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Calendar for travelling salesman

Target User
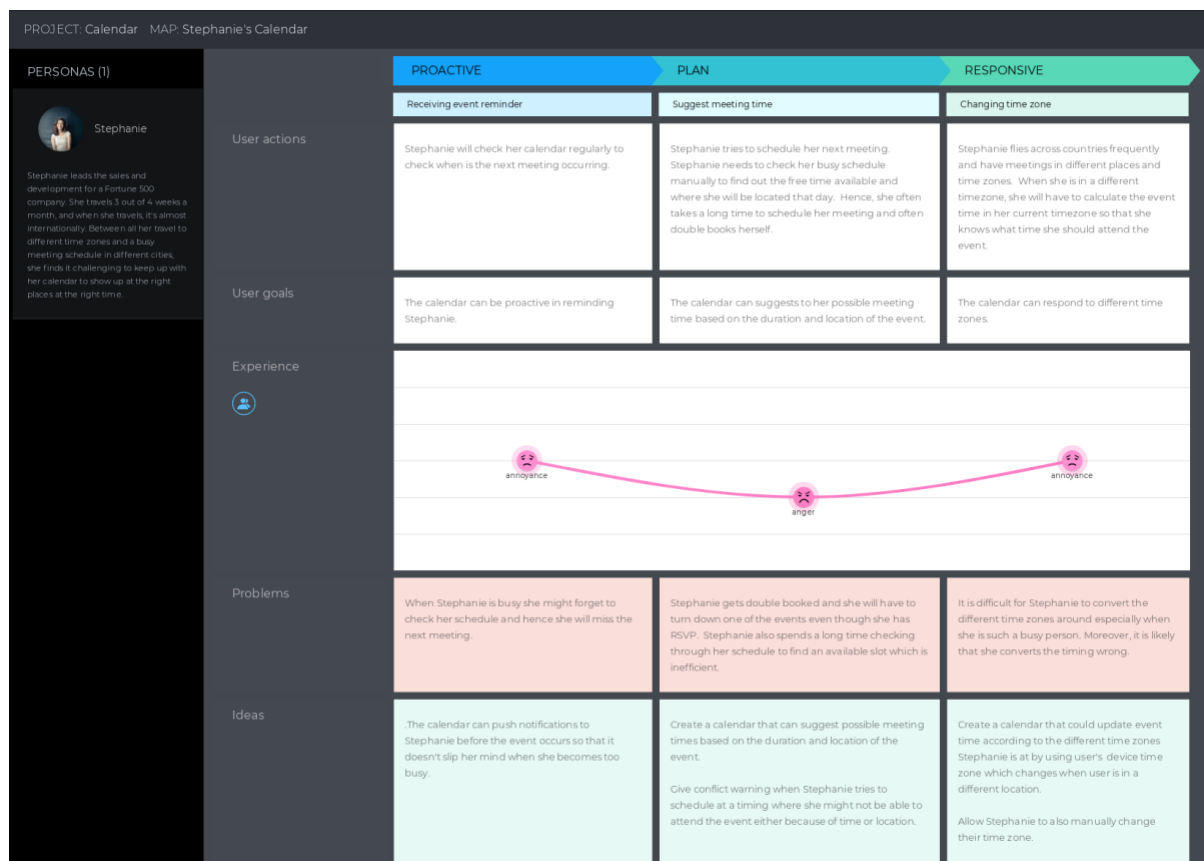- Stephanie, a salesman who travels internationally frequently

User's Pain Point
- Due to frequent international travel, it is challenging for Stephanie to use the current calendar to keep track of the meetings in different time zones and/or different cities. This causes the Stephanie to be unable to show up to the meeting at the correct time or place.

User's expectation
- Stephanie wants to calendar application to be able to achieve the following:
    1. Suggest possible meeting times
    2. Accounts for changing time zones
    3. Proactive to make sure that user is always on time for meeting

User Journey Map

PROJECT: Calendar   MAP: Stephanie's Calendar

PERSONAS (1)

Stephanie

Stephanie leads the sales and development for a Fortune 500 company. She travels 3 out of 4 weeks a month, and when she travels, it's almost internationally. Between all her travel to different time zones and a busy meeting schedule in different cities, she finds it challenging to keep up with her calendar to show up at the right places at the right time.

	PROACTIVE	PLAN	RESPONSIVE
	Receiving event reminder	Suggest meeting time	Changing time zone
User actions	Stephanie will check her calendar regularly to check when is the next meeting occurring.	Stephanie tries to schedule her next meeting. Stephanie needs to check her busy schedule manually to find out the free time available and where she will be located that day. Hence, she often takes a long time to schedule her meeting and often double books herself.	Stephanie flies across countries frequently and have meetings in different places and time zones. When she is in a different timezone, she will have to calculate the event time in her current timezone so that she knows what time she should attend the event.
User goals	The calendar can be proactive in reminding Stephanie.	The calendar can suggests to her possible meeting time based on the duration and location of the event.	The calendar can respond to different time zones.
Experience			
Problems	When Stephanie is busy she might forget to check her schedule and hence she will miss the next meeting.	Stephanie gets double booked and she will have to turn down one of the events even though she has RSVP. Stephanie also spends a long time checking through her schedule to find an available slot which is inefficient.	It is difficult for Stephanie to convert the different time zones around especially when she is such a busy person. Moreover, it is likely that she converts the timing wrong.
Ideas	.The calendar can push notifications to Stephanie before the event occurs so that it doesn't slip her mind when she becomes too busy.	Create a calendar that can suggest possible meeting times based on the duration and location of the event.

Give conflict warning when Stephanie tries to schedule at a timing where she might not be able to attend the event either because of time or location. | Create a calendar that could update event time according to the different time zones Stephanie is at by using user's device time zone which changes when user is in a different location.

Allow Stephanie to also manually change their time zone. |

Market Solutions

Solutions	Functionalities	
Google Calendar	Pros	Cons
	- Uses device time zone and updates scheduled event's time if time zone changes. Users can also set the time zone manually if they do not wish to use device time zone. - Able to tag locations to the events. - Can send users reminders for events. - Syncs with Gmail, hence any meeting invitation sent to Gmail will automatically be reflected.	- Does not give users warning when users schedule a conflicting event, in terms of both time and location. - Does not suggest possible meeting times.
IOS Apple calendar	Pros	Cons
	- Uses device time zone for event's time. - Able to tag locations to the events. Users can also set the time zone manually if they do not wish to use device time zone. - Able to send user's notification on upcoming event. - Able to add in events from the mail application in iPhone.	- warning when users schedule a conflicting event, in terms of both time and location. - Does not suggest possible meeting times.

Summary

- Current market solutions are able to address Stephanie's needs in terms of accounting for changing time zones and send out reminders. However, they are all unable to suggests possible meeting times and do not show any warning when there is a conflict in the events scheduled in the calendar.

Generation of Ideas

- To come up with solutions, I will first consider what functionalities are required to address Stephanie's request. Then, come up with additional functionalities that can enhance Stephanie's use of the calendar.

Addressing Stephanie's request

Accounting for changing time zone

Idea	Description/Evaluation
Device time zone	- The calendar designed can account for different time zones by using Stephanie device's time zone which will change when user is in a different area.
Manual Setup	- Stephanie can also set the time zone manually if she does not wish to use device's time zone. This feature will also be handy if Stephanie's device is unable to automatically update her current time zone.

Suggests new meeting time

- In order to suggest new meeting time, the calendar will consider the location and timing of other events in the same day to avoid conflict.

Idea	Description/Evaluation
Tag location of events	- In each event, Stephanie will be able to tag the actual location of the event happening via google maps. Thus, this will allow the calendar to check if she is able to attend a particular meeting based on location as well. This will help to address the scheduling problem where Stephanie has the time to attending the meeting but is at a different country.
Flight time considerations	- As Stephanie will be flying around, on top of the flight time, time to clear customs and travelling to destination in the country should also be considered when suggesting new meeting time and checking for conflicts.
Conflict warning	- Warn Stephanie when she is trying to schedule a meeting that will conflict with others. This will prevent Stephanie from being double booked, hence ensuring that she is able to attend every meeting that has being scheduled.

Proactive

Idea	Description/Evaluation
Push notifications	- The calendar will send Stephanie notifications before the meeting. The notifications can be scheduled to occur at a certain period before the actual meeting. This will ensure that Stephanie will not forget to attend the meeting and appear on time.
Track meeting invitations	- The calendar can include meeting invitations from different sources such as email. Meetings are commonly scheduled via company's email, hence for the calendar to be proactive in keeping up with Stephanie's schedule, it should be able to include meeting invitations that come from different sources.

Additional features

Different meeting types
- Since Stephanie is a salesman, she will need to have meeting regularly with clients outside of the company. Hence, it will be good if the calendar can highlight if the meeting is a client or company meeting.

In flight status
- Since Stephanie will be flying around a lot, it is possible that she is unable to respond invitations immediately. Hence by having an in-flight status displayed, others will know that Stephanie is unable to respond or attend the meeting.

Sketch

Wireframe

- I will be showing a rough sketch of calendar designed, showing the main page when the user enters the calendar.
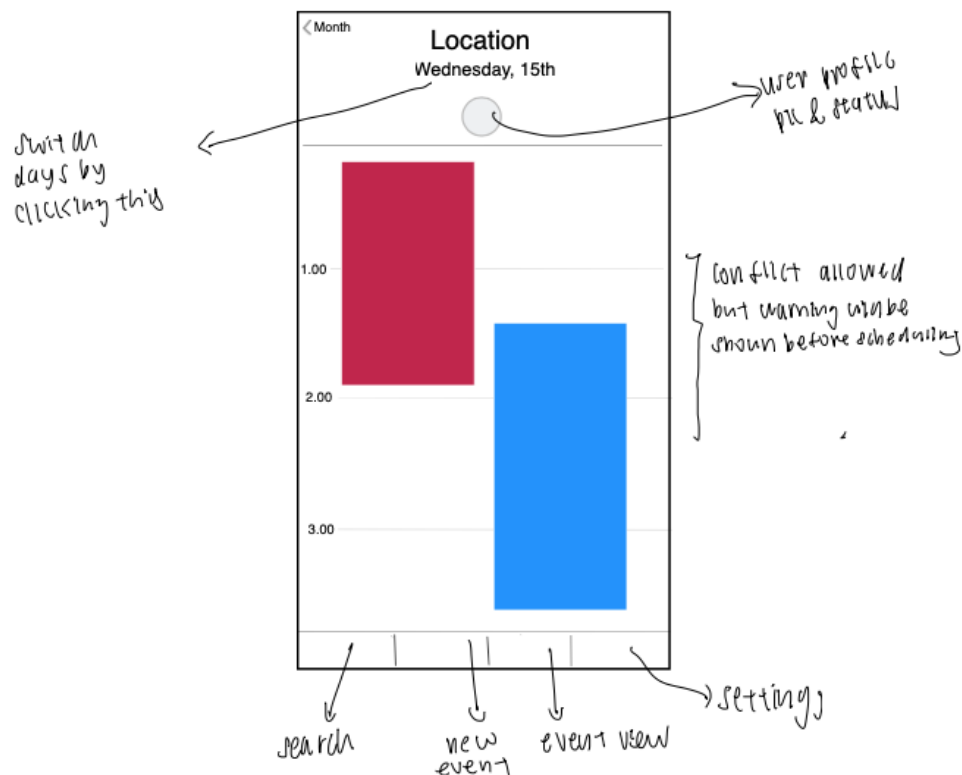
- From the sketch, I felt that there are 3 points to improve upon.
    - Firstly, the current time is not displayed. The current time should at least be marked on the calendar with the events so that Stephanie will know what is the upcoming event and how many scheduled events she still has for the day.
    - Secondly, the starting and end time of events are not marked on the calendar.
    - Lastly, there should be a more convenient way to switch between the months or year. Currently, in order to switch between the months, user will have to click out of the page displayed. A way to allow users to switch between month or year is to add a date picker within this page.

User Flow

Main User Flow

This will show a generic user flow on adding new events.

1. Open the application.
2. Create a new event by pressing the + icon at the bottom of the screen.
3. The event screen will pop out.
4. Fill in the following details in the Event page:
   a. Event title
   b. Event type
   c. Duration of Event
5. Click next to proceed to the Event Details page after filling up the information on the event page.
6. Fill in the following details in the Event Details page:
   a. Event Date
   b. Event Time, start and end
      i. Warning will appear if there is a conflict in timing with other events.
   c. Event Location
   d. Participants
7. Schedule the event.
8. Event will appear on the calendar.

A pictorial user flow will be shown next depicting the main user flow where a conflict did not happen.
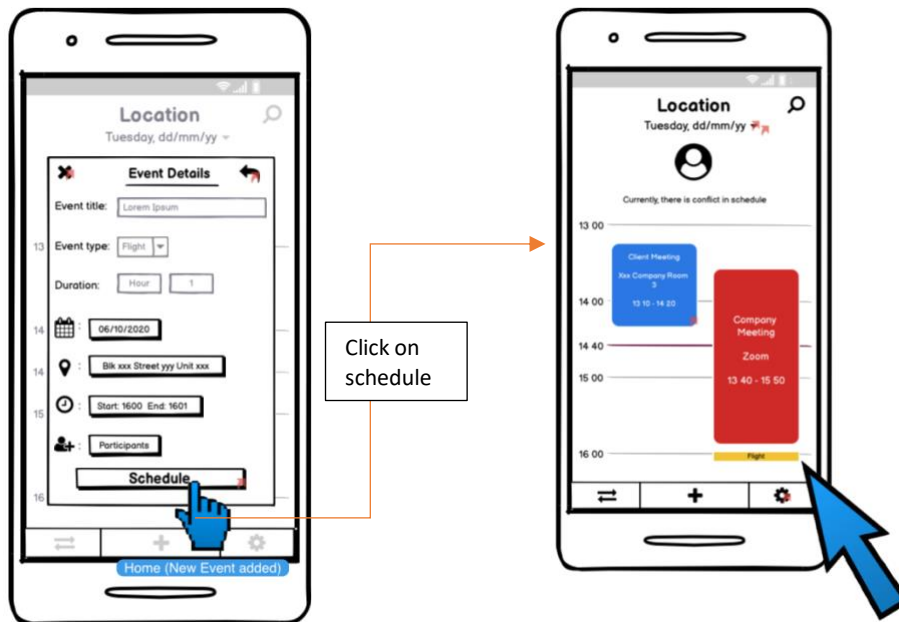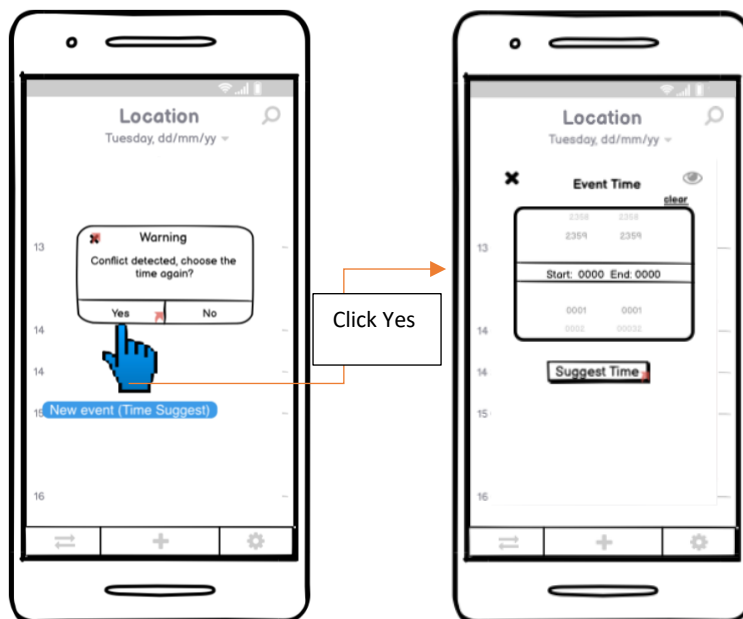
Pictorial Map of Main User Flow

start

continue on next page
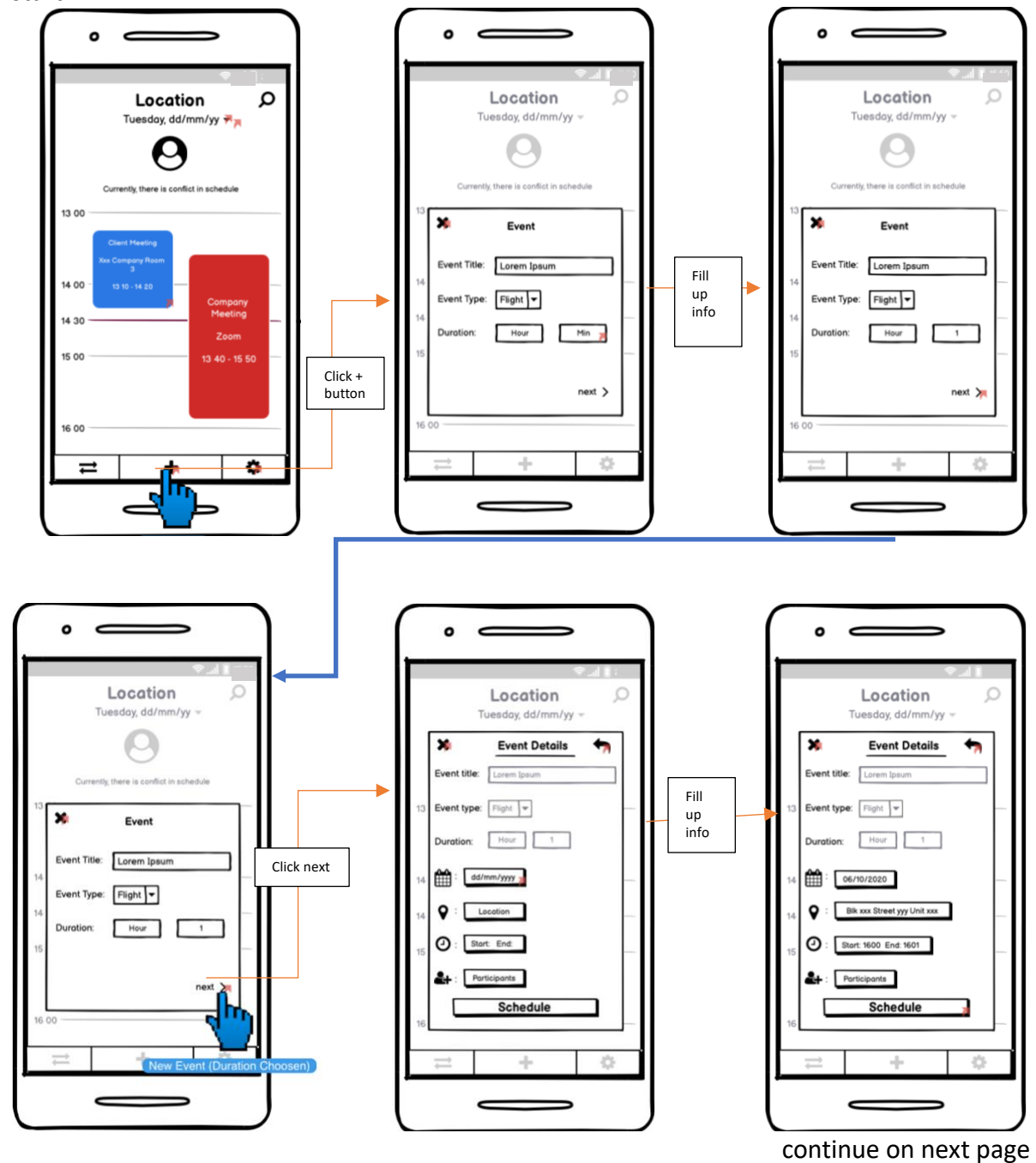
continue from prev page   end

## Conflict when filling up information

When the timing chosen for the new event conflicts with other events, a warning will be shown, as shown below.
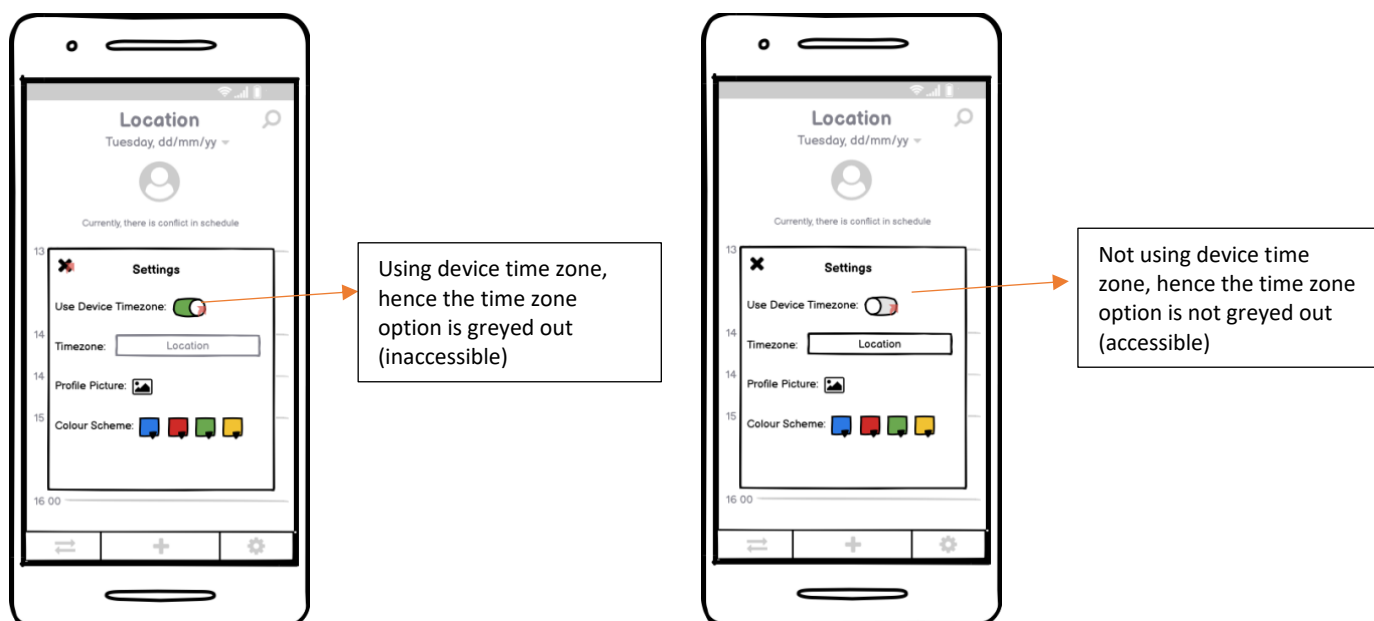
Other Interactions

Suggest timing

When filling the event time information, Stephanie can choose to fill in the time manually or let the app suggests a timing.

Manual scroll through timings

Ask application to suggest time
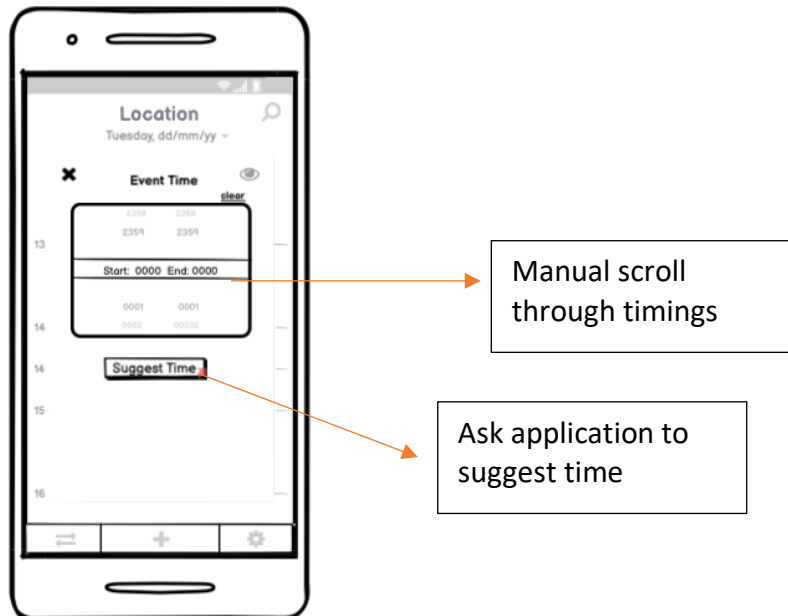
Changing region

Stephanie will not be able to change time zone if she is using the device time zone.
However, if she chooses to not use device time zone, she can set up the time zone manually.

Using device time zone, hence the time zone option is greyed out (inaccessible)

Not using device time zone, hence the time zone option is not greyed out (accessible)

Changing date

Stephanie can change the date of the calendar by clicking on the date or dropdown button beside the date which will reveal a calendar.