appear which can be easily backed out of with a simply tap to the sides, top or bottom of the screen	Somewhat, when users are creating their events they have to travel through a sequence of pages. If the user makes a mistake early on they have to navigate back through the sequence.	Users will have to make many choices in our app to create events which means many potential errors. By giving users quick and easy ways to back out and correct these errors we make the app more convenient.	3 - major usability problem; important to fix 3 - major usability problem; important to fix
4. Consistency and standards	Yes, our application uses consistent and familiar language consistent within the app and outside of it. The color scheme is also intuitive, using green and red to denote positive and negative statuses	Yes, there are some areas where the color schemes didn't match up as if there was a lack of agreement on the apps primary colors	By ensuring our app's language and visuals are consistent within the application and also with users outside world (within reason) we decrease the mental burden of using our app and streamline that use	1 - cosmetic problem 0 - doesn't seem to be a usability problem
5. Error prevention	Yes, when users go to cancel events they're enrolled in they are prompted to confirm their cancellation, just in case the cancellation was a mistake	Yes, when users go to create an event they are allowed to progress without entering critical information such as the starting time	We can make design choices that minimize the risk of mistakes as possible. It helps make our application intuitive enough so users can form accurate mental models of it easily.	2 - minor usability problem 3 - major usability problem; important to fix
6. Recognition rather than recall	Yes, the user's cognitive load is minimized when creating events as all the details necessary are displayed in a logical manner.	Yes. When users manage their events via the calendar GUI, it's not obvious that the event overview below each months calendar scrolls horizontally through ALL events for that month	Focusing on recognition over recall helps to ensure the app's design informs more and requires less memorization making it easier to work with.	0 - doesn't seem to be a usability problem 1 - Cosmetic issue

7. Flexibility and efficiency of use	Yes. Users can look at event details through either the map or calendar GUI's of our application. The calendar GUI gives an overview of events but the map GUI gives in-depth descriptions of events.	Yes. There are possible avenues for task completion our application doesn't provide. For example, users cannot cancel events from the map GUI, they must go to the calendar GUI.	By giving users multiple ways to complete the same tasks in our application, we increase its flexibility and the diversity of its usability. Users can form their own workflows that suit them best or can explore different workflows for different contexts	2 - minor usability problem 2 - minor usability problem
8. Aesthetic and minimalist design	Yes, our app only delivers relevant info. For example event map markers toggle to display event details or hide them	No there wasn't any particular point in our app where irrelevant information was being presented to the user	By limiting the content displayed at any given time to what's relevant we guarantee that the user never feels overwhelmed.	1 - cosmetic problem 0 - doesn't seem to be a usability problem
9. Help users recognize, diagnose and recover from errors	No, currently there is a distinct lack of error checking let alone error recovery	Yes. Currently our app provides almost no error checking, and so it does not give meaningful error messages	Helping users recognize, diagnose and rectify errors makes using our app desirable. Otherwise, our app easily becomes frustrating to use whenever anything goes wrong.	2 - minor usability problem 3 - major usability problem; important to fix
10. Help and documentation	Yes. When users create events they're given descriptions of what they are supposed to enter into the input fields.	Yes, currently our application has no kind of external documentation which could help users learn to use it.	External documentation would help lessen any kind of learning curve our application has and make it more accessible to new users	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability problem

A's Evaluation

Rule of Thumb	Is this rule being applied? How so?	Is this rule violated? How so?	How can this rule further improve usability, utility and desirability?	Severity (Reviewers)
1. Visibility of system status	When a user signs up for an event, there is a notification popup. The events in manage events have a status displayed. Location on map to show user's live location. The nav bar icons change colour based on which page the user is on.	Cannot see event name on map without clicking on it.	Give feedback for some of the operations like filters when applied.	1 - cosmetic problem 1 - cosmetic problem
2. Match between system and the real world	Familiar icons: left arrow is for going back, plus is for adding/creating, etc. Pins on a map means some activity going on in the area. Icons in the nav bar are easy to understand what their functionality is.	It was unclear that I could swipe to view more of your events in 'my events'. I wasn't too sure that I had to click the green checkmark to cancel the event (or click the status icon in general to view updates/delete).	Keep commonly used icons and colours (red -> cancelled, green -> going)	1 - cosmetic problem 1- cosmetic problem

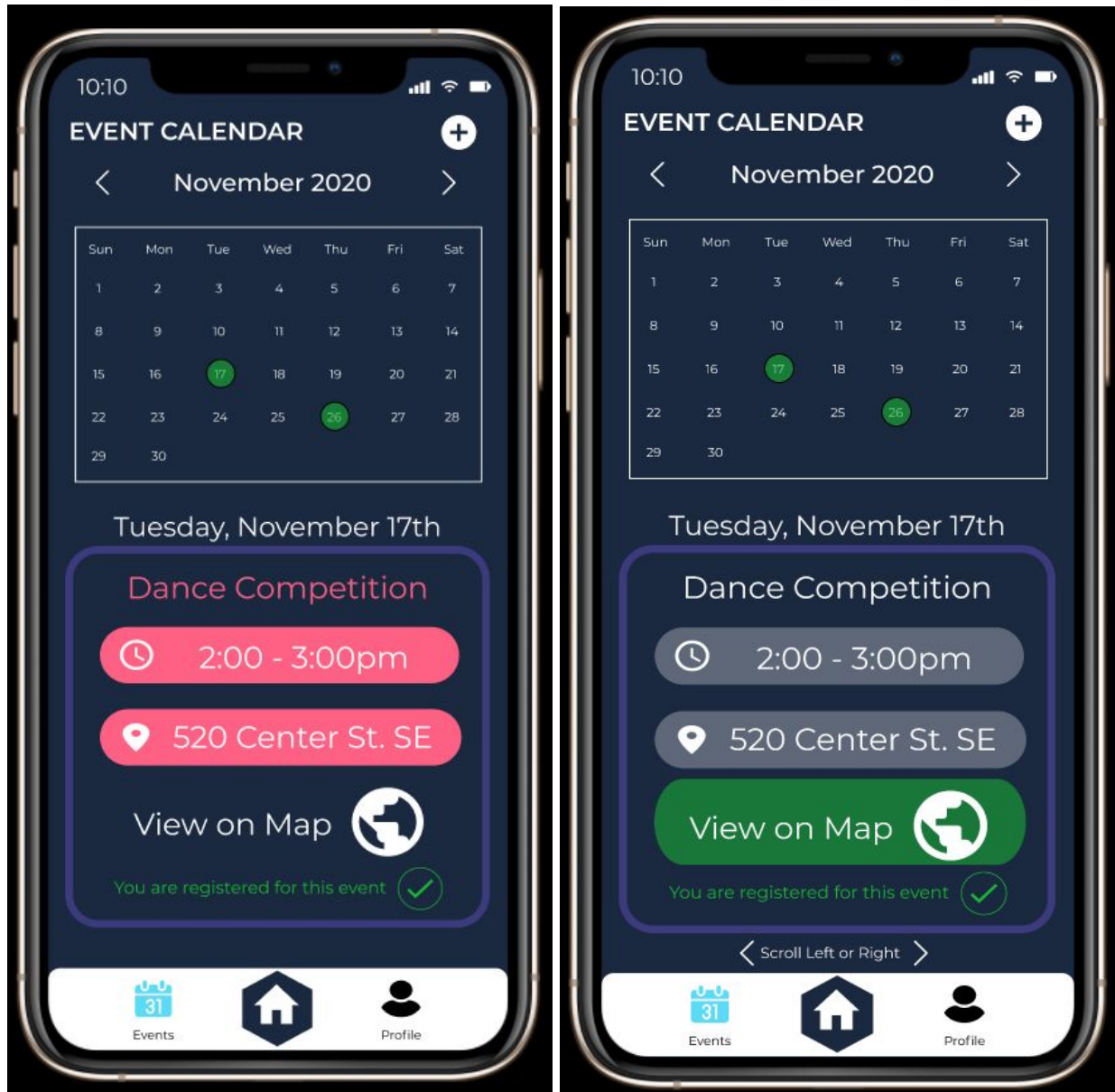
3. User control and freedom	Cancelling events, undo when typing,	Some pages only have a specific sequence you have to follow to get to the end and if those settings don't apply to you then you still go through it.	Add redo (don't wanna have to go through all the steps again if it was a mistake)	2 - minor usability problem 2 - minor usability problem
4. Consistency and standards	Colour scheme is consistent (background, buttons, etc.). Font type and size for headers and normal text is consistent.	Back button placement not consistent. Can't filter without clicking an event first. In create events, the next arrow and text both can be clicked but the back button, you can only click the arrow to go back. The icons in the nav bar are not the same size.	Keep functionality of buttons the same from frame to frame.	1 - cosmetic problem 1 - cosmetic problem
5. Error prevention	Confirmation when cancelling events.	After signing up for an event, it still says sign up. No colour difference or difference in icon in 'yes' and 'no' buttons. No confirmation when signing out (maybe not a big deal but if i click it then i have to go through all the steps again).	Can add labels (show on hover) for icons/tasks.	1 - cosmetic problem 1 - cosmetic problem
6. Recognition rather than recall	Popular social media icons on the 'profile page'.	Slider in create event looks like a progress bar	On the map, add event labels so we don't have to click each one to find out what it is.	1 - cosmetic problem 0 - doesn't seem to be a usability problem

7. Flexibility and efficiency of use	Can use the map to click and find events rather than using the search feature (multiple ways to find events). Can like events or view similar events if something interests you.	Some elements are unclear that they can be interacted with	Limit the number of things happening on one page (in 'create event'). Can maybe create multiple pages to not make it overwhelming for the user.	1 - cosmetic problem 1 - cosmetic problem
8. Aesthetic and minimalist design	Simple colours used, not too many. The Navbar has 3 main icons and everything is grouped in 1 of those 3.	Margins are not the same on every page. In the profile tab, the event you are participating in is orange and in my event that colour is used to represent an update with your event like weather delay. The purple colour used in 'my events' page is not used anywhere else.	Keep the colours and phone background the same.	1 - cosmetic problem 1 - cosmetic problem
9. Help users recognize, diagnose and recover from errors	Confirmation/error messages are simple to understand and use plain language.	Some pages allow you to go back without confirmation like the 'create event' page	For errors, add explanations for why those errors occurred and how they can be fixed.	2 - minor usability problem 2 - minor usability problem
10. Help and documentation	The icons have a label for new users to understand what each one does.	No specific help or documentation in the app	Add help link in app (like a question mark somewhere in the corner)	0 - doesn't seem to be a usability problem 0 - doesn't seem to be a usability problem

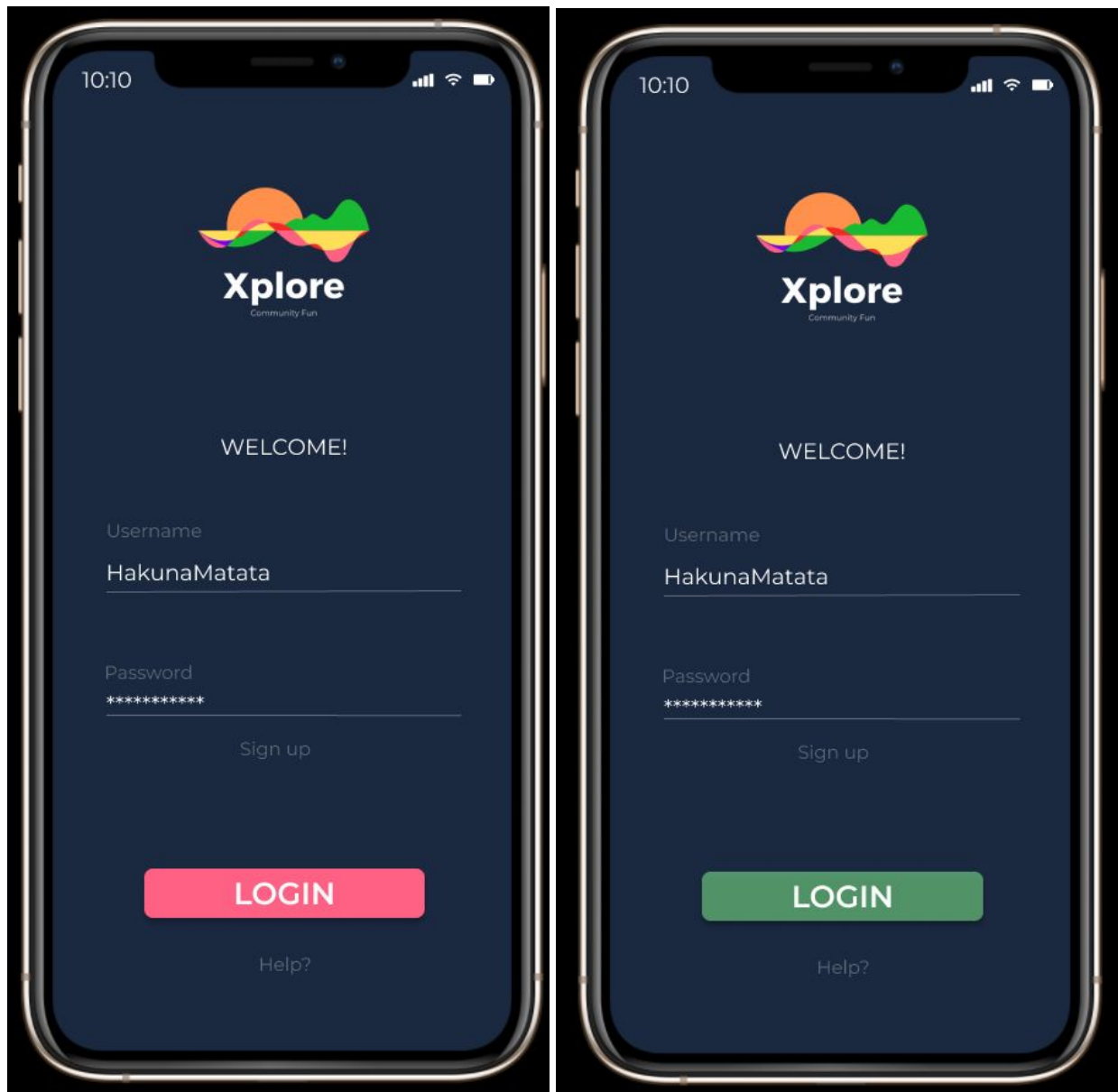
Before and after screenshots for each task to be iterated

(Left is before, Right is after)

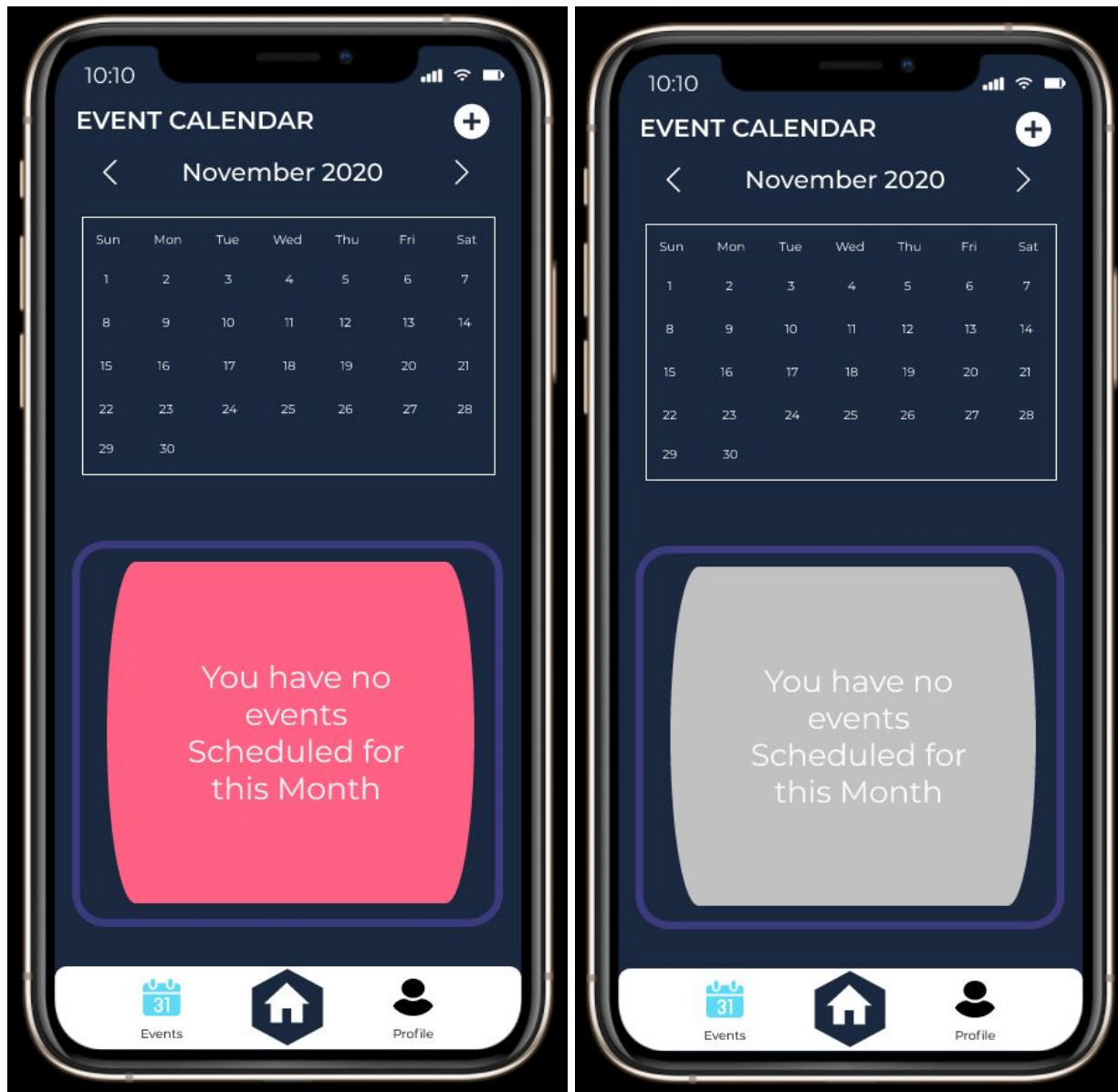
- Implement consistent colouring of buttons and design



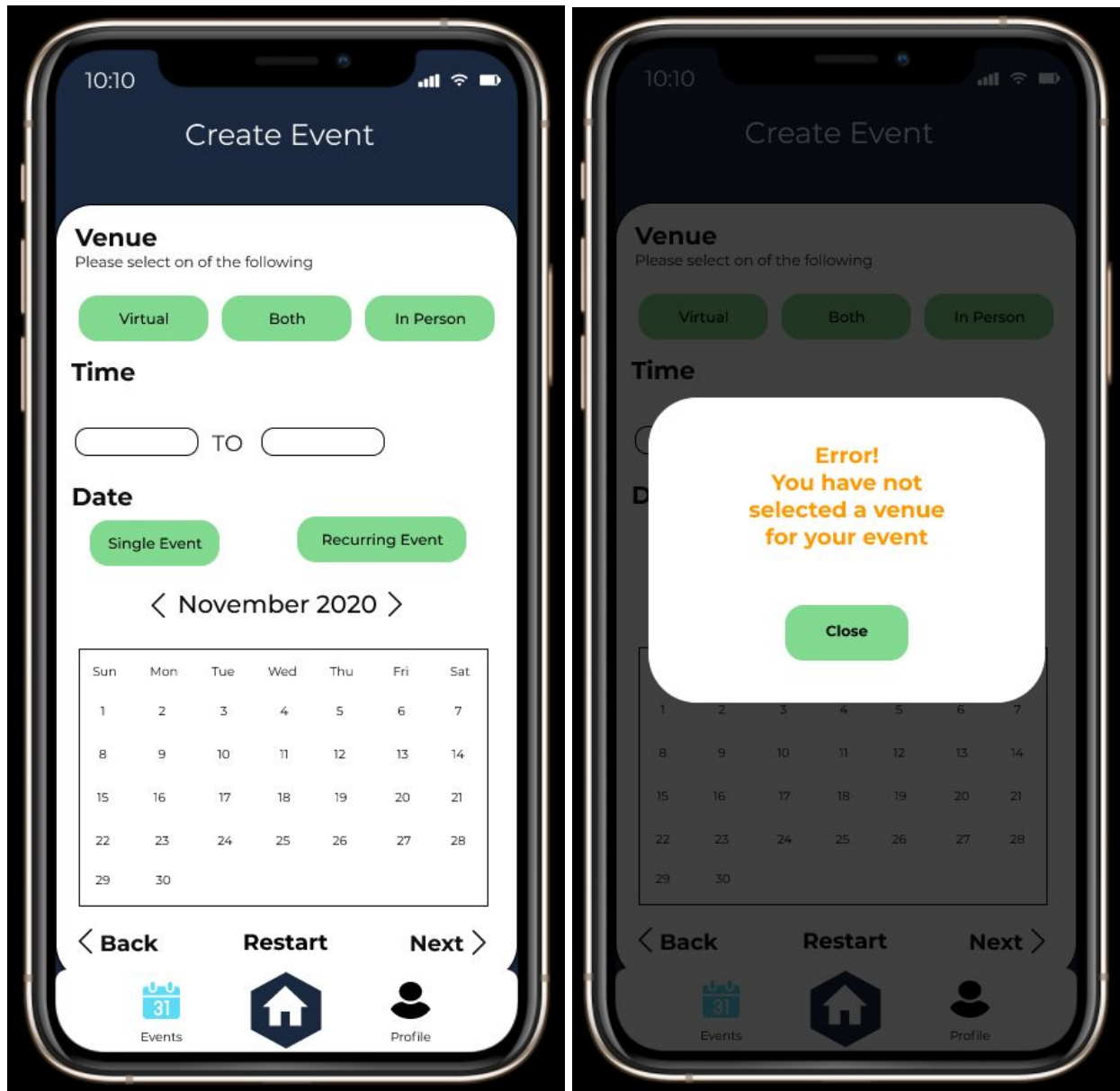
- Implement consistent colouring of buttons and design



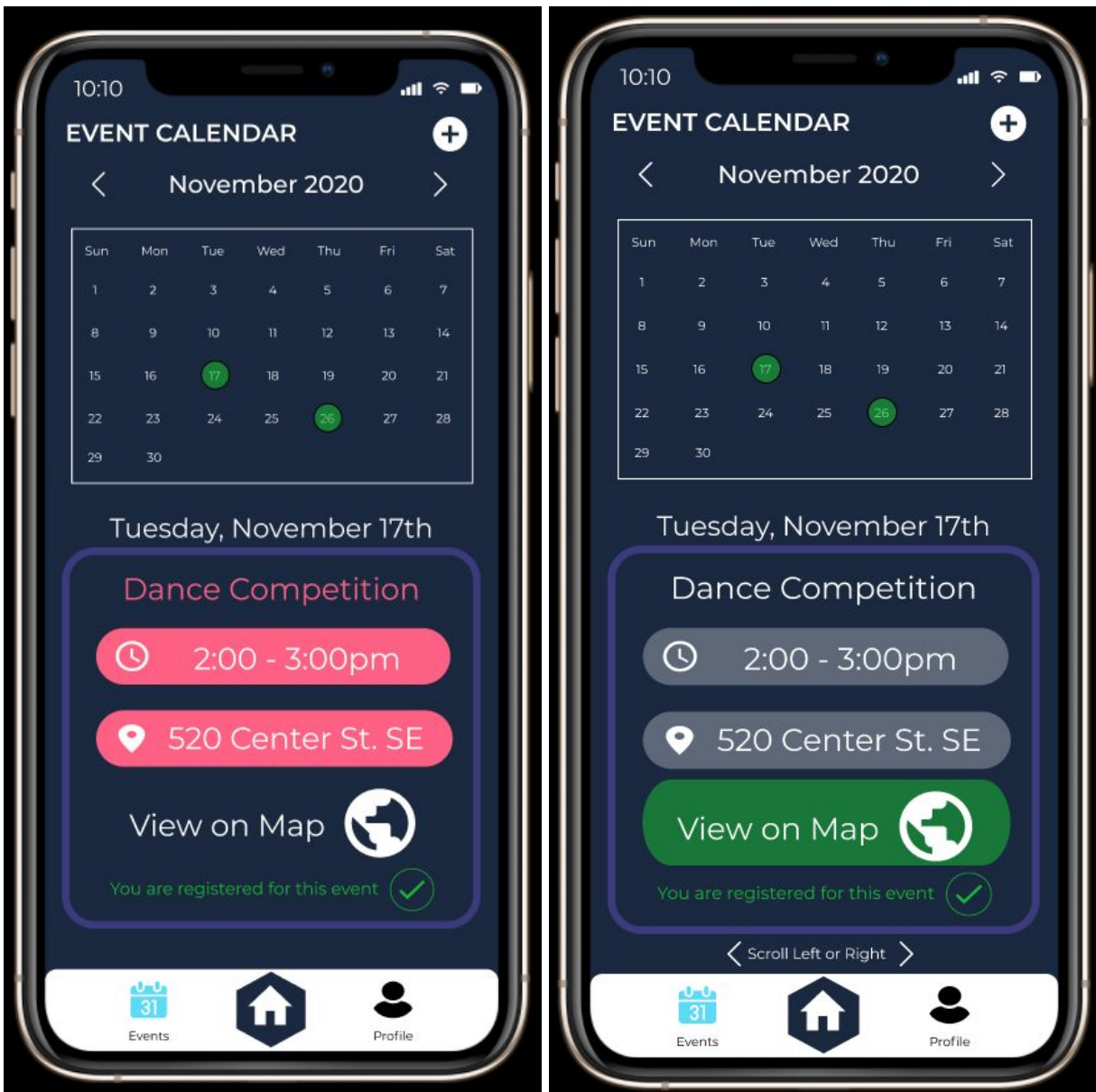
- Implement consistent colouring of buttons and design



- Implement error messages for when the user is creating an event but leaves critical fields empty



- Indicate that horizontal scrolling is possible in the manage events sections



- Implement more navigation options so user does not have to always reset

