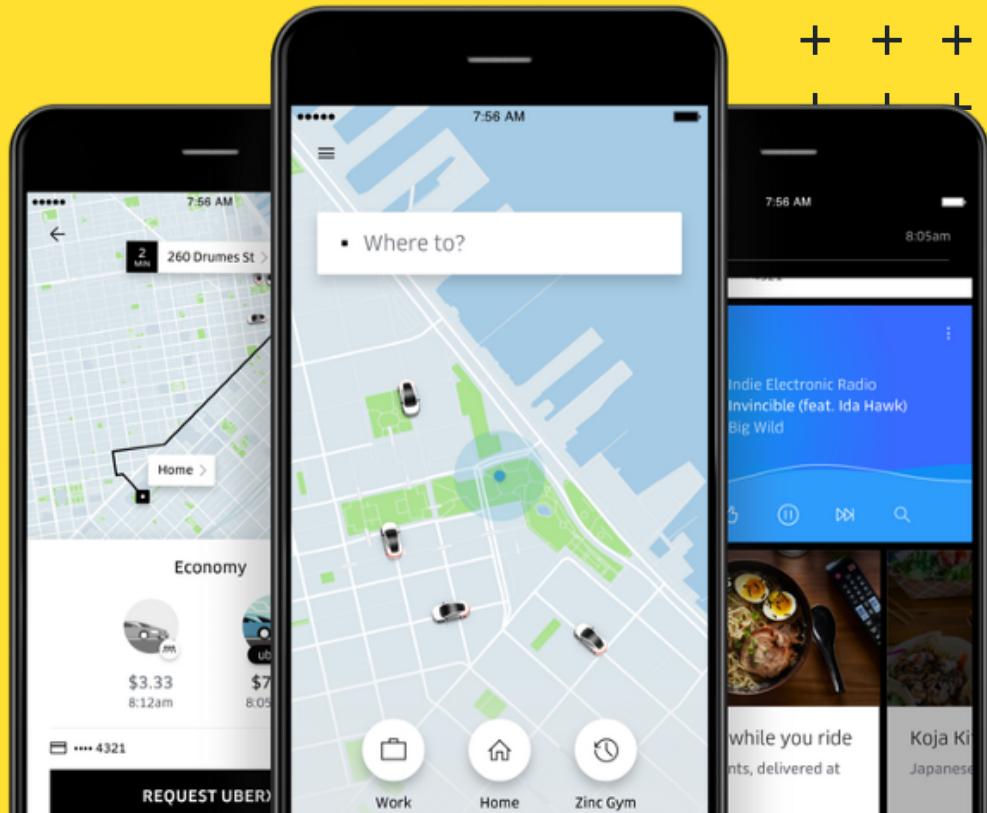


# notJust

//development

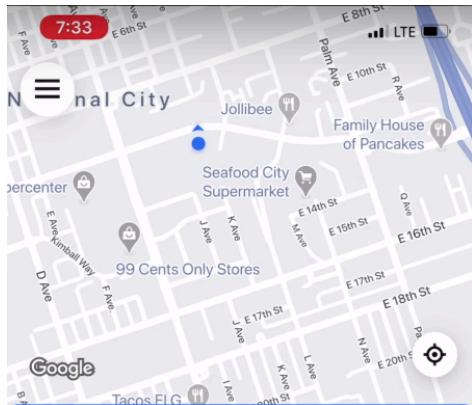
# Uber Clone in React Native

Build a full stack Taxi mobile app



# We are going to build

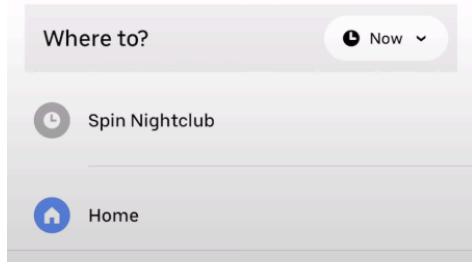
## Home



### Travel only if necessary

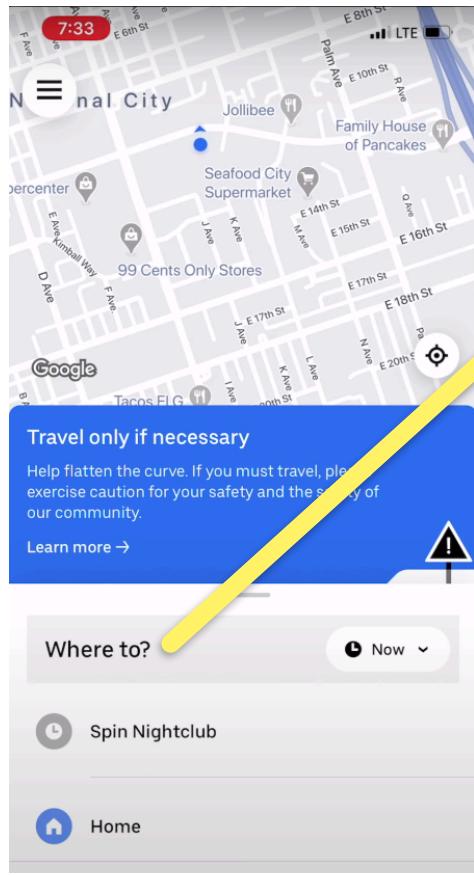
Help flatten the curve. If you must travel, please exercise caution for your safety and the safety of our community.

[Learn more →](#)

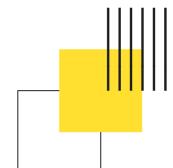
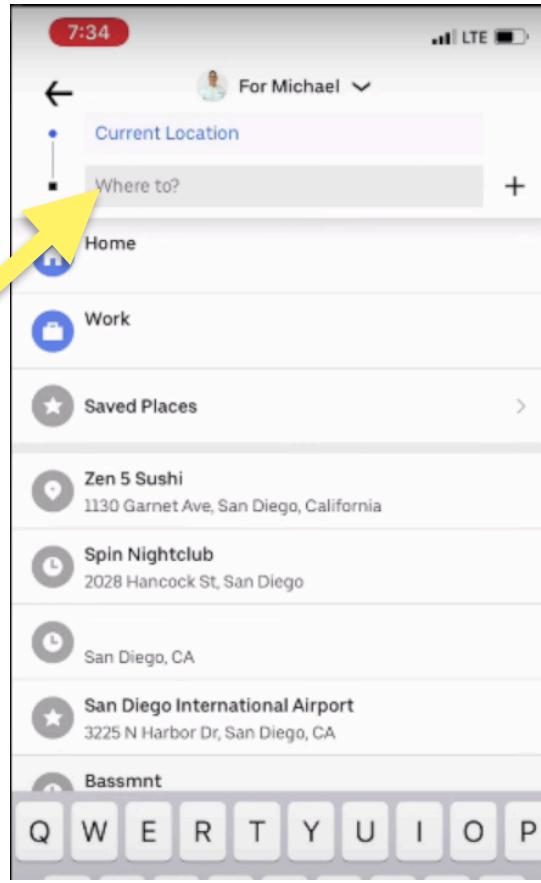


# We are going to build

## Home

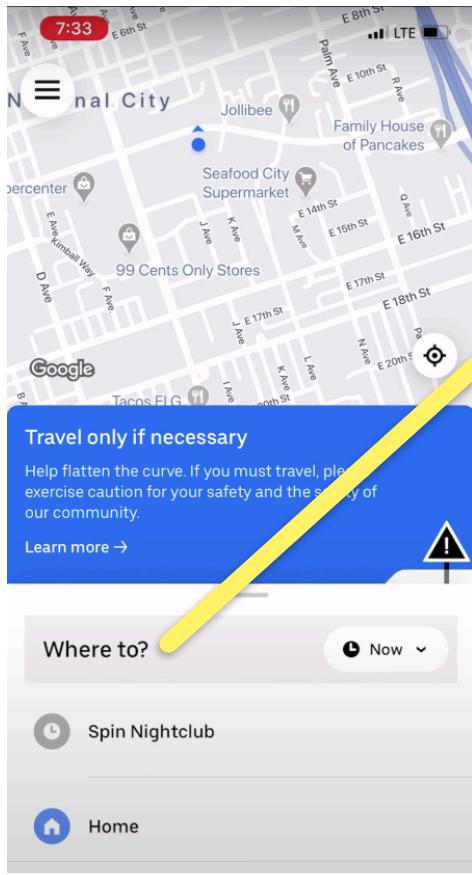


## Search Page

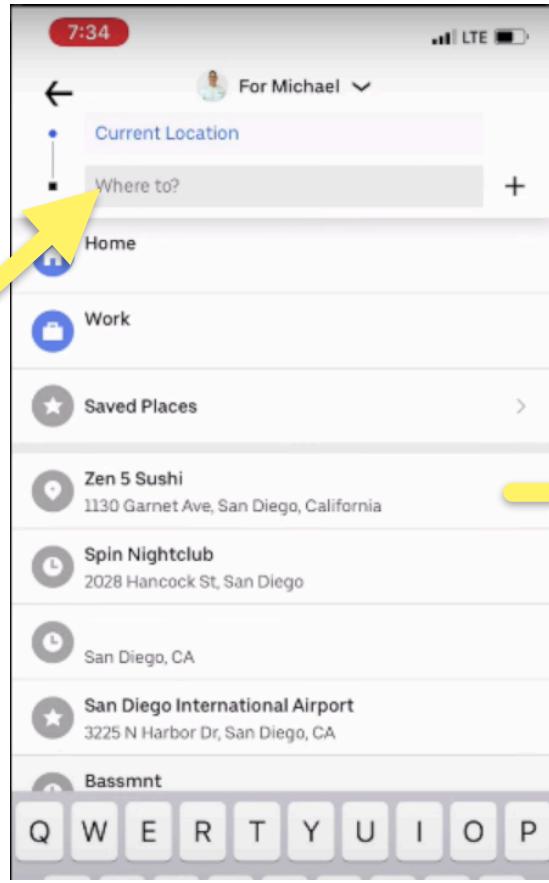


# We are going to build

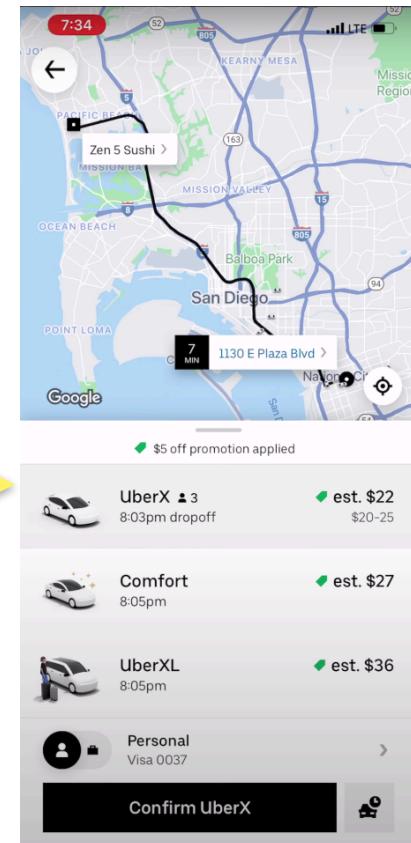
## Home



## Search Page



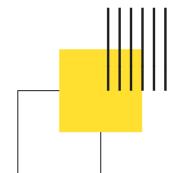
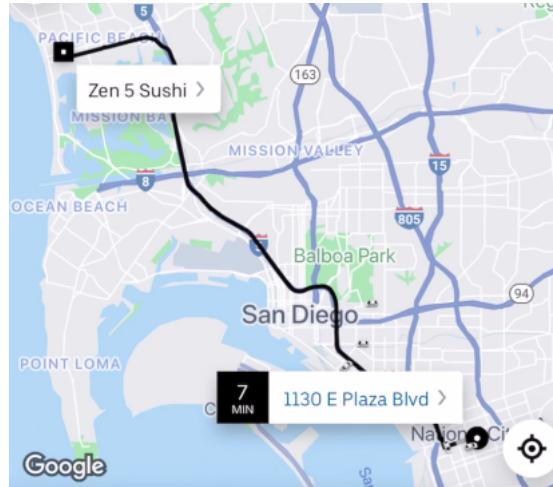
## Route Confirmation



# We are going to build

---

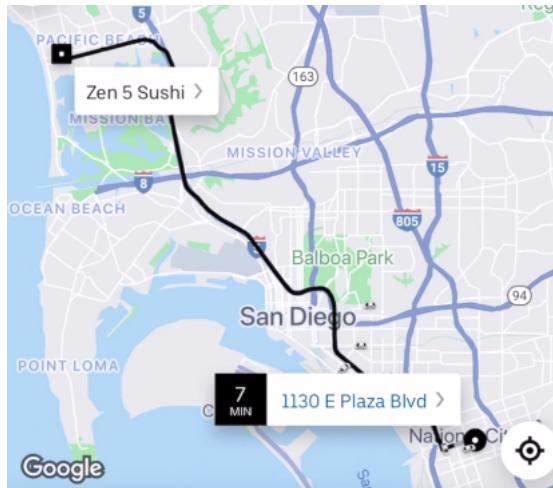
## Maps & Directions



# We are going to build

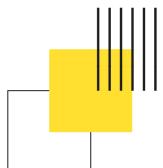
## Google Autocomplete

### Maps & Directions



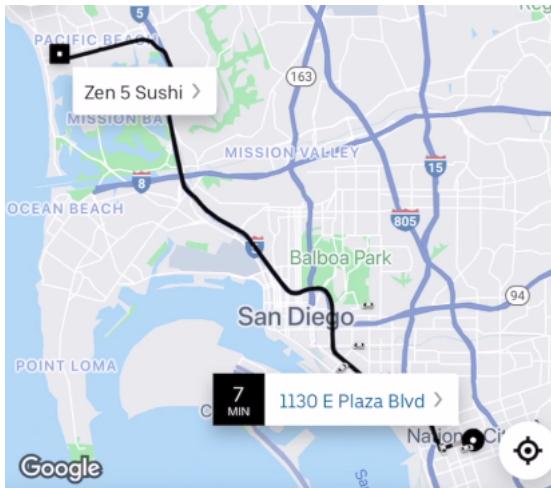
Zen 5

- Zen 5 Sushi  
1130 Garnet Ave, San Diego, California
- 53 Zen Gdn  
Irvine, California
- 50 Zen Gdn  
Irvine, California
- 57 Zen Gdn  
Irvine, California
- 55 Zen Gdn  
Irvine, California
- Set location on map

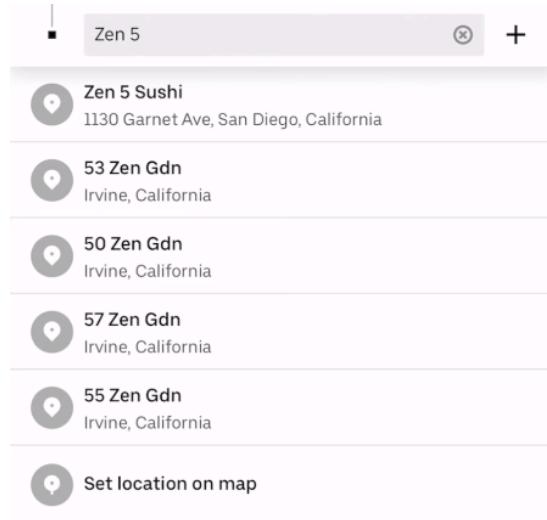


# We are going to build

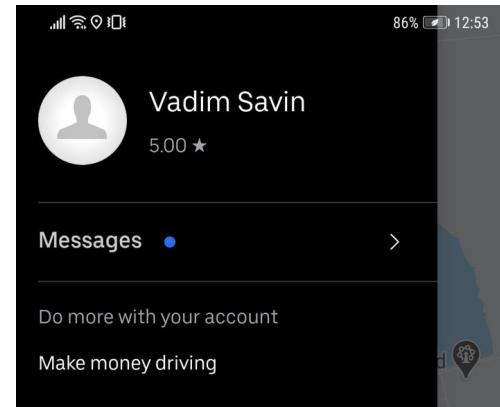
## Maps & Directions



## Google Autocomplete



## Drawer Navigator (Hamburger menu)



Your trips

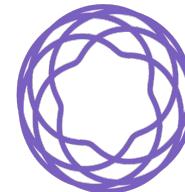
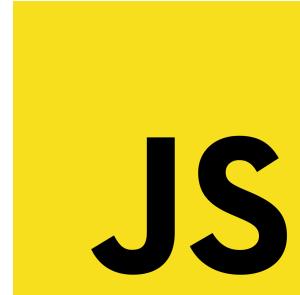
Help

Wallet

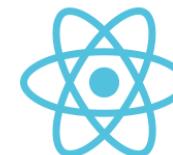
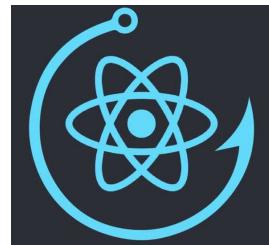
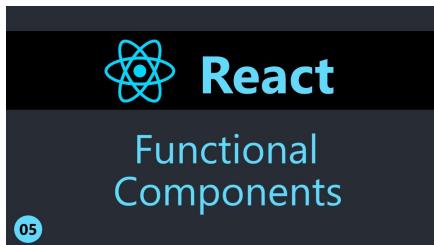
Settings

# Front-end technologies

---



React Navigation



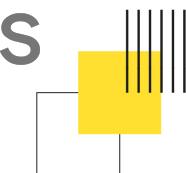
Vector Icons



Choose from 3K+ icons or use your own



Google Maps



## You will learn

- ||| - How to setup a React Native project
- ||
- ||
- ||
- ||
- ||
- ||



## You will learn

- How to setup a React Native project
- Render built-in elements/components



## You will learn

- ||| - How to setup a React Native project
- ||| - Render built-in elements/components
- ||| - Create your own components



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- |||
- |||
- |||
- |||
- |||



## You will learn

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- | |
- |||
- |||



## You will learn

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- ||| - State



## You will learn

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- ||| - State
- ||| - Navigation
- |||
- |||



## You will learn

- ||| - How to setup a React Native project
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- ||| - Props
- ||| - State
- ||| - Navigation
- ||| - Install 3rd party libraries



## You will learn

- ||| - How to setup a React Native project
- ||| - Render built-in elements/components
- ||| - Create your own components
- ||| - Functional components
- ||| - Props
- ||| - State
- ||| - Navigation
- ||| - Install 3rd party libraries
- ||| - Work with Google Maps, Google Places API
- |||



## Who am I



- Full stack developer for >7yrs
- CTO @Fitinium
- ex Amazon SDE
- Passionate about coding and building impactful startups.



## Prerequisites

1. React Native environment set up
2. Google developer account
3. Dummy data, images, icons, PDF presentation:  
<https://assets.notjust.dev/uber>

# notJust

//development



# Let's get started



## Let's get started

Initialise the RN project:

```
$ npx react-native init Uber
```

||| Run the development server

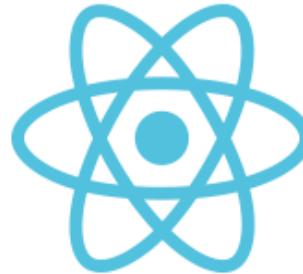
```
$ yarn start           $ npm start
```

||| Run the app on iOS

```
$ yarn ios            $ npm run ios
```

||| Run the app on android

```
$ yarn android        $ npm run android
```



# Vector Icons



Choose from 3K+ icons or use your own

## Vector icons

Install vector icons

```
$ yarn add react-native-vector-icons
```

```
$ npm install react-native-vector-icons
```



iOS: Add UIAppFonts to Info.plist



Android: Add to the android/app/build.gradle



```
apply from: "../../node_modules/react-native-vector-icons/fonts.gradle"
```



Install pods (iOS only)



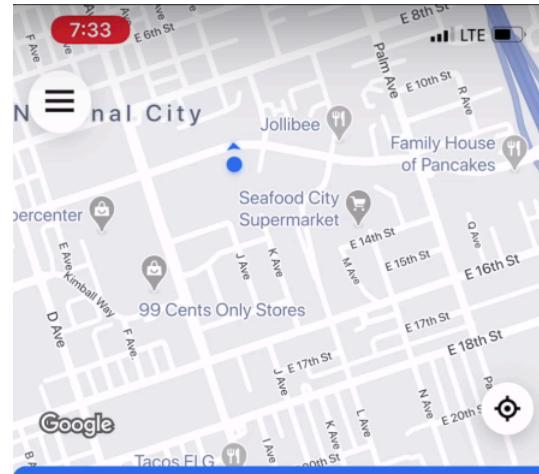
```
$ npx pod-install
```



## Home Screen



- Dummy Map component
- Message Box
- Where to? Component



Travel only if necessary

Help flatten the curve. If you must travel, please exercise caution for your safety and the safety of our community.

[Learn more →](#)



Where to?

Now

Spin Nightclub

Home

302 pts

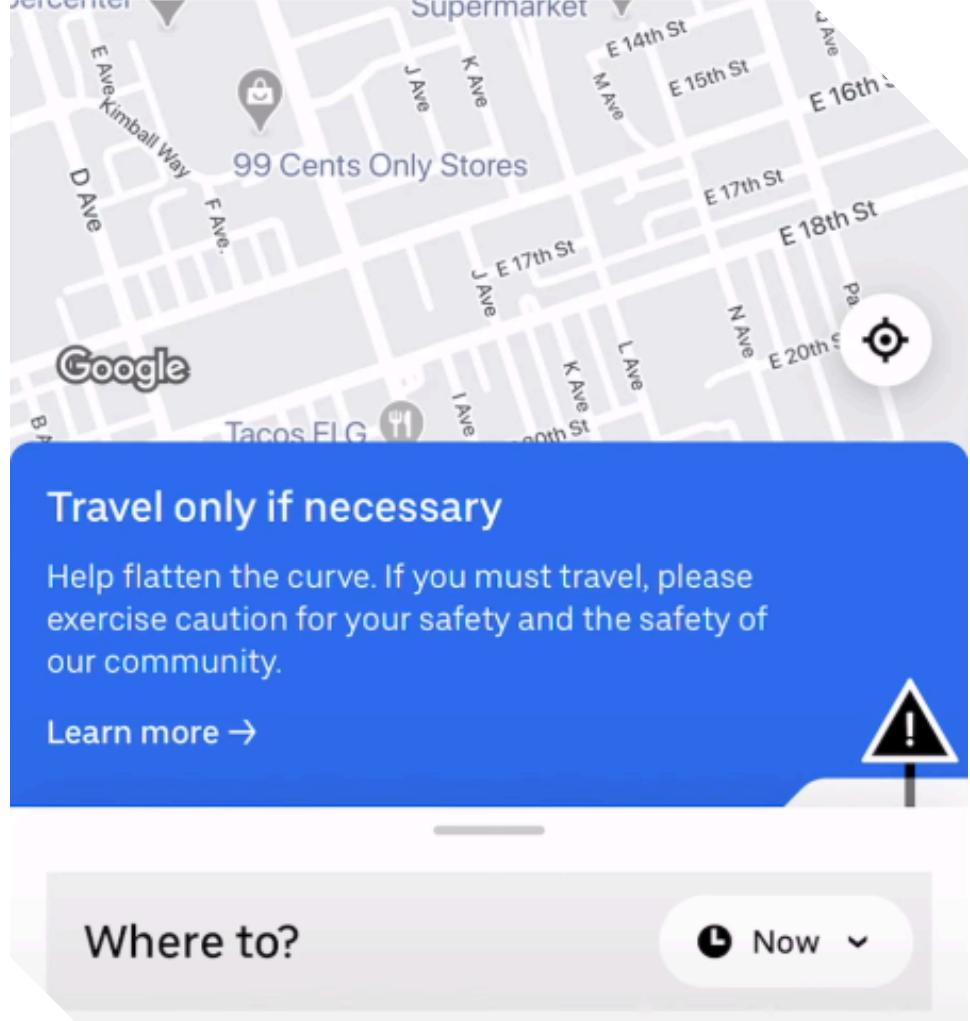
Rewards Hub



## Home Screen



- Dummy Map component
- **Message Box**
- Where to? Component

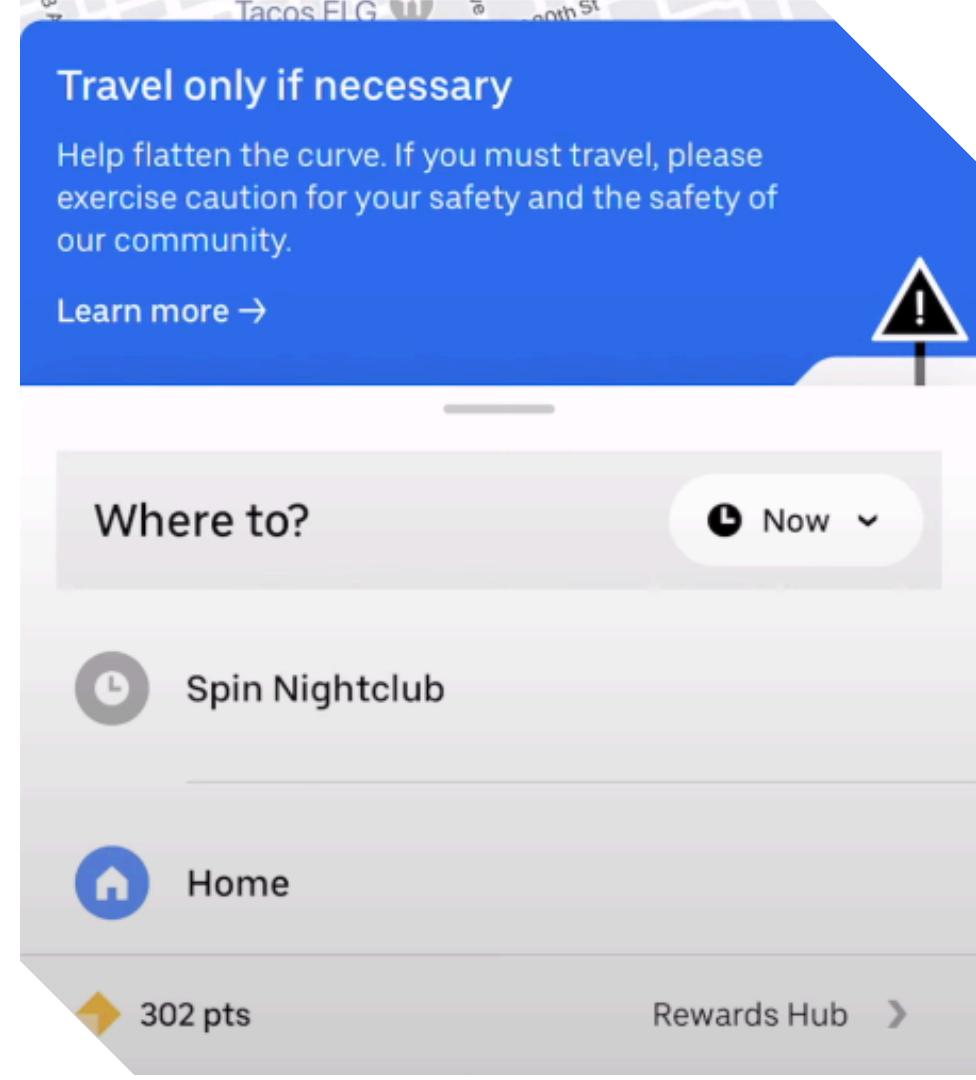




## Home Screen



- Dummy Map component
- Message Box
- **Where to? Component**

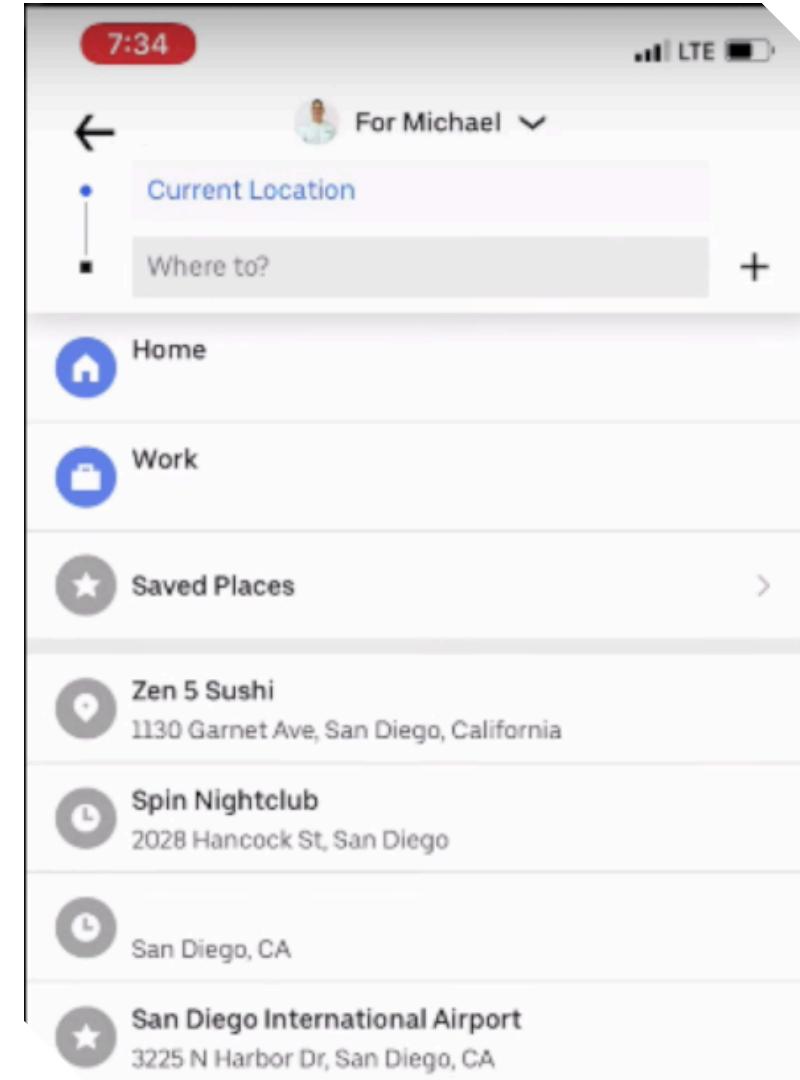




## Search Page



- Location input boxes
- Default locations (Home, Work)
- Location row



## Places Autocomplete



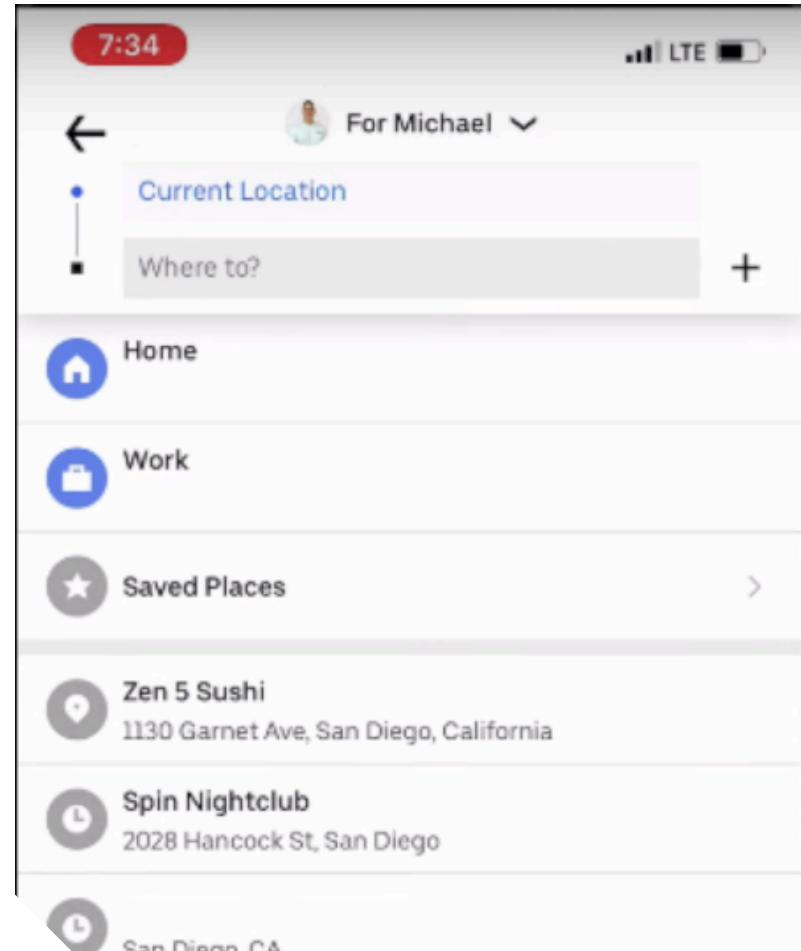
Library: **React Native Google Places Autocomplete**



<https://www.npmjs.com/package/react-native-google-places-autocomplete>



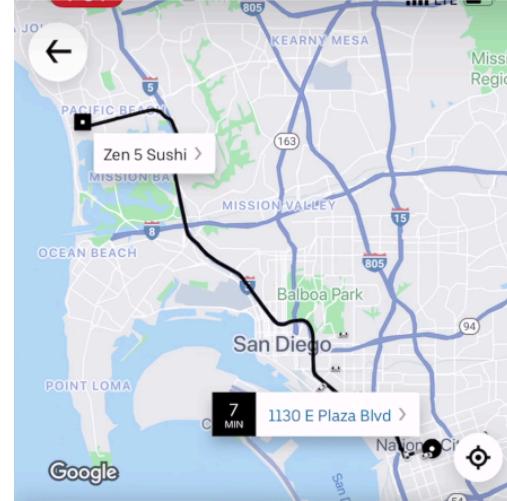
1. install library
2. Enable google API
3. Make sure billing is enabled
4. Get API Key



## Search Result



- Dummy Map view
- List of Uber cars
- Confirm Uber ride



\$5 off promotion applied

	UberX • 3 8:03pm dropoff	est. \$22 \$20-25
	Comfort 8:05pm	est. \$27
	UberXL 8:05pm	est. \$36
	Personal Visa 0037	

**Confirm UberX**

## Maps

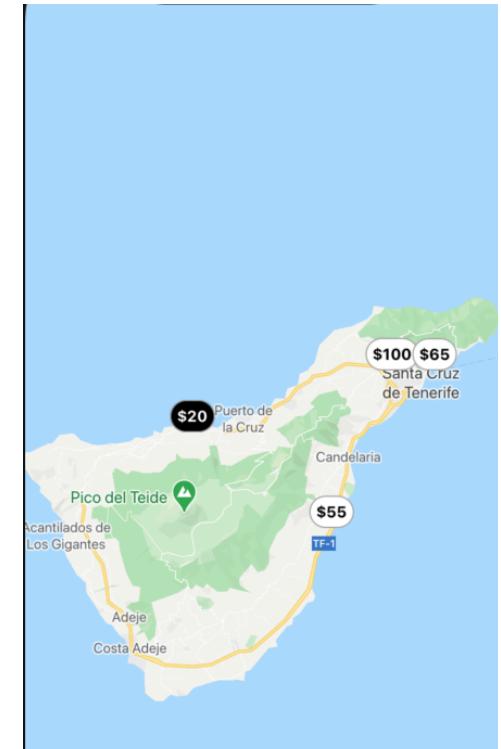


Library: **React Native Maps**

<https://www.npmjs.com/package/react-native-maps>



1. install library
2. Enable google API
3. Make sure billing is enabled
4. Get API Key



## Maps Directions



Library: **React Native Maps Directions**



<https://www.npmjs.com/package/react-native-maps-directions>



```
latitude: 37.790790,  
longitude: -122.442753,  
  
latitude: 37.790651,  
longitude: -122.422497,  
  
GOOGLE_MAPS_APIKEY = '...';  
  
RNMapsDirectionsExample extends Component {  
  render() {  
    <MapView initialRegion={initialRegion} style={StyleSheet.absoluteFillObject}>  
      <MapView.Marker coordinate={coordinates[0]} />  
      <MapView.Marker coordinate={coordinates[1]} />  
      <MapViewDirections  
        origin={coordinates[0]}  
        destination={coordinates[1]}  
        apikey={GOOGLE_MAPS_APIKEY}  
        strokeWidth={3}  
        strokeColor="hotpink"  
      />  
    </MapView>  
  
    default RNMapsDirectionsExample;
```



# Navigation

---

Install React-Navigation Library:

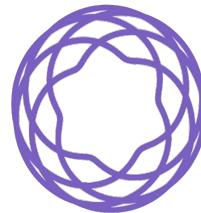
Installing Dependencies

Install the pods (for Mac and IOS only)

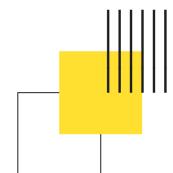
```
$ npx pod-install ios
```

Import Gesture handler

```
Import 'react-native-gesture-handler'
```



React Navigation



# notJust

//development



# DEMO



**notJust**  
*//development*



# Q&A



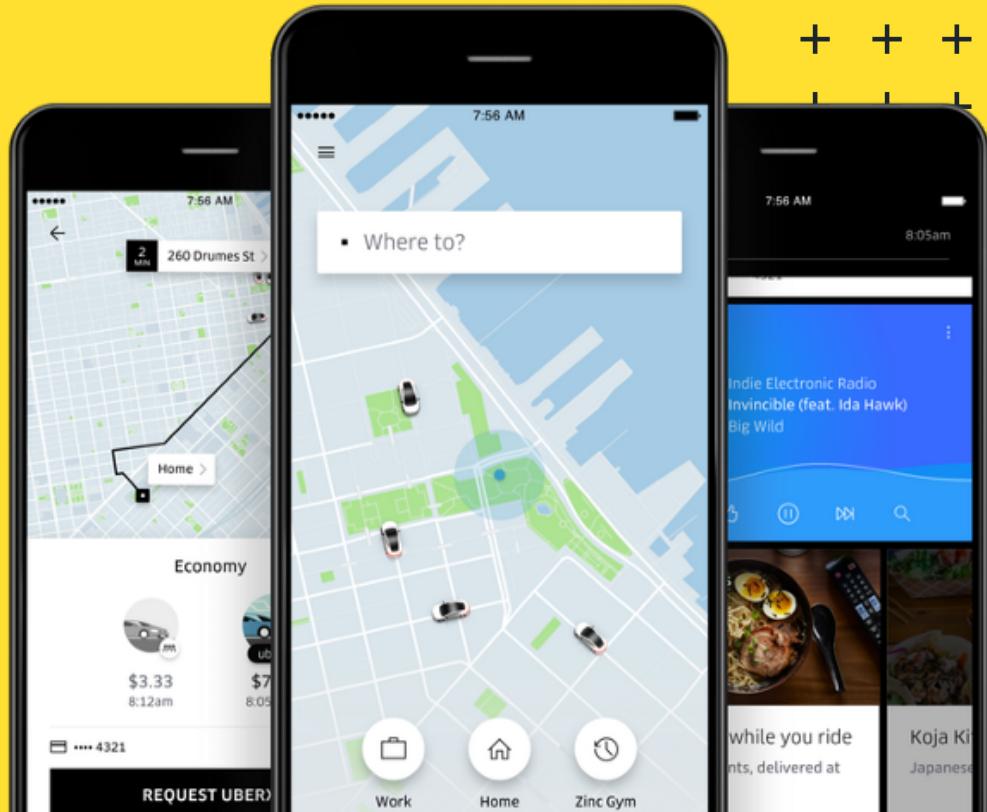
# notJust

//development

# Uber Clone in React Native

Part 2

Advanced UI and GPS Tracking



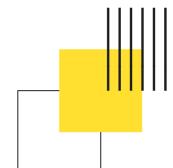
# We are going to build

## Places Autocomplete

(Custom styles, current location, predefined location, etc.)

The screenshot shows a mobile application interface. At the top is a search bar with the text "Tene" and an "x" button to clear it. Below the search bar is a placeholder text "Where to?". A list of five location suggestions is displayed, each with a small location pin icon and the name of the place:

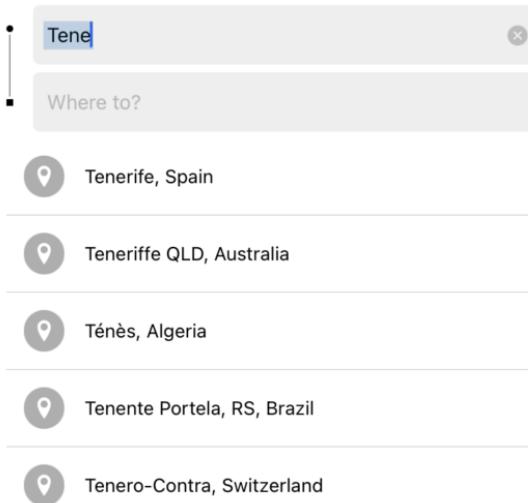
- Tenerife, Spain
- Teneriffe QLD, Australia
- Ténès, Algeria
- Tenente Portela, RS, Brazil
- Tenero-Contra, Switzerland



# We are going to build

## Places Autocomplete

(Custom styles, current location, predefined location, etc.)



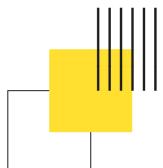
## GEO Tracking

Current user location & direction-aware car-markers



### Travel only if necessary

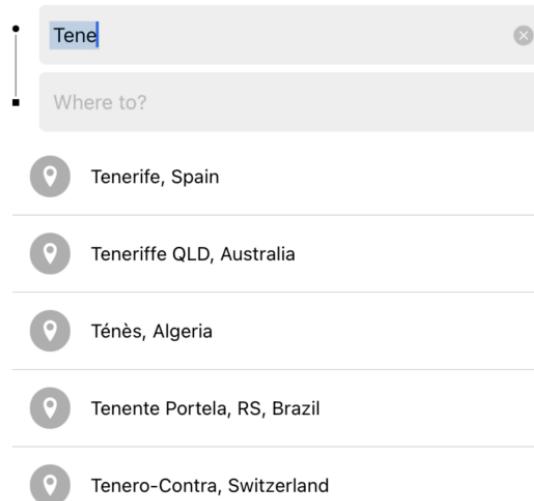
Upgrading this package often requires the font files linked to your projects to be updated as well. If the automatic linking works for you, running this again should update the fonts.



# We are going to build

## Places Autocomplete

(Custom styles, current location, predefined location, etc.)



## GEO Tracking

Current user location & direction-aware car-markers

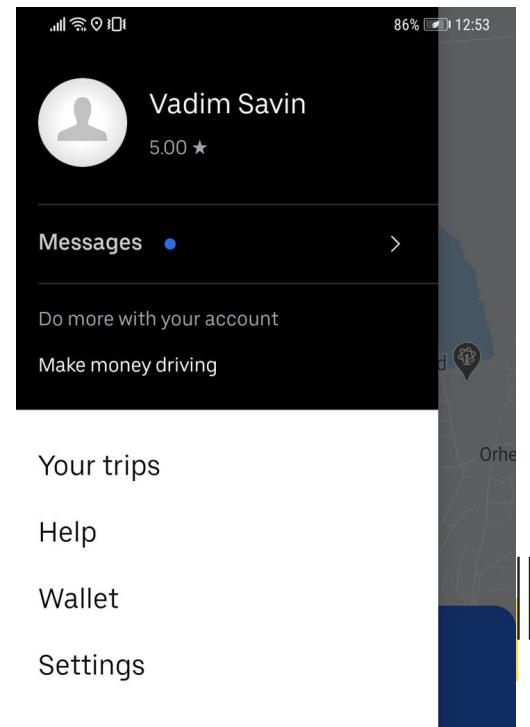


**Travel only if necessary**

Upgrading this package often requires the font files linked to your projects to be updated as well. If the automatic linking works for you, running this again should update the fonts.

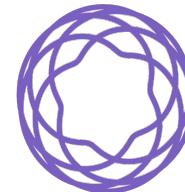
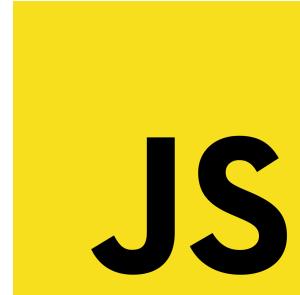
## Navigation

Simple navigation between screens  
Custom Drawer navigation

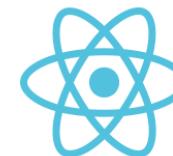
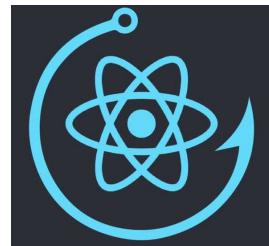
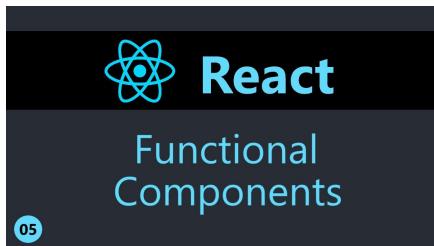


# Front-end technologies

---



React Navigation



Vector Icons



Choose from 3K+ icons or use your own



## You will learn

- Work with and Customise the Maps



## You will learn

- Work with and Customise the Maps
- Customise the Google Places Autocomplete



## You will learn

- Work with and Customise the Maps
- Customise the Google Places Autocomplete
- Track user location (Realtime)



## You will learn

- ||| - Work with and Customise the Maps
- ||| - Customise the Google Places Autocomplete
- ||| - Track user location (Realtime)
- ||| - Suggest nearby places



## You will learn

- ||| - Work with and Customise the Maps
- ||| - Customise the Google Places Autocomplete
- ||| - Track user location (Realtime)
- ||| - Suggest nearby places
- ||| - Basic Navigation
- |||
- |||
- |||



## You will learn

- ||| - Work with and Customise the Maps
- ||| - Customise the Google Places Autocomplete
- ||| - Track user location (Realtime)
- ||| - Suggest nearby places
- ||| - Basic Navigation
- ||| - Drawer Navigation (Hamburger menu)
- |||
- |||



# notJust

//development

## Who am I



- Full stack developer for >7yrs
- CTO @Fitinium
- ex Amazon SDE
- Passionate about coding and building impactful startups.

I AM notJust  
//developer



## Prerequisites

1. React Native environment set up
2. Google developer account
3. Dummy data, images, icons, PDF presentation:  
<https://assets.notjust.dev/uber>



## Starting point

1. Part 1





## Starting point

1. Part 1



**Didn't follow part 1, but want to follow along now?**

2. Clone the repo: <https://github.com/Savinvadim1312/UberClone/tree/part-1>
3. Create a google developer account, create a project, and enable all these APIs
4. Get an API key from Credentials page, and replace the old API key from the whole project, with your new API key (5 files) (Search for "AlzaSyB1KoK7KQe0YzwScTNjC7IHRSi7my056bk")
5. Install all the libraries
6. Run the project



### Enabled APIs

Select an API to view details. Figures are for the last 30 days.

API ↑	Requests
Directions API	208
Geocoding API	0
Maps SDK for Android	2
Maps SDK for iOS	21
Places API	834



# notJust

//development



## DEMO Part 1



# notJust

//development



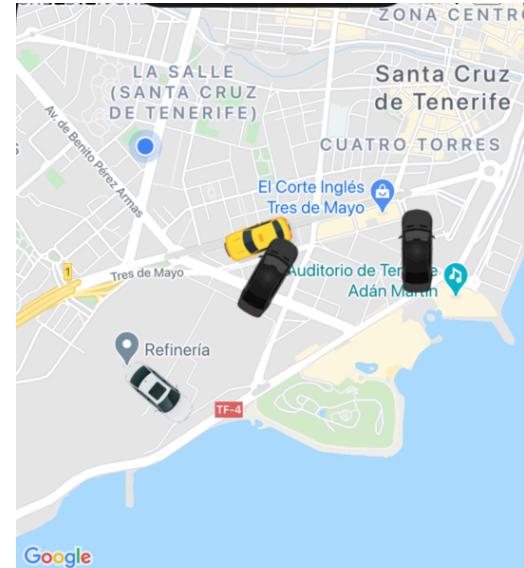
# Let's get started



## Maps: Marker direction

||| Rotate the cars in the direction of their movement

|| - make sure all images (assets) are facing up



### Travel only if necessary

Upgrading this package often requires the font files linked to your projects to be updated as well. If the automatic linking works for you, running this again should update the fonts.

# Places Autocomplete

notJust  
//development

From

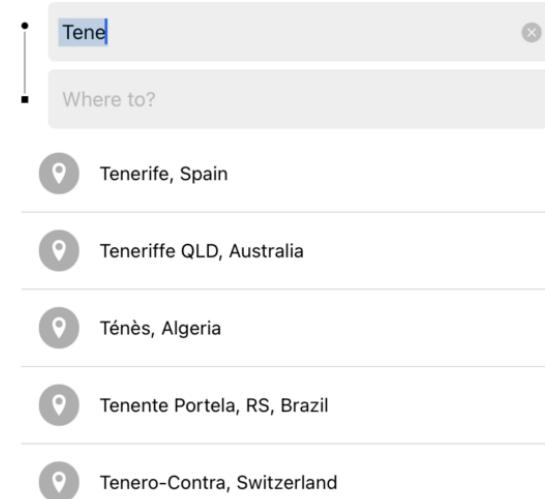
Where from?

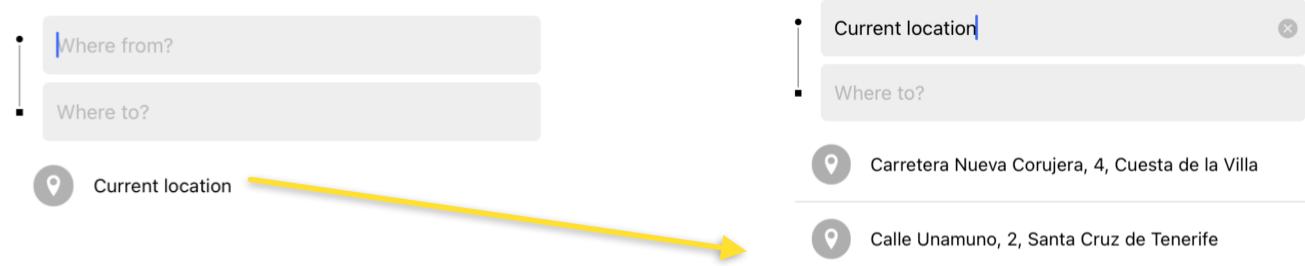
Where to?

To

- 
- Tene
- Where to?
- Tenerife, Spain
  - Teneriffe QLD, Australia
  - Ténès, Algeria
  - Tenente Portela, RS, Brazil
  - Tenero-Contra, Switzerland

## Places Autocomplete styles

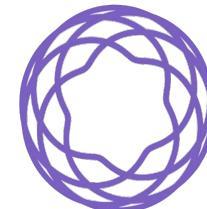




## Places Autocomplete Current Location

- ||| - Install Geolocation
- ||| - Request Permission to use Location
- ||| - Use the location in Places autocomplete component
- ||| - Add Predefined Location (HOME, WORK) ?

## Navigation



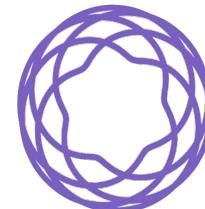
# React Navigation



- Install React-Navigation library and follow the installation guide



## Navigation



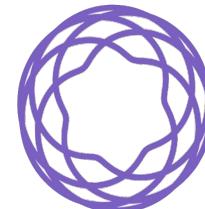
# React Navigation



- Install React-Navigation library and follow the installation guide
- Defined all the screens in a Stack Navigator



## Navigation

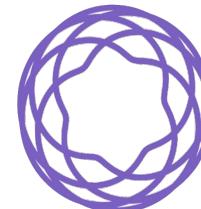


# React Navigation

- ||| - Install React-Navigation library and follow the installation guide
- ||| - Defined all the screens in a Stack Navigator
- ||| - Implement the Navigation between screens



## Navigation



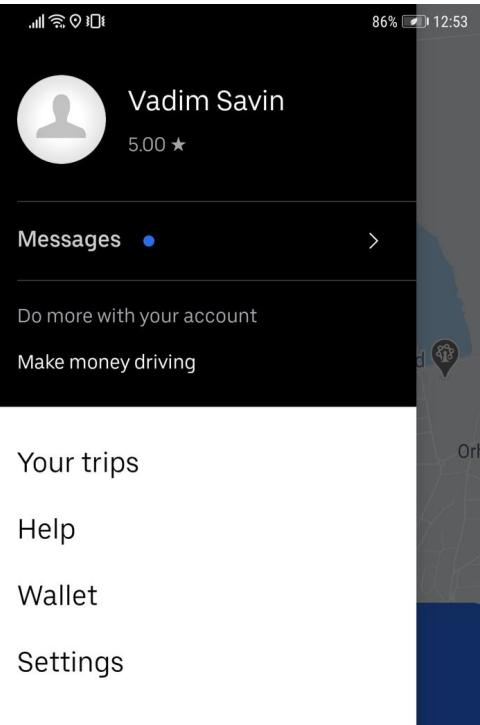
# React Navigation

- ||| - Install React-Navigation library and follow the installation guide
- ||| - Defined all the screens in a Stack Navigator
- ||| - Implement the Navigation between screens
- ||| - Send data between screens
- | |
- | |
- ||
- |||

## Drawer Navigation



- Install Drawer Navigation package



Your trips



Help



Wallet

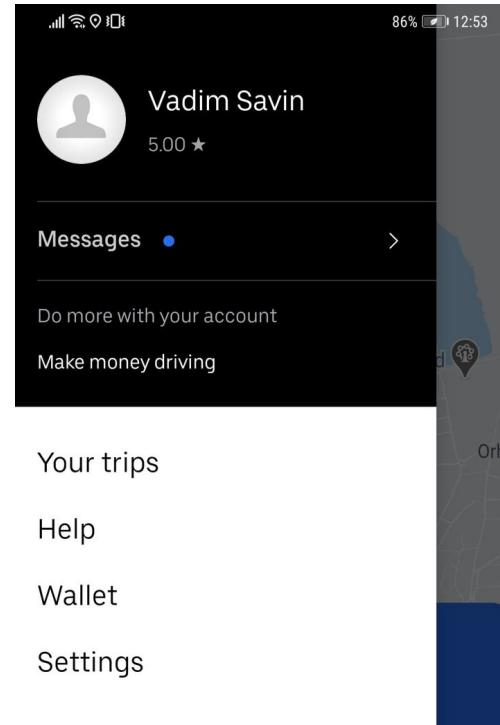


Settings

## Drawer Navigation



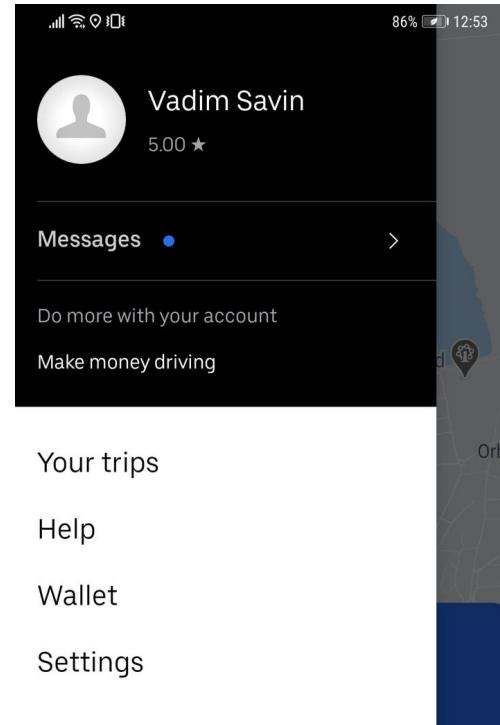
- Install Drawer Navigation package
- Setup Basic Drawer Navigation



## Drawer Navigation



- Install Drawer Navigation package
- Setup Basic Drawer Navigation
- Customise the Drawer Navigation



**notJust**  
*//development*



# Q&A



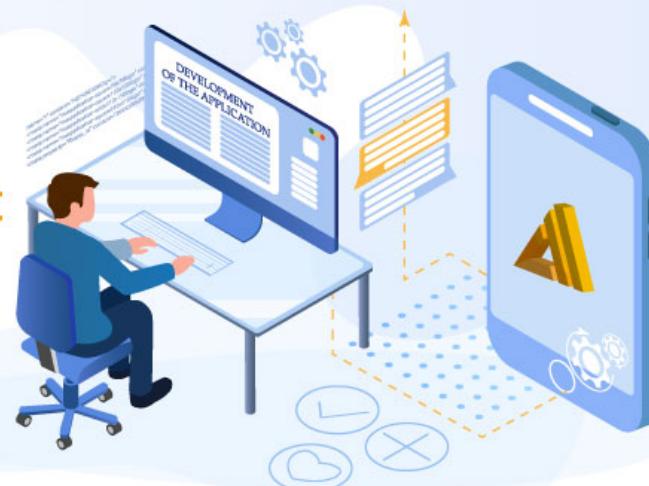


# React Native AWS Backend

Authentication, GraphQL API

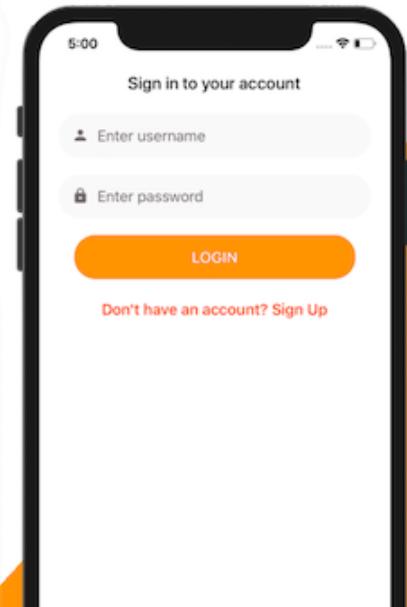
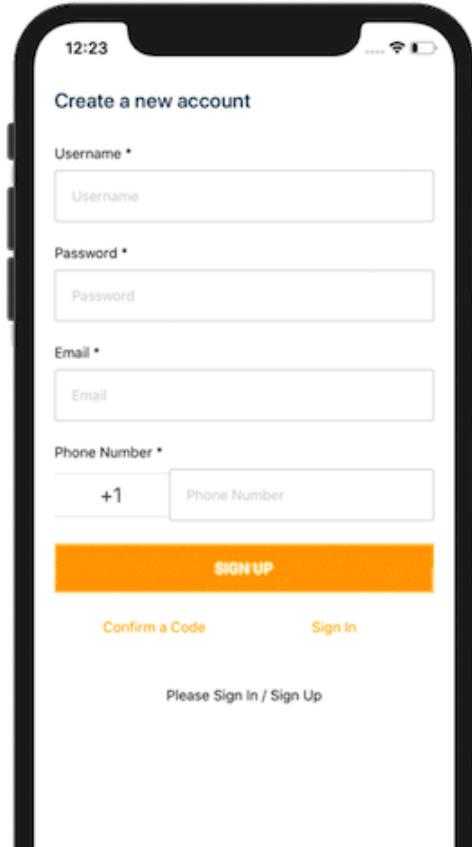
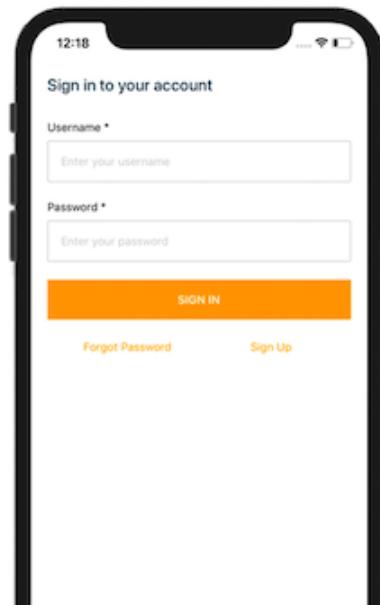
 AWS Amplify

For Next-Gen  
App Development

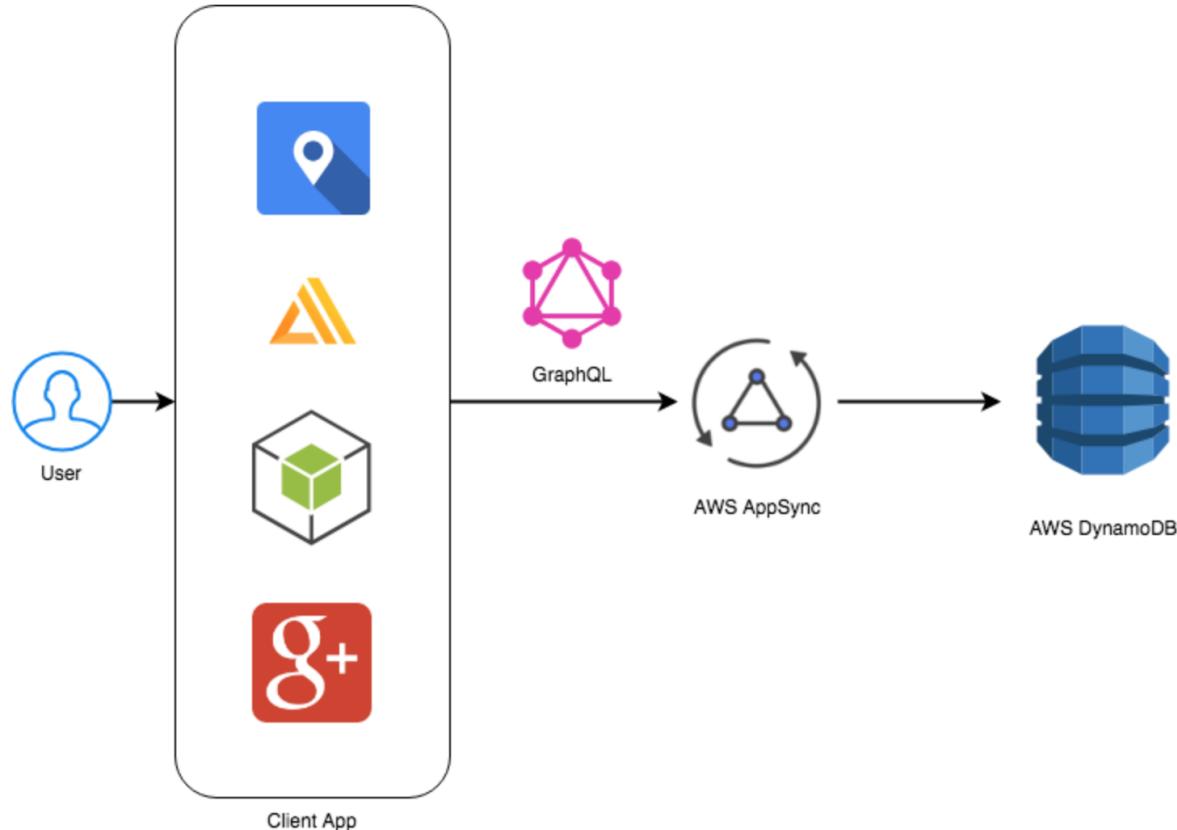




## Authentication



## GraphQL API



# notJust

//development

## Who am I



- Full stack developer for >7yrs
- CTO @Fitinium
- ex Amazon SDE
- Passionate about coding and building impactful startups.

I AM notJust  
//developer





## New channel members



it is now



sambulo senda

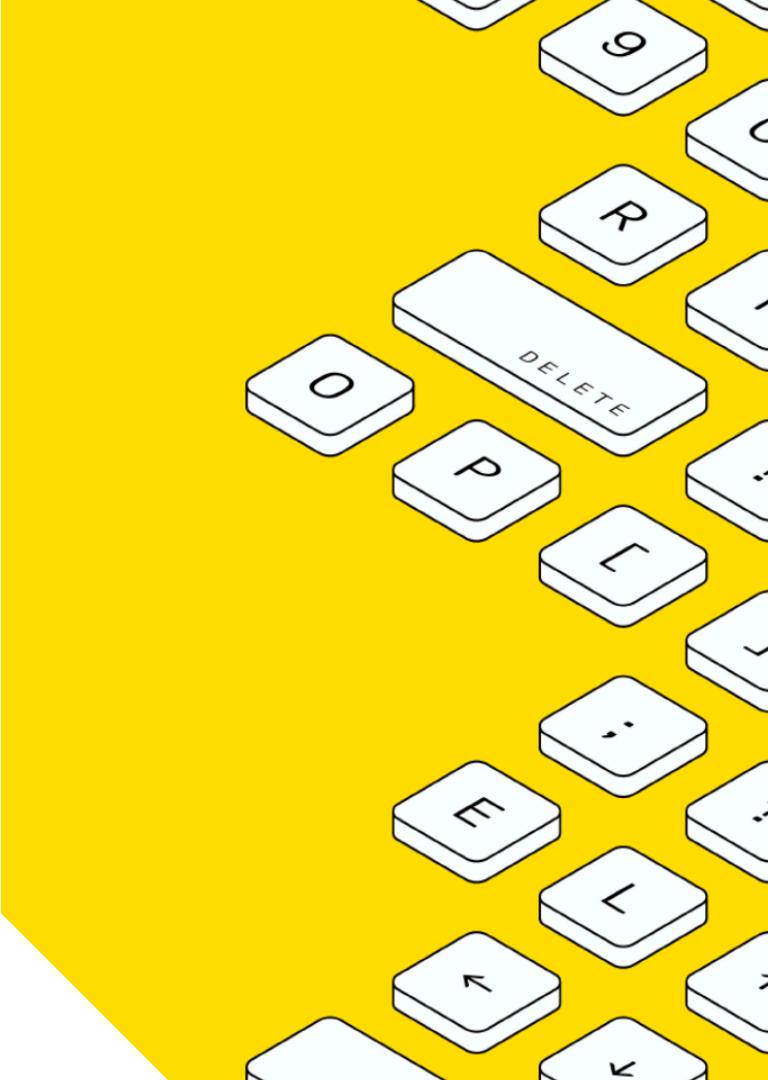


ACodei Codando



Edwardo1978

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//development



Membership

Vadim Savin

## Join this channel

Get access to membership perks

<b>notJust Developer Junior</b> €1.99/month	<b>€1.99/month</b> <b>JOIN</b>
<b>notJust Developer Mid</b> €4.99/month	Recurring payment. Cancel anytime. Creator may update perks from time to time.
<b>notJust Developer Senior</b> €9.99/month	Loyalty badges next to your name in comments and live chat 
	Custom emoji to use in comments and live chat 
	Discord Exclusive Member Role

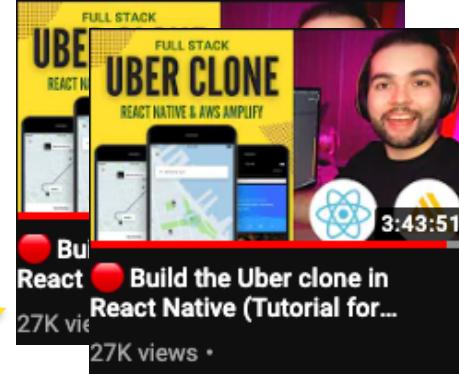
## Prerequisites

1. AWS Account
2. Dummy data, images, icons, PDF presentation, code snippets:

<https://assets.notjust.dev/uber>

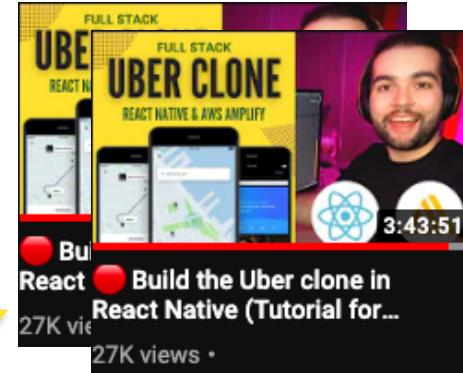
## Starting point

1. Part 1 & Part 2



## Starting point

1. Part 1 & Part 2



API ↑	Requests
Directions API	208
Geocoding API	0
Maps SDK for Android	2
Maps SDK for iOS	21
Places API	834



**Didn't follow part 1 & 2, but want to follow along now?**

2. Clone the repo: <https://github.com/Savinvadim1312/UberClone/tree/part-2>
3. Create a google developer account, create a project, and enable all these APIs
4. Get an API key from Credentials page, and replace the old API key from the whole project, with your new API key (5 files)
5. Install all the libraries
6. Run the project



# notJust

//development



## DEMO Part 1



## Setup AWS Amplify Project

```
||| https://docs.amplify.aws/start/q/integration/react-native
```

```
||| $ amplify init
```

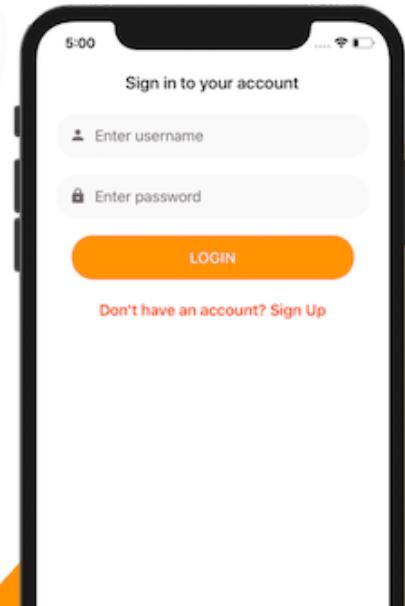
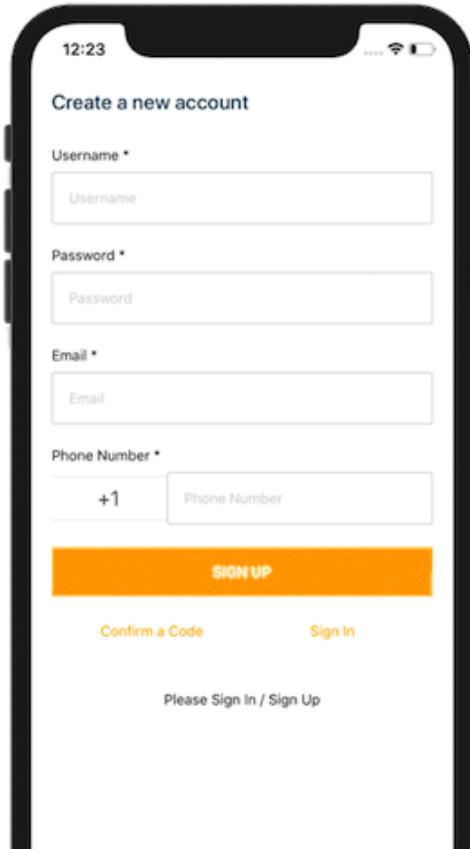
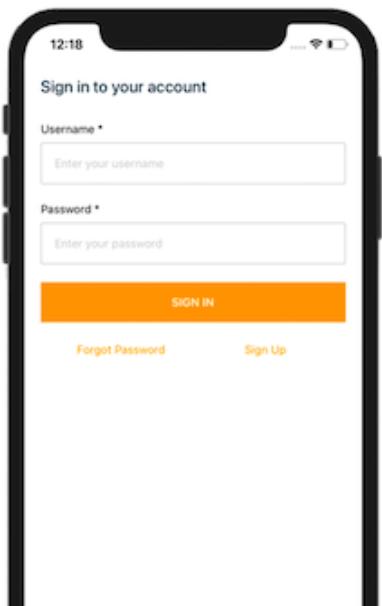
```
||| $ yarn add aws-amplify aws-amplify-react-native amazon-cognito-identity-js @react-native-community/netinfo
```

```
||| Configure the App.js
```





## Authentication

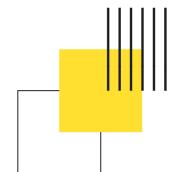


# How does it work?

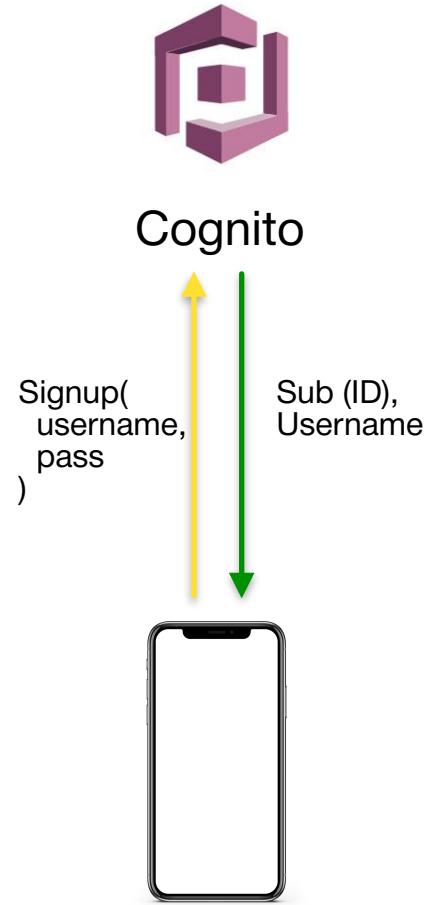
---



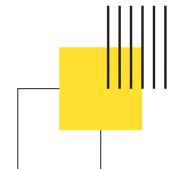
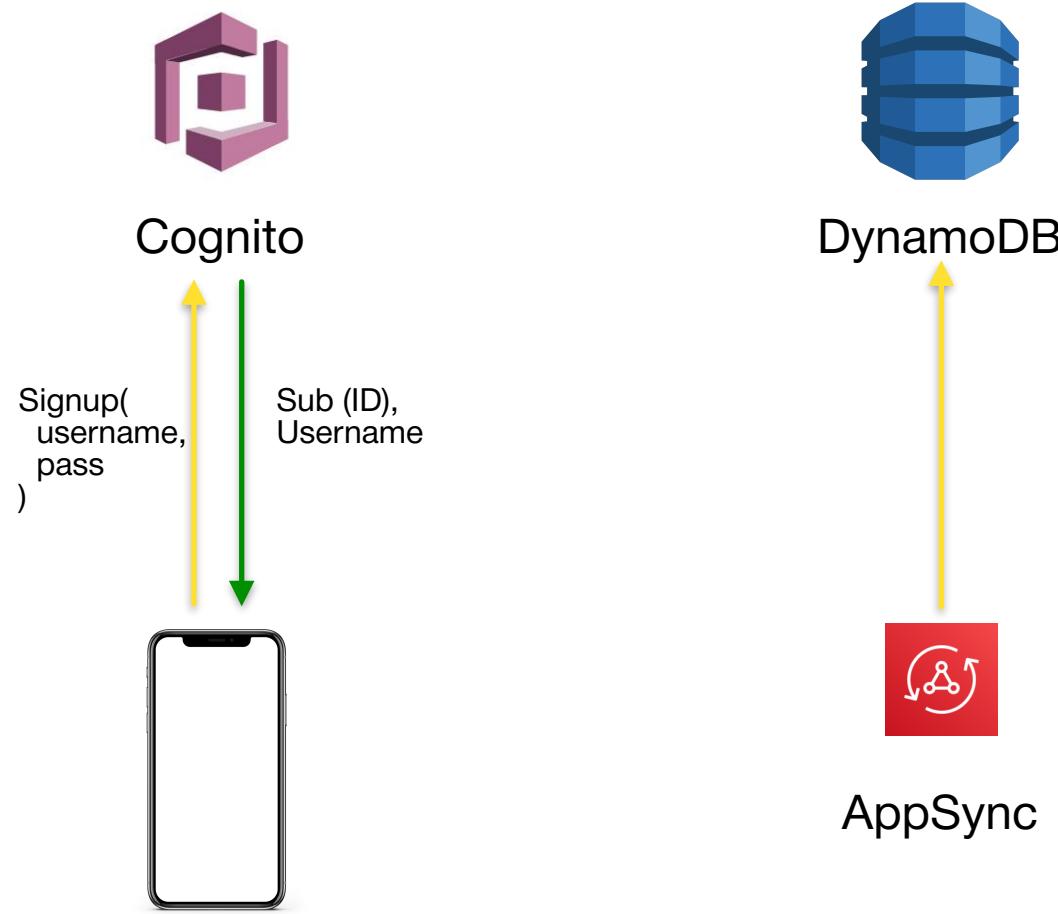
Cognito



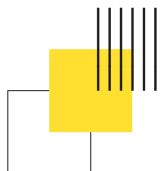
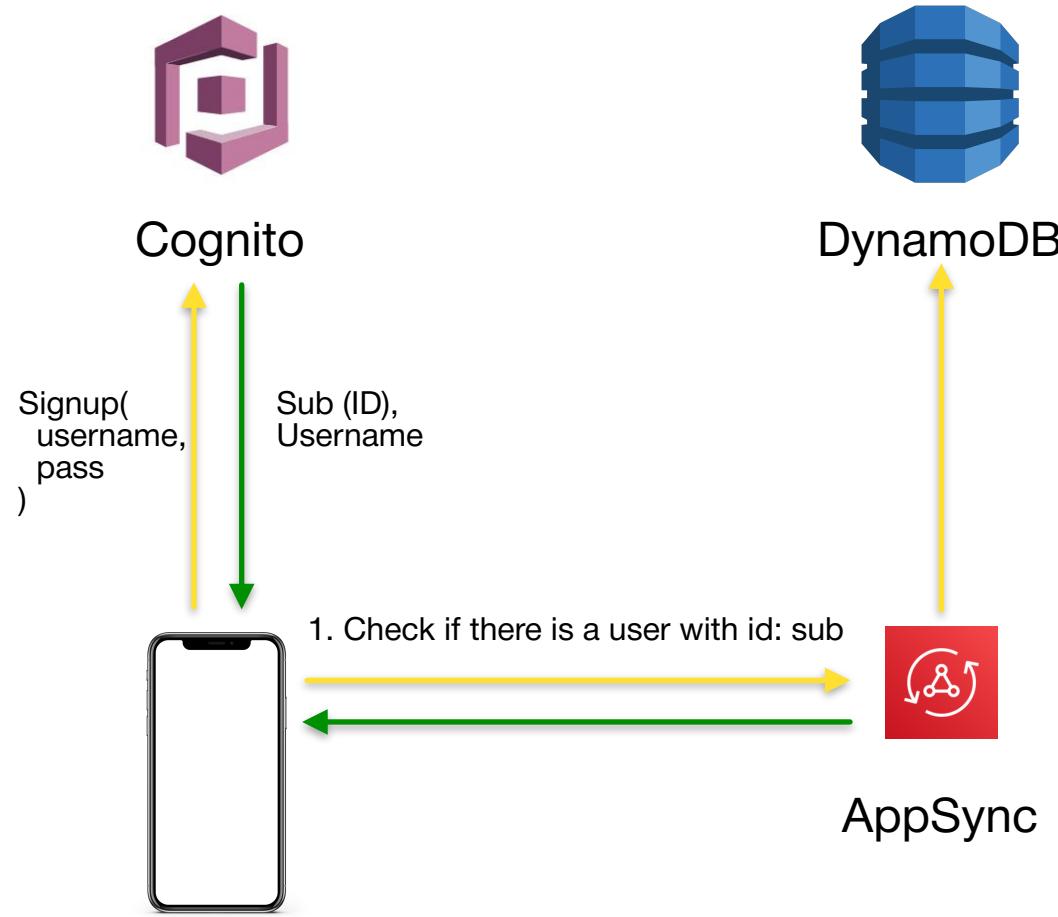
# How does it work?



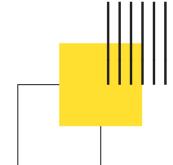
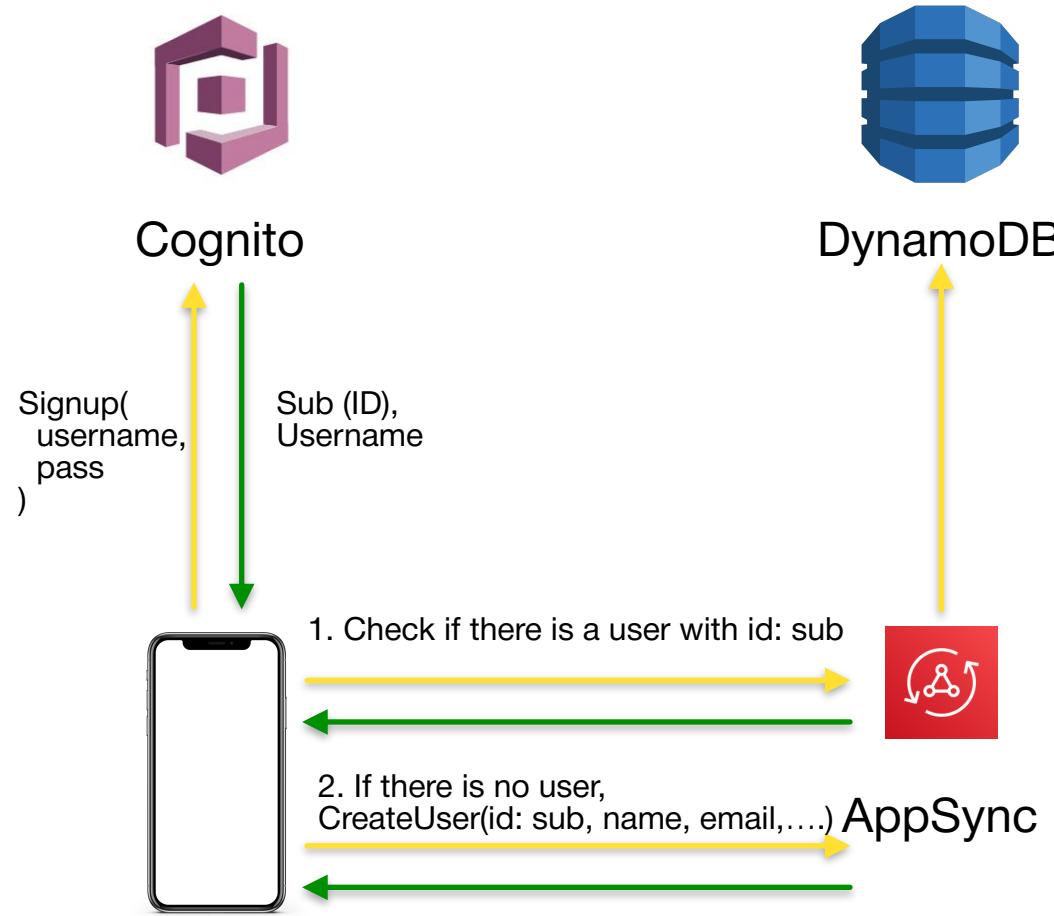
# How does it work?



# How does it work?



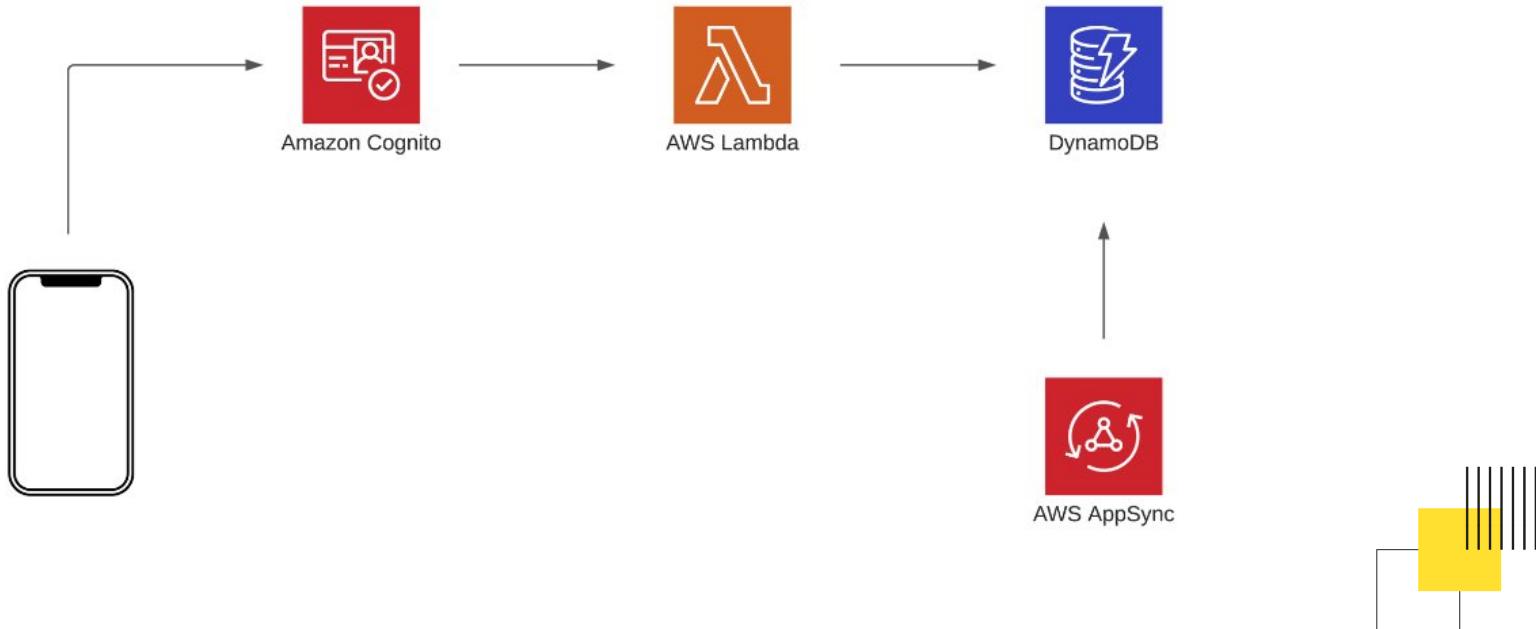
# How does it work?



# A better way to sync Cognito users with Database users

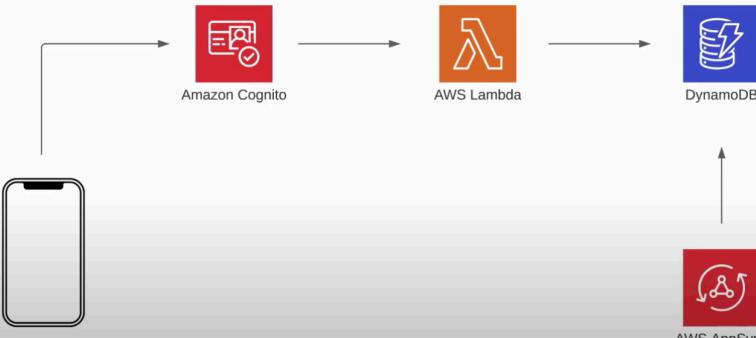
## Post-confirmation Lambda Trigger

Saving a user in DynamoDB & creating an API to query for users.



## Post-confirmation Lambda Trigger

Saving a user in DynamoDB & creating an API to query for users.



▶ 0:01 / 11:15 • Introduction >

Settings

Adding Users to DynamoDB using a Cognito Post-confirmation Lambda Trigger & Exposing a GraphQL API

279 views • Feb 11, 2021



21



0



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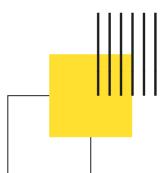
Nader Dabit

7.61K subscribers

SUBSCRIBED



<https://www.youtube.com/watch?v=Sk9HMuAaTmQ>



## Setup Authentication

```
||| $ amplify add auth
```

- || - Manual configuration
- || - Setup Lambda Triggers: Post confirmation
- || - Create own module
- || - Configure App.js

```
| |
```

```
||
```

```
|||
```

## GraphQL API

```
||| $ amplify add api  
||| 1. Write User Model  
||| 2. Push everything to the cloud (amplify push)
```



## Finish set-up of Lambda Function

- ||| 1. Set the user table name as env variable
- ||| 2. Give access to Lambda to access the DynamoDB
- ||| 3. Test it out



## GraphQL API

- ||| 1. Write the Cars Model
- ||| 2. Write the Orders Model
- ||
- ||
- ||
- |||
- |||

 AWS Amplify



## GraphQL API

- ||| 1. Fetch cars from API
- ||| 2. Create order using API
- ||
- ||
- ||
- |||
- |||

 AWS Amplify





## New channel members



it is now



sambulo senda

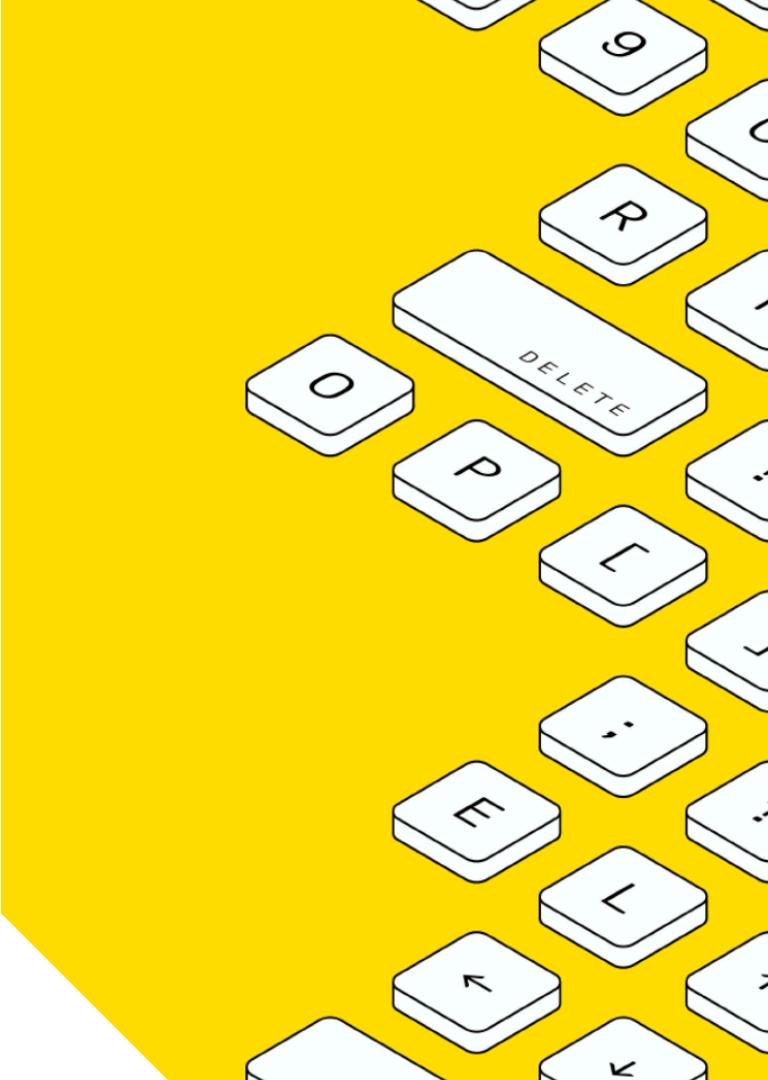


ACodei Codando



Edwardo1978

I AM notJust  
//developer



**notJust**  
*//development*

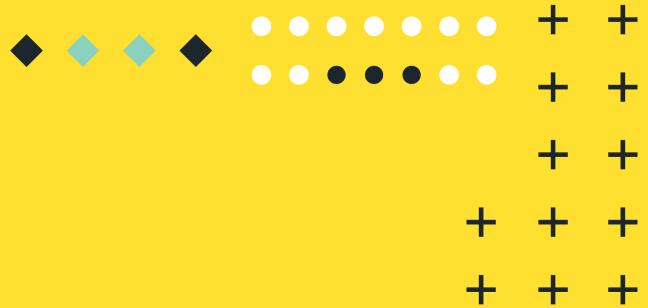
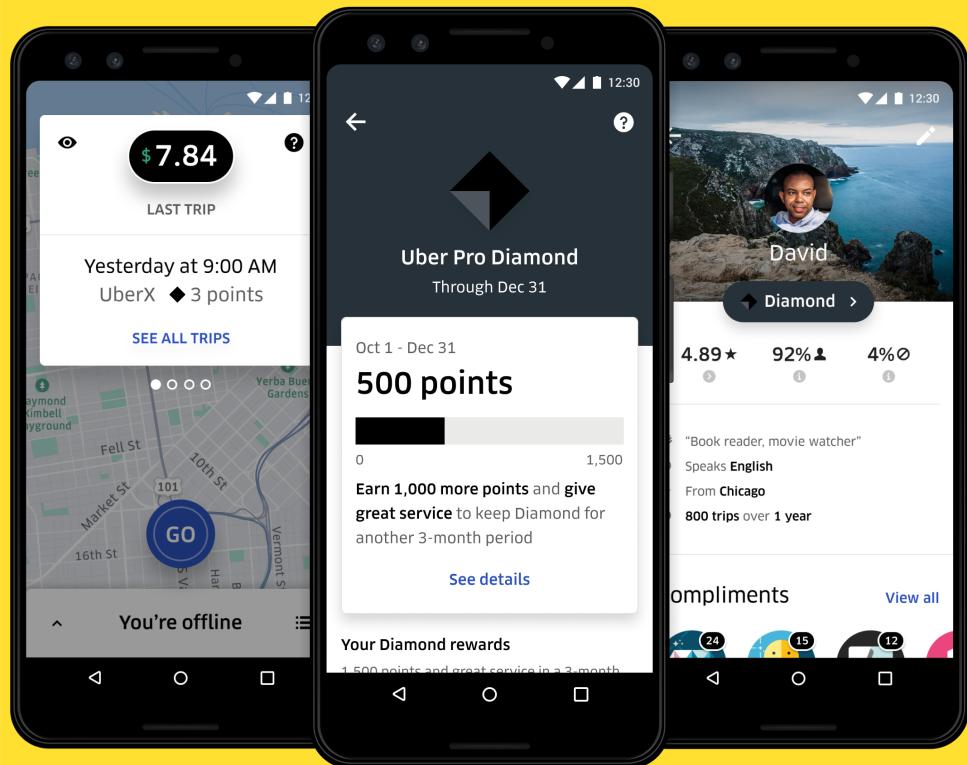


# Q&A



# notJust

//development



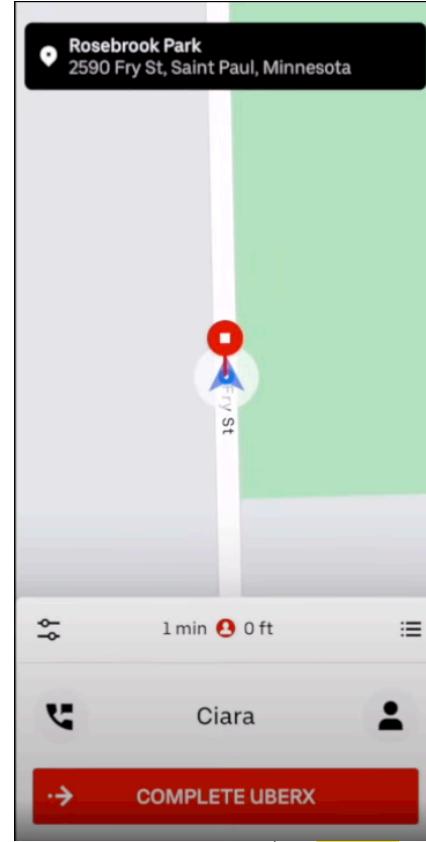
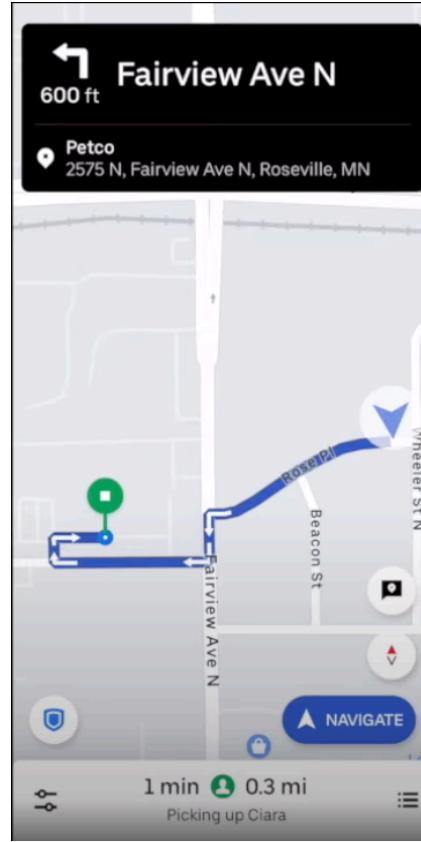
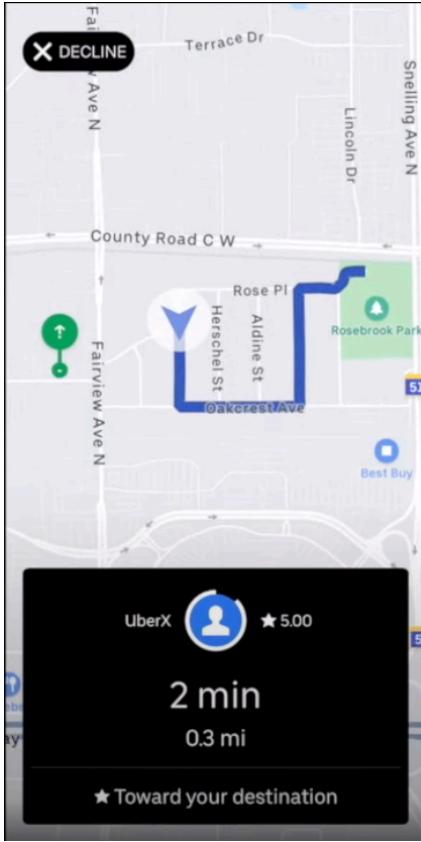
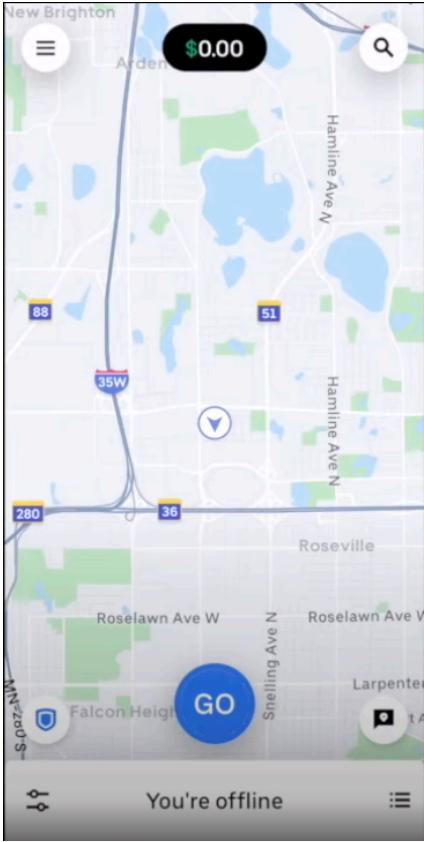
# Uber Driver App

React Native & AWS AMPLIFY

Build a full stack Taxi mobile app



# We are going to build



# notJust

//development

## Who am I



- Full stack developer for >7yrs
- CTO @Fitinium
- ex Amazon SDE
- Passionate about coding and building impactful startups.

I AM notJust  
//developer



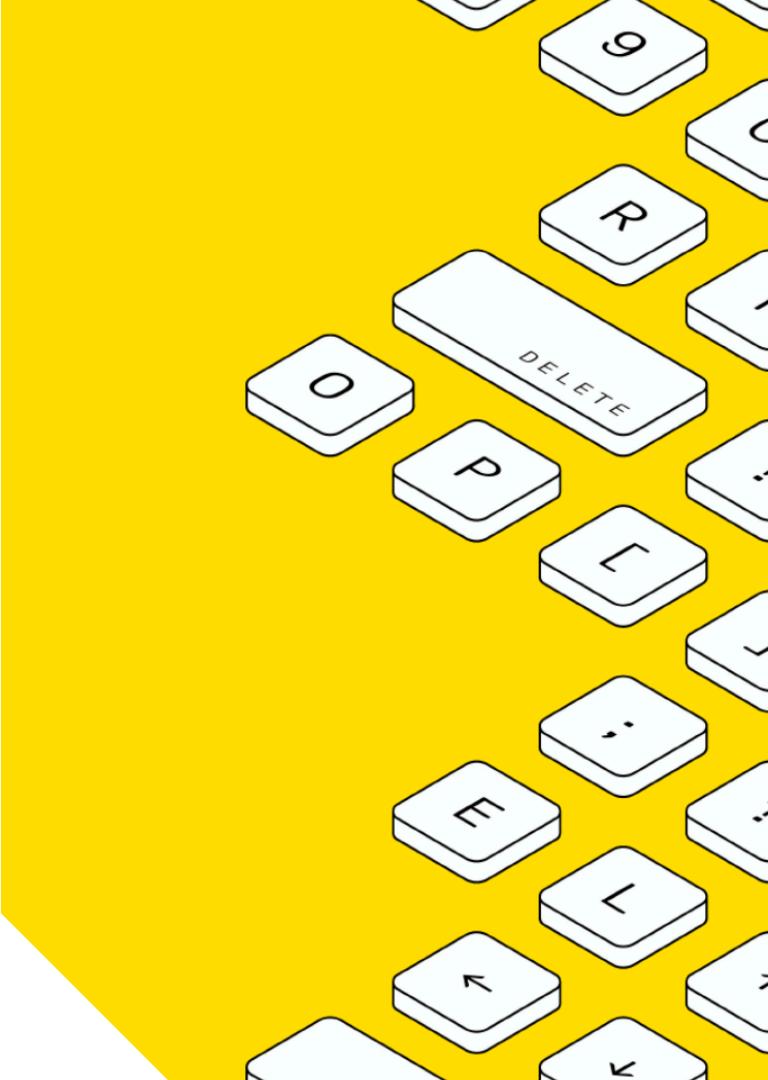


## New channel members

Member	Current level
 Jaroslav Beneš	notJust Developer Senior



I AM **notJust**  
//developer





Membership

Vadim Savin

## Join this channel

Get access to membership perks

notJust Developer Junior  
€1.99/month

notJust Developer Mid  
€4.99/month

notJust Developer Senior  
€9.99/month

€1.99/month

**JOIN**

Recurring payment. Cancel anytime. Creator may update perks from time to time.

Loyalty badges next to your name in comments and live chat

Custom emoji to use in comments and live chat

Discord Exclusive Member Role

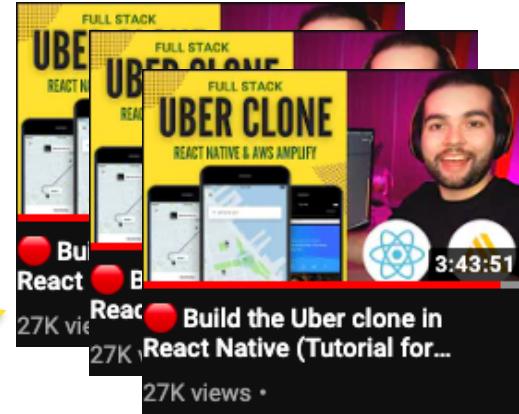


## Prerequisites

1. React Native environment set up
2. Google developer account
3. Dummy data, images, icons, PDF presentation:  
<https://assets.notjust.dev/uber>

Starting point

1. User App

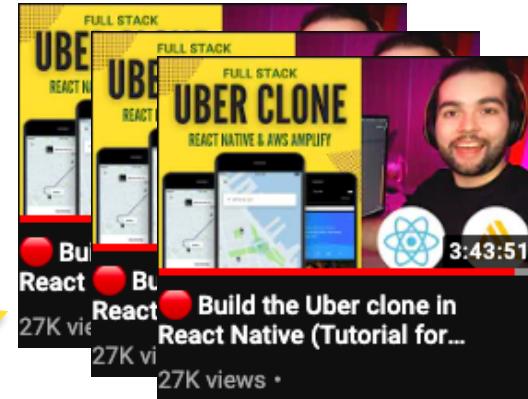


## Starting point

1. User App



1. User App
2. Clone the repo: <https://github.com/Savinvadim1312/UberClone/tree/part-3>
3. Create a google developer account, create a project, and enable all these APIs
4. Get an API key from Credentials page, and replace the old API key from the whole project, with your new API key (5 files)
5. Install all the libraries
6. Run the project



Build the Uber clone in  
React Native (Tutorial for...)

27K vi

### Enabled APIs

Select an API to view details. Figures are for the last 30 days.

API ↑	Requests
Directions API	208
Geocoding API	0
Maps SDK for Android	2
Maps SDK for iOS	21
Places API	834

Places API

# notJust

//development



# Let's get started



## Let's get started

Initialise the RN project:

```
$ npx react-native init UberDriver
```

||| Run the development server

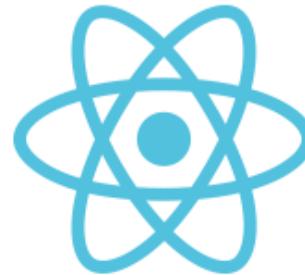
```
$ yarn start           $ npm start
```

||| Run the app on iOS

```
$ yarn ios            $ npm run ios
```

||| Run the app on android

```
$ yarn android        $ npm run android
```



# Vector Icons



Choose from 3K+ icons or use your own

## Vector icons

Install vector icons

```
$ yarn add react-native-vector-icons
```

```
$ npm install react-native-vector-icons
```



IOS: Add UIAppFonts to Info.plist



Android: Add to the android/app/build.gradle



```
apply from: "../../node_modules/react-native-vector-icons/fonts.gradle"
```



Install pods (iOS only)



```
$ npx pod-install
```



## Maps

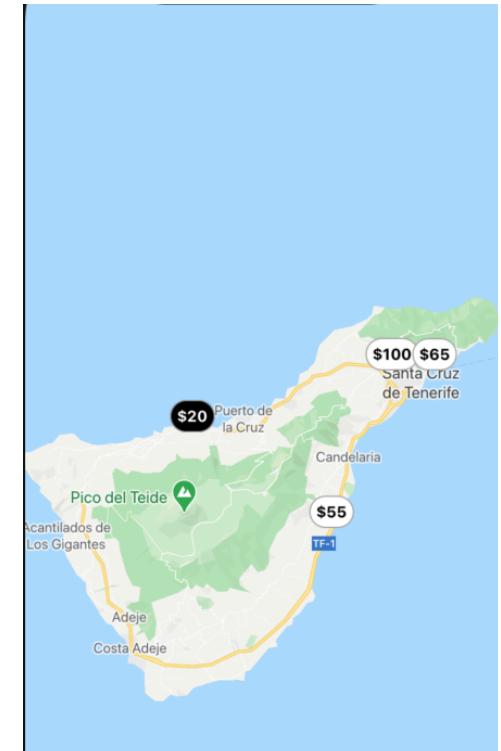


Library: **React Native Maps**

<https://www.npmjs.com/package/react-native-maps>



1. install library
2. Enable google API
3. Make sure billing is enabled
4. Get API Key



## Maps Directions



Library: **React Native Maps Directions**

- ||
- ||
- ||
- ||
- ||
- ||

<https://www.npmjs.com/package/react-native-maps-directions>

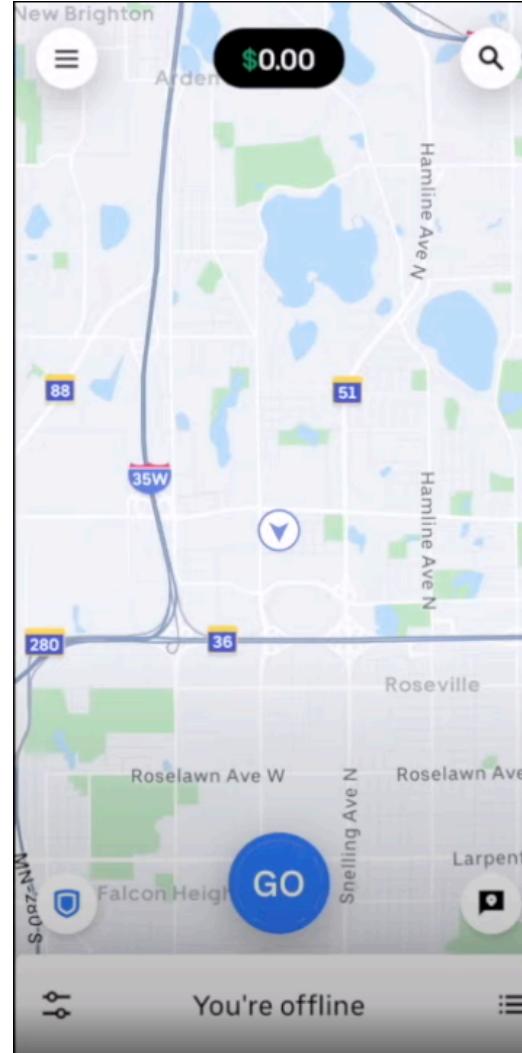
```
latitude: 37.790790,  
longitude: -122.442753,  
  
latitude: 37.790651,  
longitude: -122.422497,  
  
GOOGLE_MAPS_APIKEY = '...';  
  
RNMapsDirectionsExample extends Component {  
  render() {  
    <MapView initialRegion={initialRegion} style={StyleSheet.absoluteFillObject}>  
      <MapView.Marker coordinate={coordinates[0]} />  
      <MapView.Marker coordinate={coordinates[1]} />  
      <MapViewDirections  
        origin={coordinates[0]}  
        destination={coordinates[1]}  
        apikey={GOOGLE_MAPS_APIKEY}  
        strokeWidth={3}  
        strokeColor="hotpink"  
      />  
    </MapView>  
  
    default RNMapsDirectionsExample;
```



## Home Screen



1. Render the map, with user location
2. Render all the buttons on the screen
3. Switch from offline to online

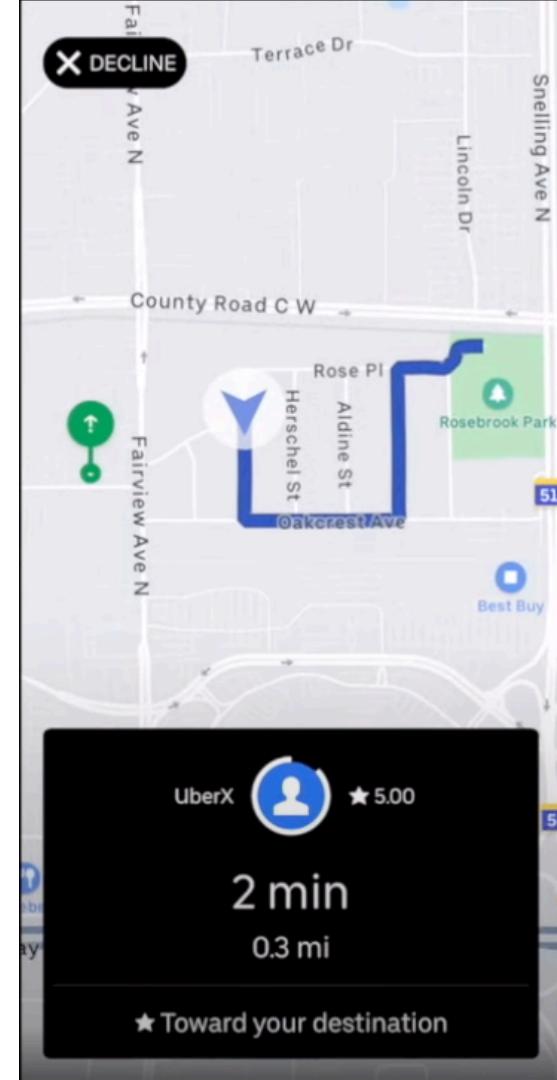




## New Ride pop-up



1. Render the popup
2. On decline, remove from list
3. On press, start ride



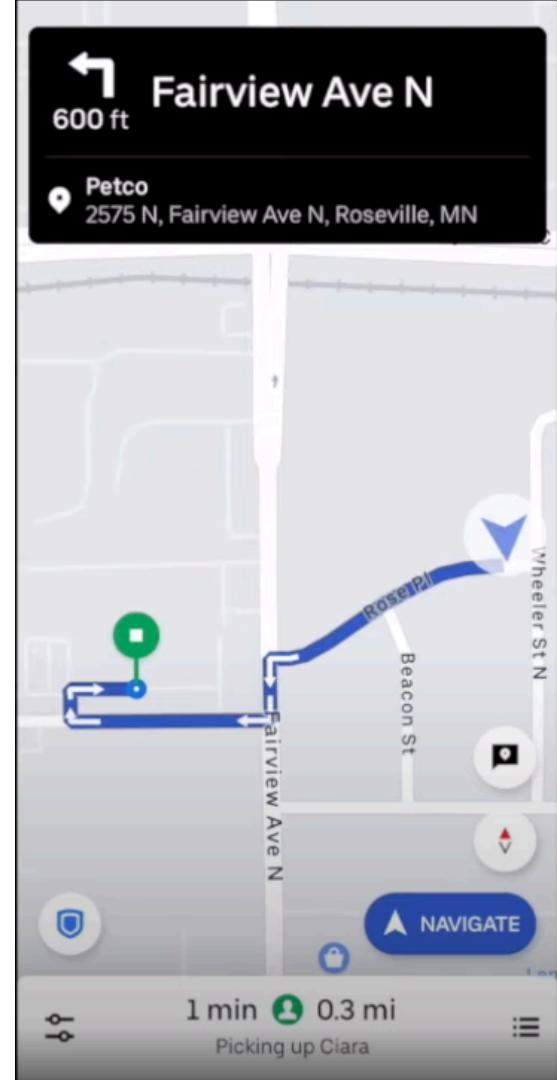
# notJust

//development

## Pick up the client



1. Show route to the client



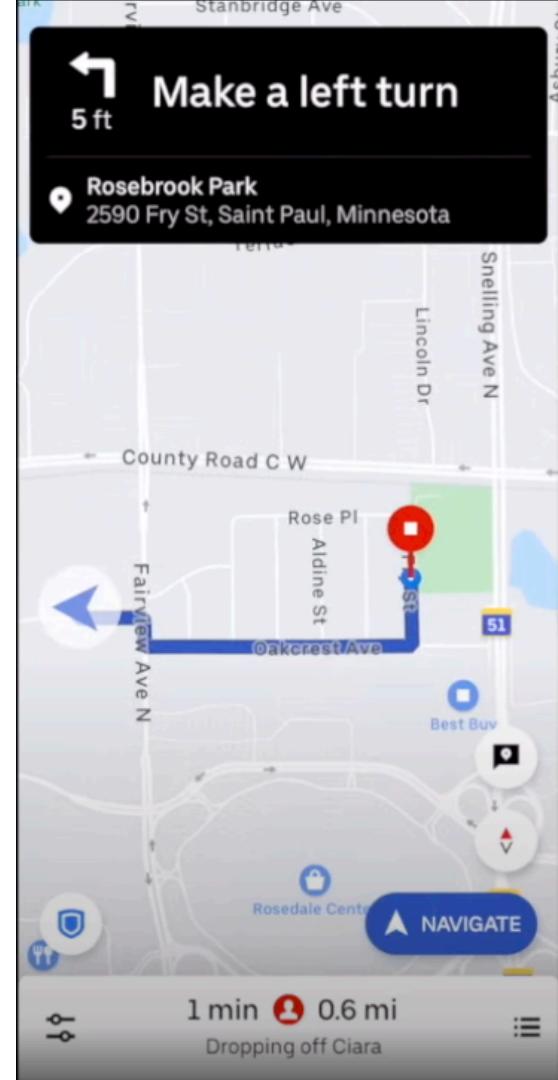
# notJust

//development

## Pick up the client



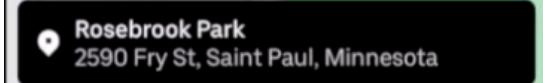
1. Show route to the destination



# notJust

//development

Complete Ride



# notJust

//development



## Next week, Friday at 3PM GMT

- Connect the driver app with the user app
- Synchronise data and orders
- Real-time GEO tracking of the cars



**notJust**  
*//development*

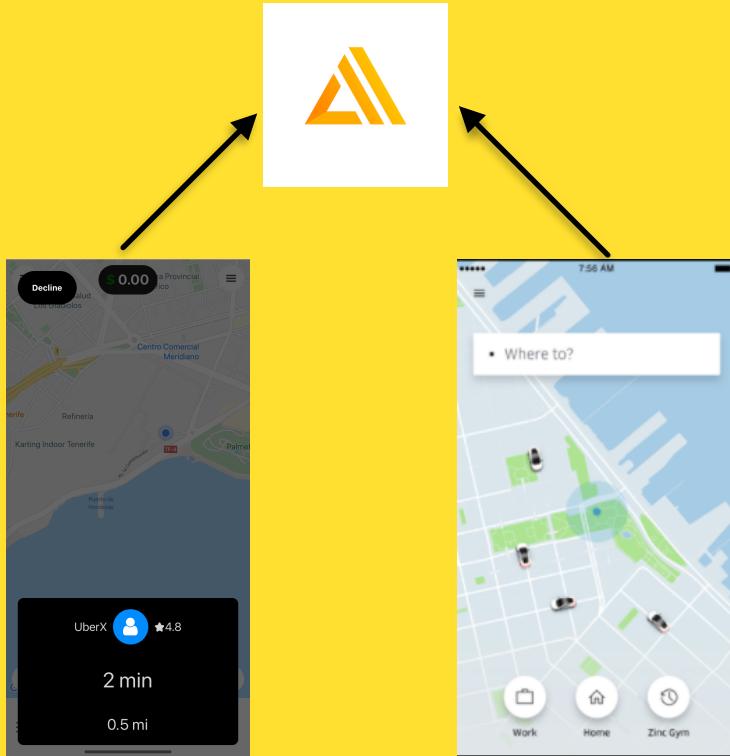


# Q&A



# notJust

//development



## Uber Clone

React Native & AWS Amplify

Sync User app with Driver App



# notJust

//development

## Who am I



- Full stack developer for >7yrs
- CTO @Fitinium
- ex Amazon SDE
- Passionate about coding and building impactful startups.

I AM notJust  
//developer

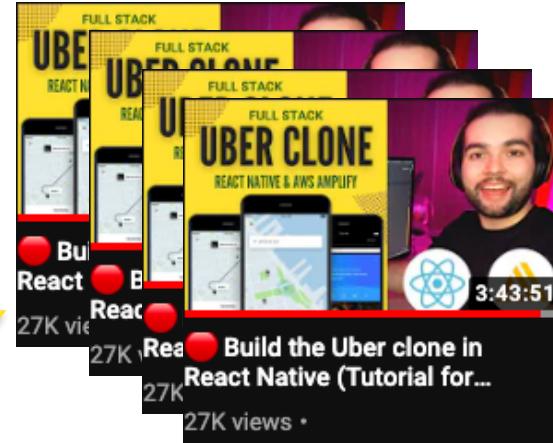


## Prerequisites

1. React Native environment set up
2. Google developer account
3. Dummy data, images, icons, PDF presentation:  
<https://assets.notjust.dev/uber>

## Starting point

1. User App & Driver App



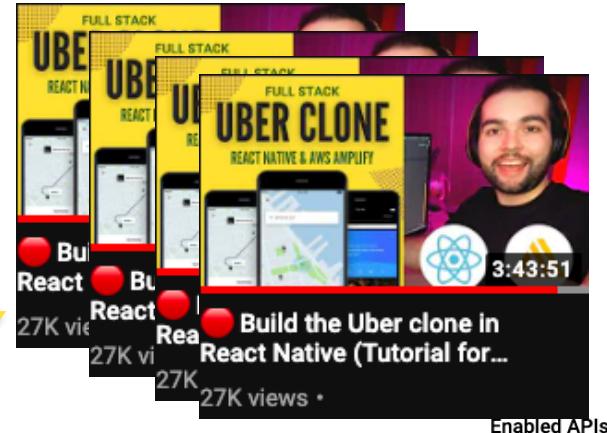
## Starting point

1. User App & Driver App



**Didn't follow the User app builds, but want to follow along now?**

2. Clone the repo: <https://github.com/Savinvadim1312/UberClone/tree/part-4>
3. Create a google developer account, create a project, and enable all these APIs
4. Get an API key from Credentials page, and replace the old API key from the whole project, with your new API key (5 files)
5. Install all the libraries
6. Initialise and Deploy the amplify backend
7. Run the project



Enabled APIs

Select an API to view details. Figures are for the last 30 days.

API ↑	Requests
Directions API	208
Geocoding API	0
Maps SDK for Android	2
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Places API	834

Places API

# notJust

//development



## Let's get started

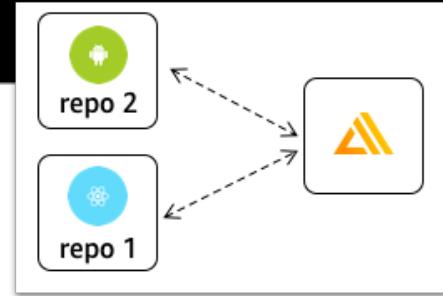


## Configure Amplify in Driver App

- 1. Pull the existing backend in the Driver app
- 2. Keep the backend definition in only one app  
(User App)
- 3. Install amplify packages

```
yarn add aws-amplify aws-amplify-react-native amazon-cognito-identity-js @react-native-community/netinfo
```

```
$ amplify pull
Which app are you working on?
> android-myawesomeapp
  react-myawesomeapp
Do you plan on modifying your backend? (Y/n) n
Successfully pulled backend metadata.
```



## Configure Authentication

```
||| export default withAuthenticator(App);
```

```
||
```

```
||
```

```
||
```

```
||
```

```
|||
```

## Configure Authentication



1. Add a 1 to 1 relationship between a user and a car (User drives a car)
2. Create a new Car object, when a new driver sign up



## Update availability of the car



1. Query the availability of the car
2. Update the availability in database, when driver changes the availability



## Orders



1. when we open the driver app query existing orders (only unfulfilled orders).
2. Confirm order (update the carId and status of the order)
3. Subscribe to new Orders



## Update Car Position



When the car changes position, update this in the backend



## User side app



- Create the order page (a map, with the position of the car)
- Subscribe to car position updates



**notJust**  
*//development*



# Q&A

