

Ooup

Introduction

Ooup was born out of the desire to make short distance commute enjoyable and safe. Our aim is to solve the scooter business problem of maintaining and charging the scooters by offering users prizes for tasks and chores.

Aims and Objectives

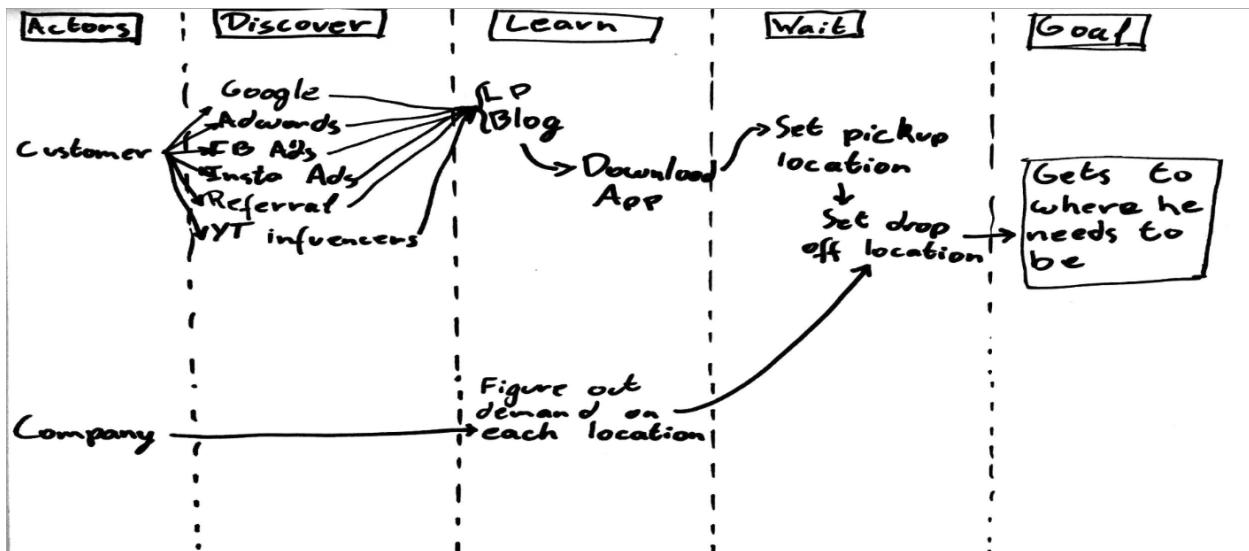
Ooup should be a new way to move around the city, in two years it should replace a substantial part of public transport and ride-sharing apps for small distances. For that we'll need to generate user trust both in the choice of trusted partners and transparency in the communication to ensure a trustworthy and safe service.

Planning and Requirements Gathering

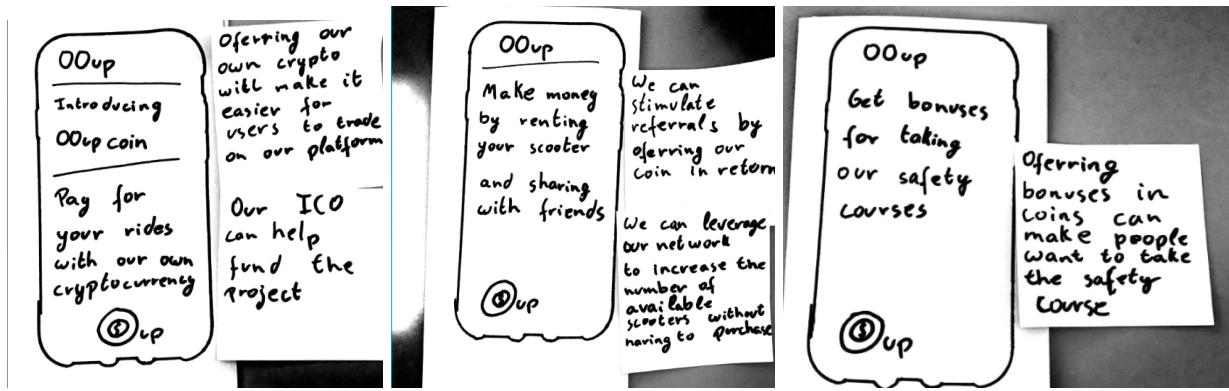
First thing we did was to talk to a few users of current scooter services and understand what were their main issues and concerns, this led us to creating 3 main questions that needed to be solved before we could consider this sprint a success:

- How might we increase product awareness?
- How might we broaden our user base?
- How might we guarantee user safety?

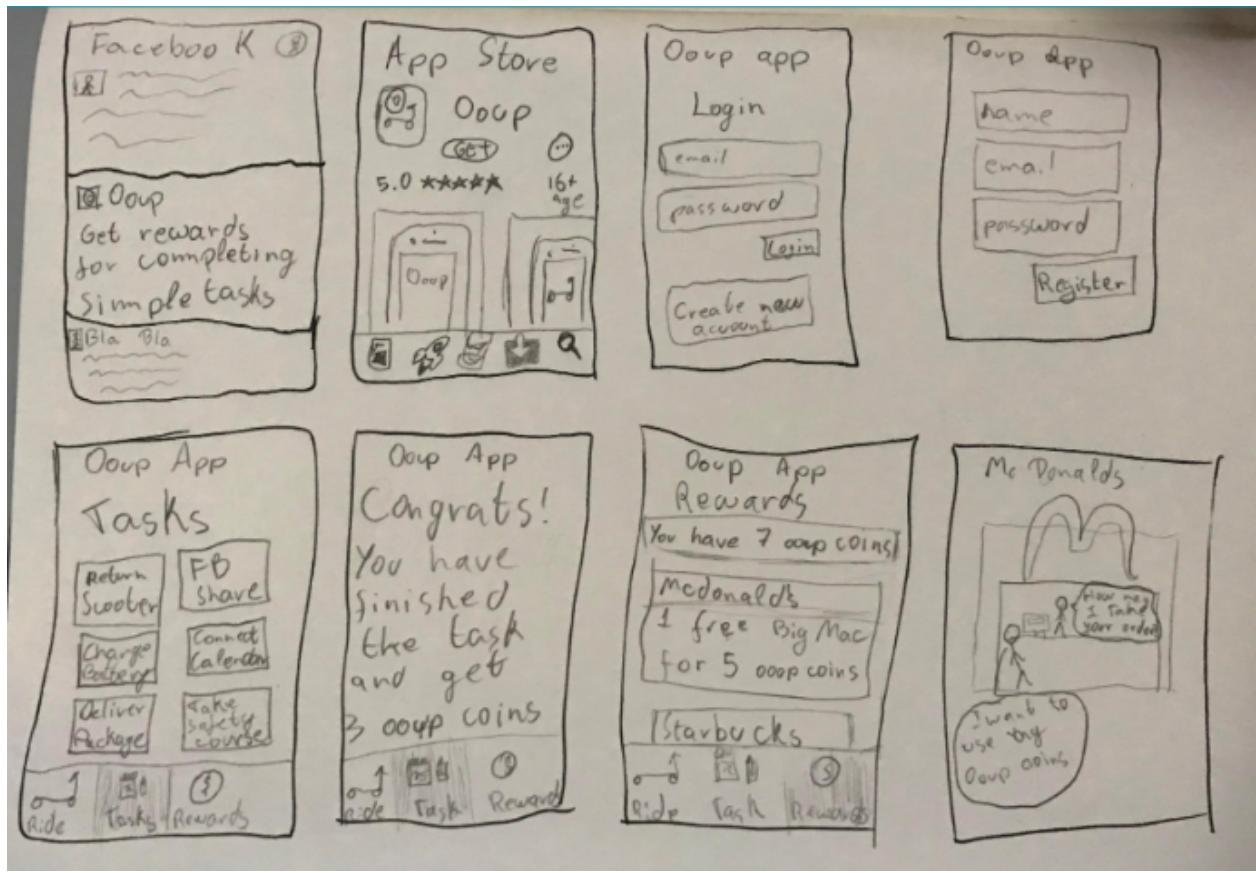
We then created a **user history map** detailing the user journey through our app.



Now that we have our user journey mapped, we are able to create **concept screens** that will serve as our first low level **prototype**.



With this prototype we created a user journey script to go through with our users using the crazy 8's technique.



Formative Testing and Evaluation

With the first prototype done we were able to talk once more with our users and we gathered a few opinions about how the app met their needs, with that we were able to create a **trend map** of our users perceptions of our service, the intent is to hash out the main concerns before we develop further, ideally this should be done in a sprint-by-sprint basis to guarantee that our evolution still meets customer needs. The main trends were:

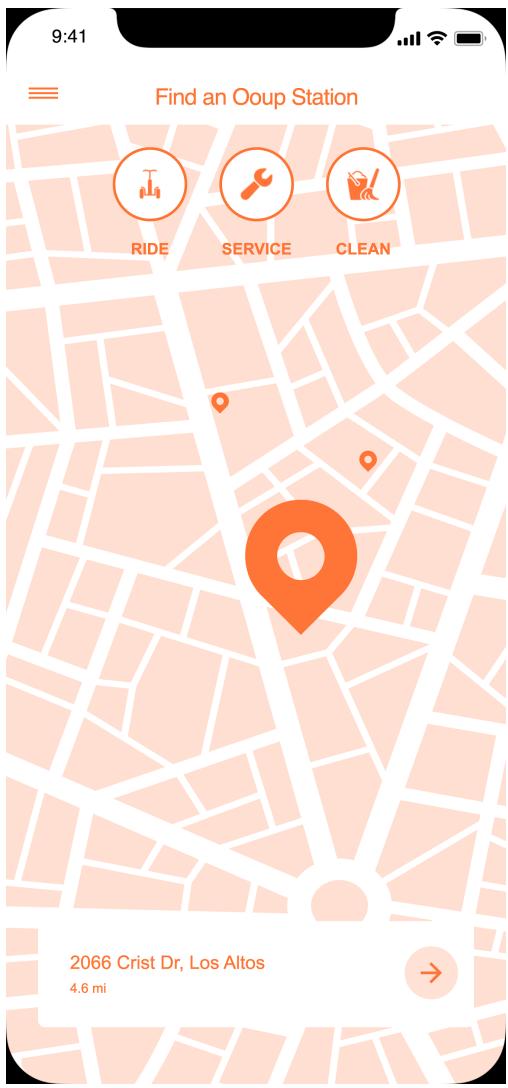
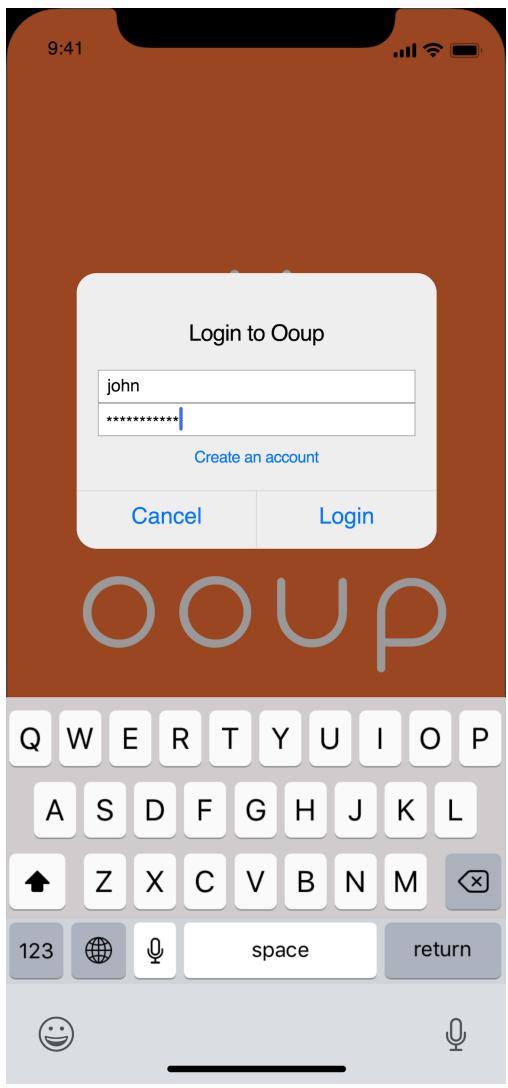
- I'm afraid that it is some kind of trap
- I don't feel safe using crypto-currency
- Do I have to pay for it?
- Can I use social networks to register in the service?

- I like to get things for free
- The point system makes me feel like I'm playing a game, so I want to do more to win more

Prototyping Techniques

We started creating **low-fidelity prototypes** and iterating over them to gradually increase complexity and fidelity, after a few rounds of prototype development vs. user interviews we created a **usable high-fidelity prototype** to see what users would think if the product was finished:





Pickup now

From Current Location
Drop off at 1 Infinite Loop

John Appleseed
4.73 ★

Ride

Perform a task

Get Rewards

Task History

Reward History

Help

Settings

Suggested Routes

To 1 Infinite Loop
2.7 mi via W Homestead Rd.
Arrival time: 9:57 AM

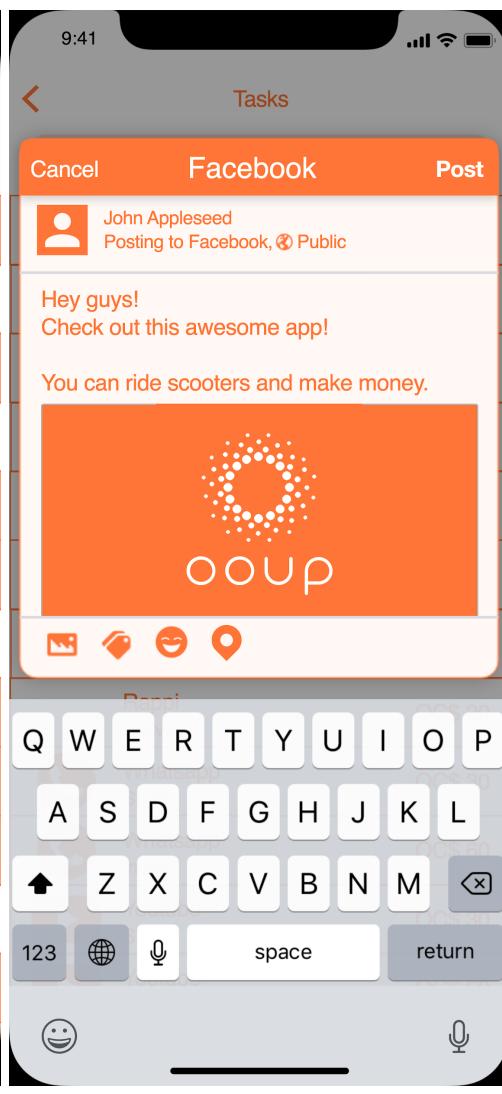
To 1 Infinite Loop
2.8 mi via Valley Green Dr.
Arrival time: 9:59 AM

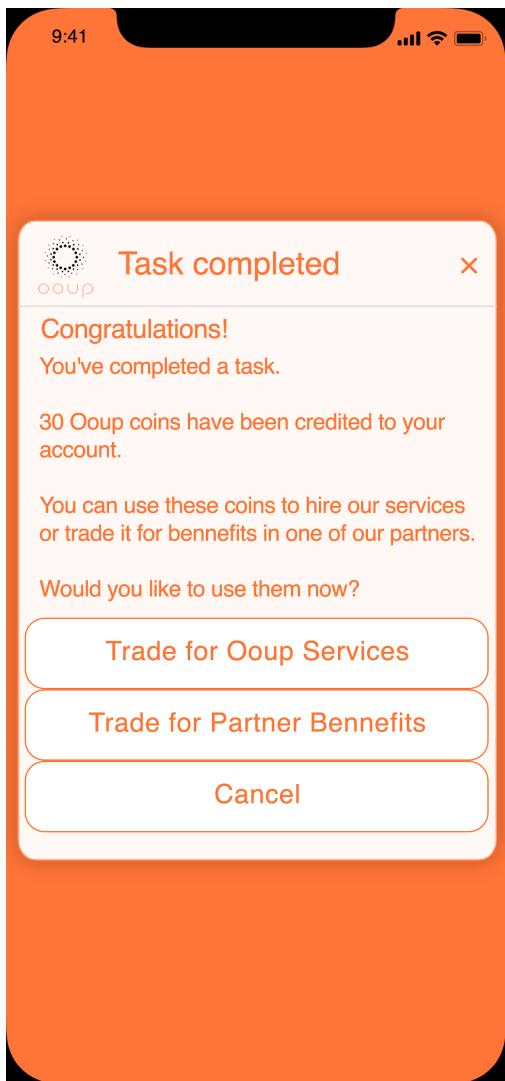
9:41

Tasks

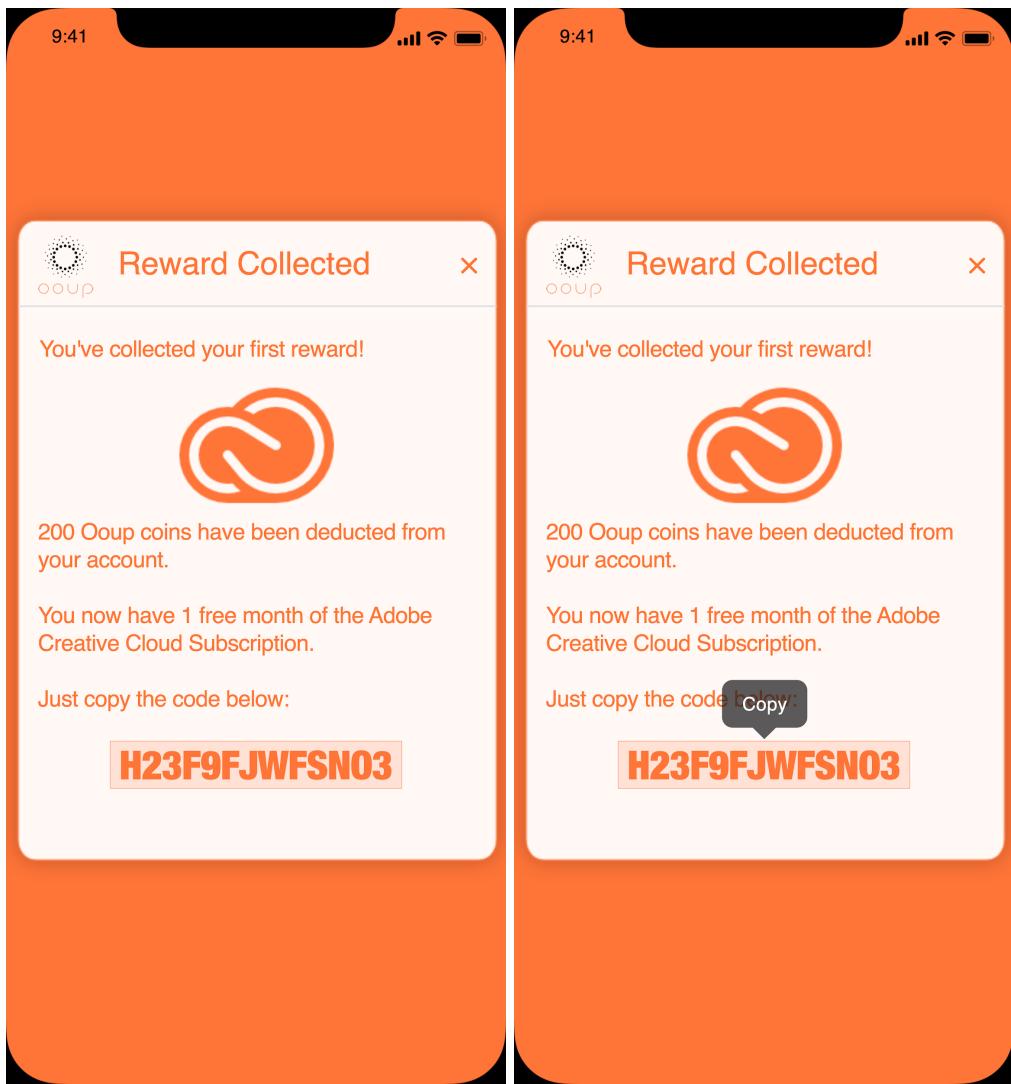
Search

	Facebook Share	OC\$ 30
	Facebook Message	OC\$ 40
	Instagram Share	OC\$ 30
	Instagram Story	OC\$ 30
	Ooup Clean	OC\$ 90
	Ooup Register	OC\$ 15
	Ooup Service	OC\$ 150
	Rappi Deliver	OC\$ 20
	Whatsapp Share	OC\$ 30
	Whatsapp Invite	OC\$ 60
	Youtube Share	OC\$ 30
	Youtube Subscribe	OC\$ 50
	Facebook Share	OC\$ 30





Ooup Rewards		
Search		Microphone icon
Partners	Ooup	
You have 230 Ooup coins!		
	McDonald's 1 free BigMac	OC\$ 80
	McDonald's 1 free BigMac Combo	OC\$ 150
	Rappi 1 month of Prime	OC\$ 50
	Netflix 1 free month	OC\$ 70
	AirBnB No cleaning fee	OC\$ 100
	Adobe Creative Cloud 1 free month	OC\$ 200
	Uber 50% discount	OC\$ 50
	Linkedin 1 month premium	OC\$ 120
	Youtube Red 1 free month	OC\$ 80
	Medium 1 free month	OC\$ 15
	Bitcoin 100 Satoshi	OC\$ 200



Evaluation Techniques

After giving the users the final prototype we gather more detailed feedback and recorded their screens while using the product to create a **heatmap** of the main parts of the application. A few data points of the detailed feedback is below, we used **color coding** to map **user sentiment**:

- Wow, rewards. I'd like to know what and how I can win things
- I don't recognize a few of these logos/partners
- I'd rather register using my Google/Facebook account
- I like the idea of a subscription, but I worry with it won't be free
- The zero in the superior part makes me want to start doing tasks immediately
- I don't think I'd install this app. I need more info about it.
- I like to have completed my first task when I registered for the app and received a special offer immediately. Makes me want to do more tasks.
- I like rewards, but I don't know if it's a trap. Seems too easy...
- I like the task-based reward system
- The images announce a new reward program, but I still don't have enough context to understand what is Ooup.
- At first glance, I'm not sure what this is all about
- I don't know who these partners are, but they seem important
- The app name doesn't say anything. I don't know if I'd click the link without more context
- If there's no trap, I'd sign up
- As I'm a vegan, the special offer was a little unpleasant. I'd like to customize what kind of offers I could receive, since I don't eat burgers and all...

System Development

User authentication and authorization

To achieve the level of security and flexibility we wanted on our app, we decided to use a 3rd party authentication service, for that we created an app using AWS Amplify and we setup the AWS Cognito service to handle all our user auth needs.

```
oop - Login.js

1 const onSubmit = async () => {
2   await Auth.signIn({
3     username: email.toLowerCase(),
4     password,
5   }).then(user =>
6     props.navigation.navigate('Home')
7   ).catch(e => {
8     if (e.code === 'UserNotFoundException') {
9       Alert.alert("User doesn't exist, please create a new account")
10      props.navigation.navigate('Register')
11    }
12  })
13 }
```

```
oop - Register.js

1 const onSubmit = async () => {
2   await Auth.signUp({
3     username: email,
4     password,
5     attributes: {
6       preferred_username: username,
7       name
8     }
9   }).then(user =>
10     props.navigation.navigate('Home')
11   ).catch(e => {
12     if (e.code === 'UsernameExistsException') {
13       Alert.alert('You already have an account. Please Login')
14       props.navigation.navigate('Login')
15     }
16   })
17 }
```

User location and proximity to scooters

To display user's location and proximity to scooters we used react-native-maps



A screenshot of a code editor window titled "oop - Home.js". The code is written in JSX and displays a map view with markers. The code is numbered from 1 to 15.

```
1 <View style={styles.container}>
2   <MapView
3     style={styles.map}
4     region={region}
5   >
6   {markers.map((marker, index) => (
7     <Marker
8       key={index}
9       coordinate={marker.coordinates}
10      title={marker.title}
11      description={marker.description}
12    />
13  ))}
14 </MapView>
15 </View>
```

Tasks API

To store and retrieve the available tasks and the tasks each user has already fulfilled we relied once more on AWS Amplify through the use of a GraphQL API, using a Mutation/Query/Subscription model.

```
oop - mutations.js

1 export const createTask = /* GraphQL */ ` 
2   mutation CreateTask(
3     $input: CreateTaskInput!
4     $condition: ModelTaskConditionInput
5   ) {
6     createTask(input: $input, condition: $condition) {
7       id
8       name
9       description
10      createdAt
11      updatedAt
12    }
13  }
14 `;
15 export const updateTask = /* GraphQL */ ` 
16   mutation UpdateTask(
17     $input: UpdateTaskInput!
18     $condition: ModelTaskConditionInput
19   ) {
20     updateTask(input: $input, condition: $condition) {
21       id
22       name
23       description
24       createdAt
25       updatedAt
26     }
27   }
28 `;
29 export const deleteTask = /* GraphQL */ ` 
30   mutation DeleteTask(
31     $input: DeleteTaskInput!
32     $condition: ModelTaskConditionInput
33   ) {
34     deleteTask(input: $input, condition: $condition) {
35       id
36       name
37       description
38       createdAt
39       updatedAt
40     }
41   }
42 `;
```



oop - queries.js

```
1 export const getTask = /* GraphQL */ ` 
2   query GetTask($id: ID!) {
3     getTask(id: $id) {
4       id
5       name
6       description
7       createdAt
8       updatedAt
9     }
10   }
11 `;
12 export const listTasks = /* GraphQL */ ` 
13   query ListTasks(
14     $filter: ModelTaskFilterInput
15     $limit: Int
16     $nextToken: String
17   ) {
18     listTasks(filter: $filter, limit: $limit, nextToken: $nextToken)
19     {
20       items {
21         id
22         name
23         description
24         createdAt
25         updatedAt
26       }
27     }
28   }
29 `;
30 `;
```



oop - subscriptions.js

```
1 export const onCreateTask = /* GraphQL */ ` 
2   subscription OnCreateTask {
3     onCreateTask {
4       id
5       name
6       description
7       createdAt
8       updatedAt
9     }
10   }
11 `;
12 export const onUpdateTask = /* GraphQL */ ` 
13   subscription OnUpdateTask {
14     onUpdateTask {
15       id
16       name
17       description
18       createdAt
19       updatedAt
20     }
21   }
22 `;
23 export const onDeleteTask = /* GraphQL */ ` 
24   subscription OnDeleteTask {
25     onDeleteTask {
26       id
27       name
28       description
29       createdAt
30       updatedAt
31     }
32   }
33 `;
```

App Navigation

For app navigation we used [@react-navigation](#) it makes handling native navigation simple and straightforward.

```
oop - App.js  
1 <NavigationContainer>  
2   <GalioProvider customTheme={customTheme}>  
3     <Block flex>  
4       <Screens />  
5     </Block>  
6   </GalioProvider>  
7 </NavigationContainer>
```

Partner integration

Since this is not a real product, we didn't make any partner integrations, but the way the app is set up makes this as simple as an API request, but a more robust solution would be to create an SNS topic and let a lambda on the backend handle these requests in an asynchronous manner.

