

MULTIPLATFORM UI

MICHAL SÄNGER

michal.sanger@kiwi.com

**KIWI.COM WANTS TO
MAKE TRAVEL BETTER**

Illustrator CS6AppleBingWikipediaSeznamFacebookTwitterLinkedInYelpTripAdvisorMAPSAppleiCloudTwitter

KIWI.COMTravelRoomsCarsEnglish (United States)EUR - €HelpStarredManage My Booking

Return1 AdultEconomy

FromParisToNew YorkDepartureReturnSearch

Transport

Flight only

Bus only

Train only

Stops

Any

Nonstop (direct flights)

Up to 1 stop

Up to 2 stops

Duration

MAX TRAVEL TIME

any (1249 of 1249 flights)

Connections to New York

Pricing Table

Create Price AlertBest317 €15h 10m

317 €

United Airl...

9:45 AM - 11:50 AM

Fri Jun 14

8h 05m

Paris (CDG) → New York (EWR)

2 nights in New York

United Airl...

6:40 PM - 7:45 AM

Sun Jun 16

7h 05m

New York (EWR) → Paris (CDG)

This trip has baggage limitations. More Info →Hide flights with baggage limitations.

317 €

United Airl...

9:45 AM - 11:50 AM

Thu Jun 13

8h 05m

Paris (CDG) → New York (EWR)

3 nights in New York

United Airl...

6:40 PM - 7:45 AM

Sun Jun 16

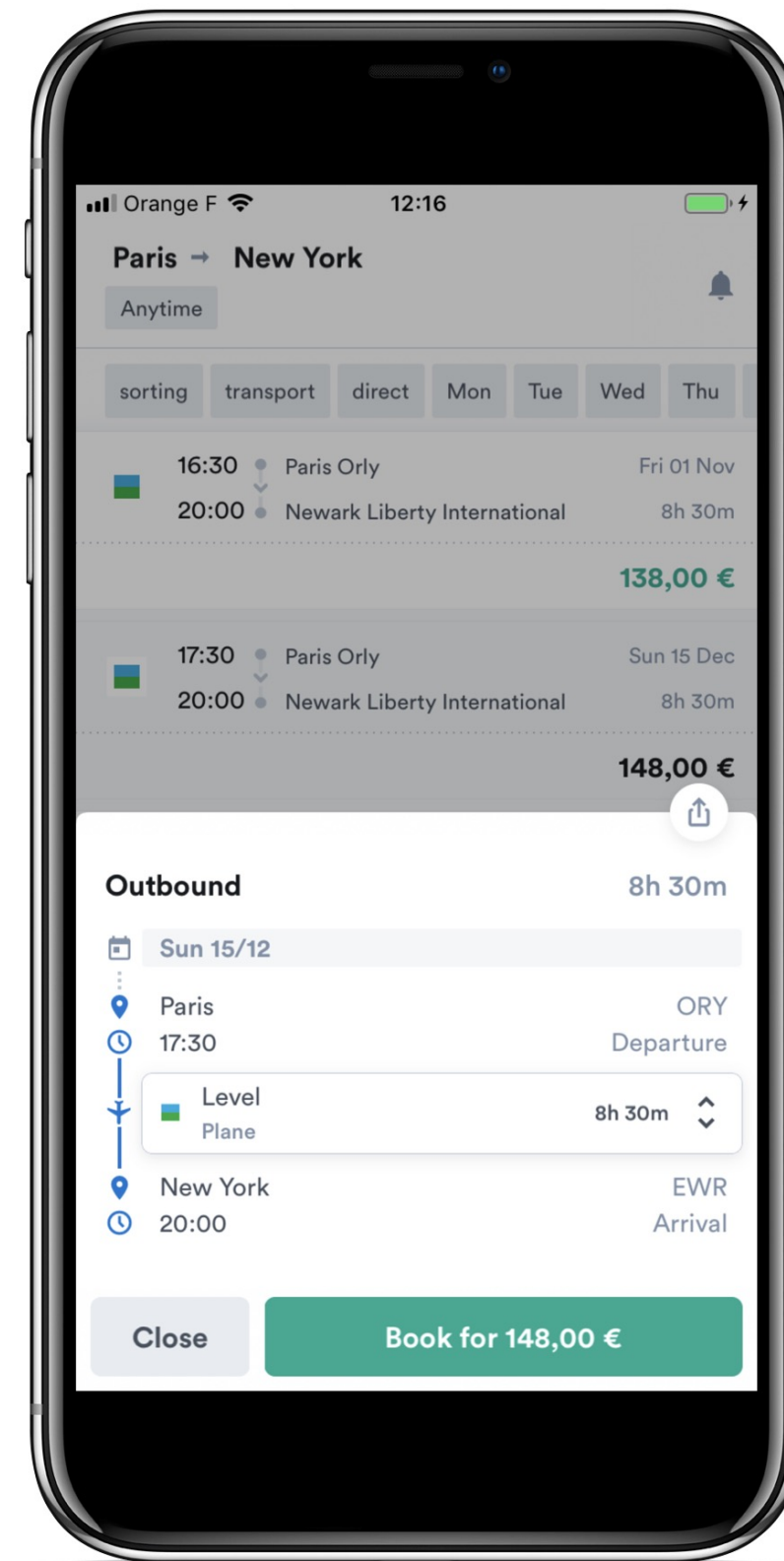
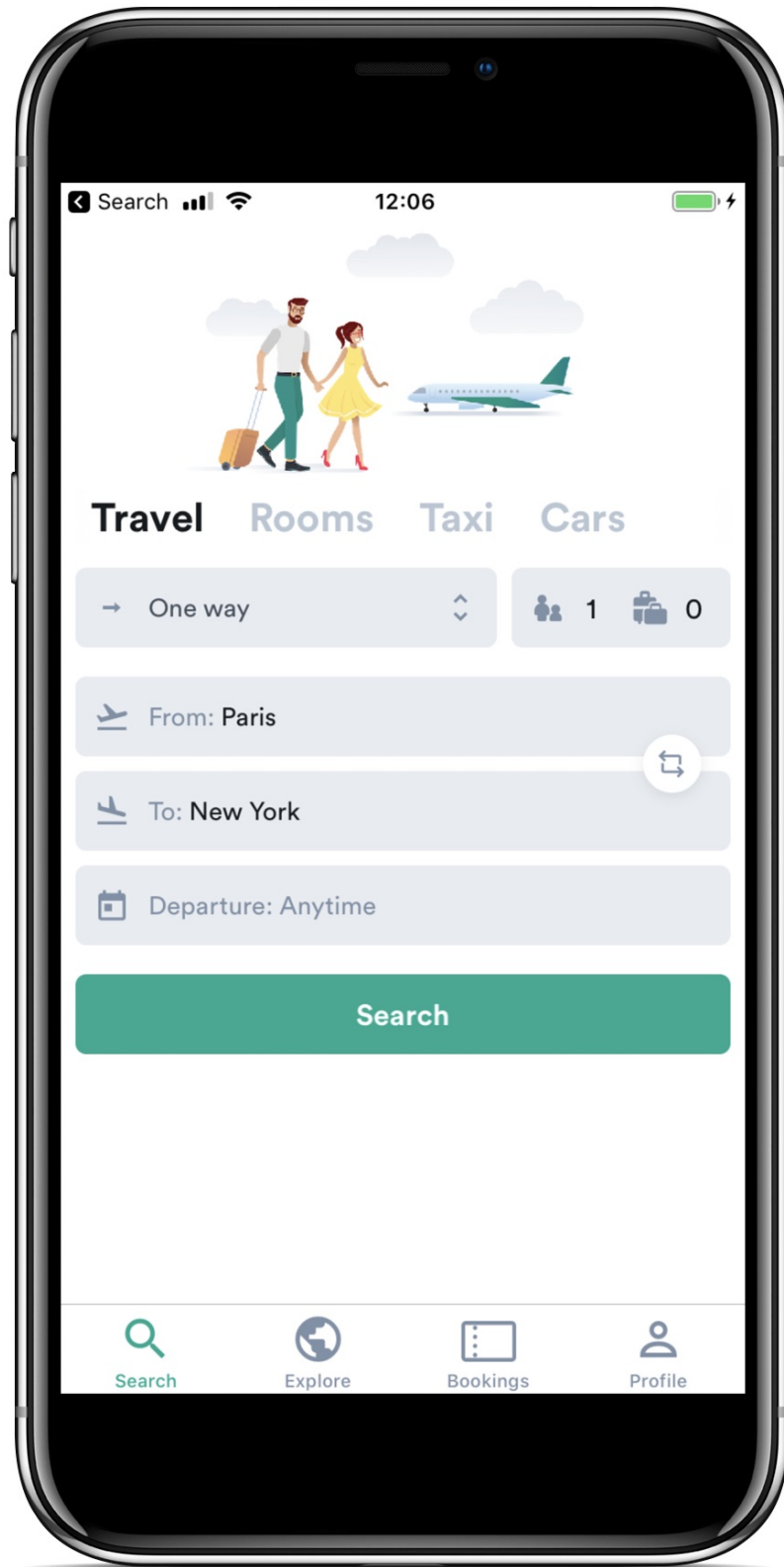
7h 05m

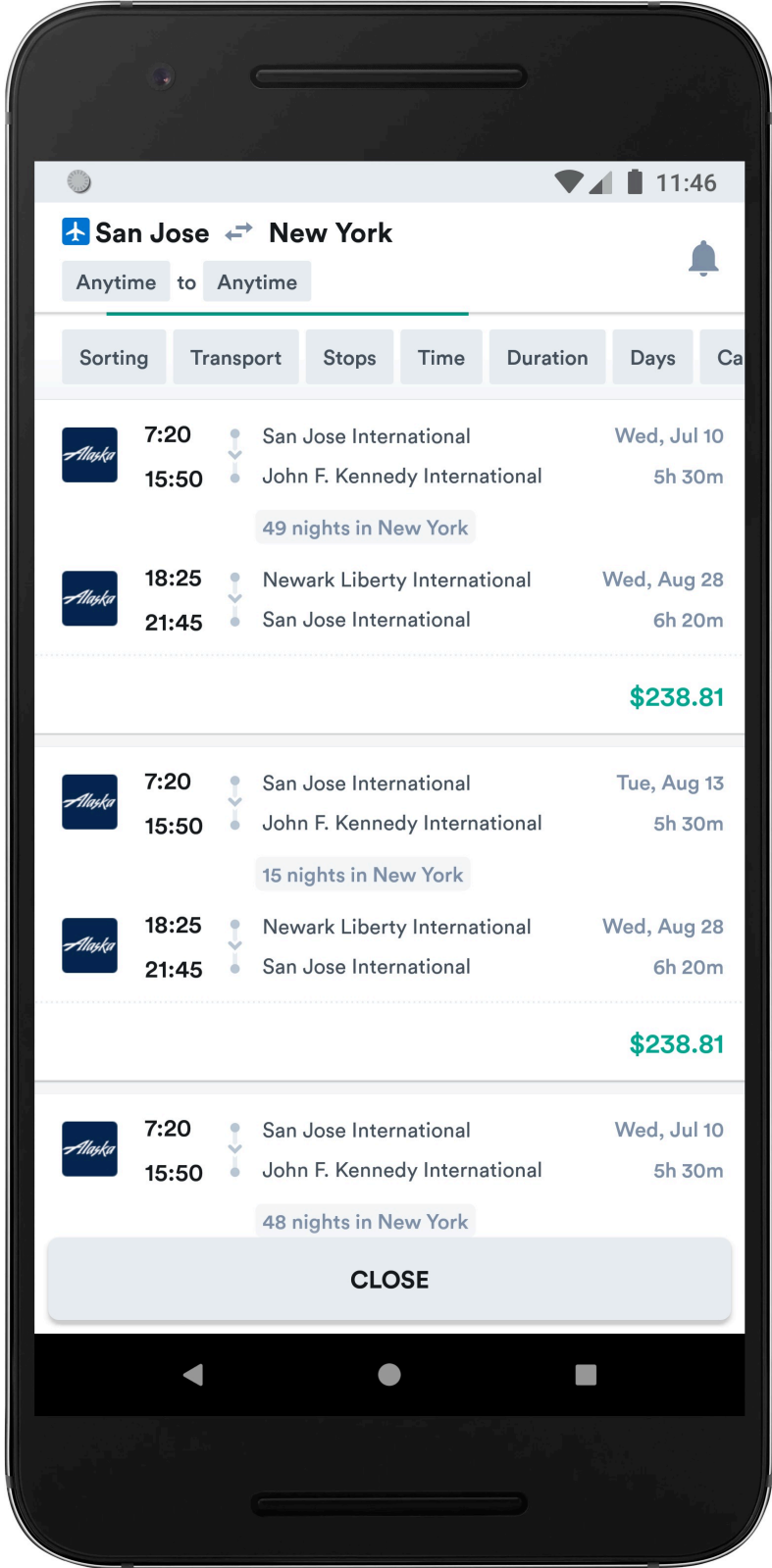
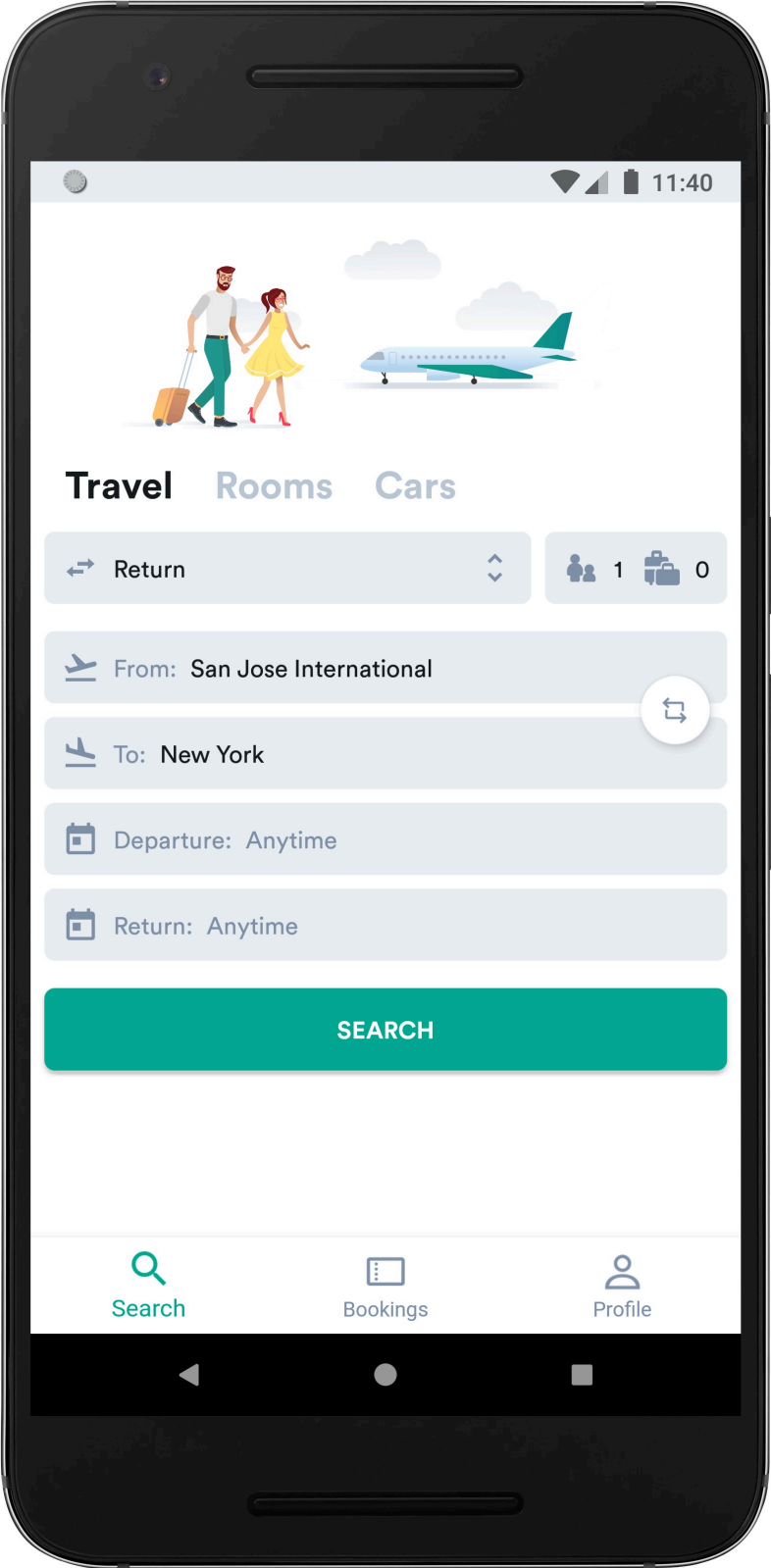
New York (EWR) → Paris (CDG)

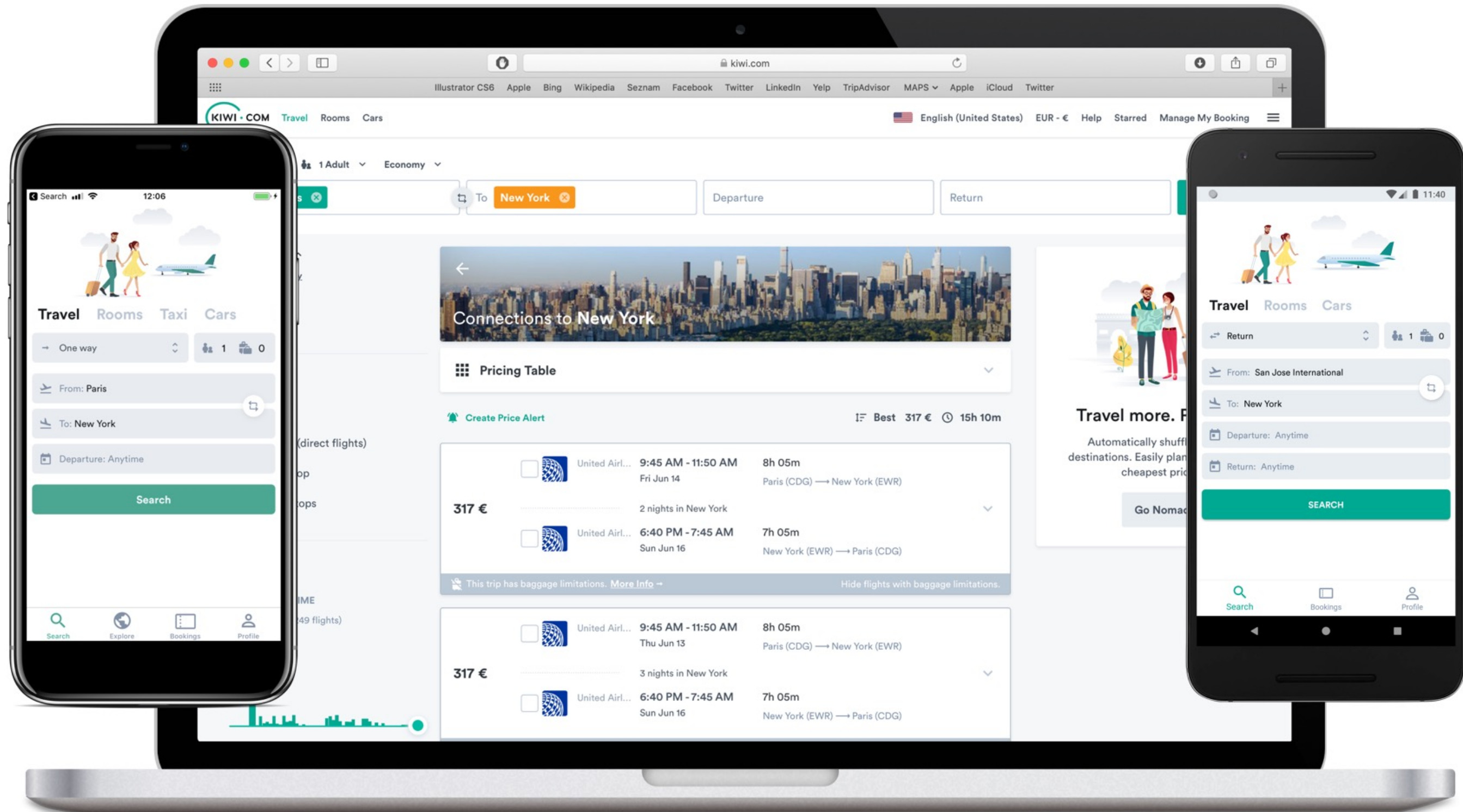
Travel more. Pay less.

Automatically shuffle multiple destinations. Easily plan trips with the cheapest prices.

Go Nomad







3 PLATFORMS

3 FE TEAMS

3 ISOLATED ISLANDS

NEW PROJECT

MARGARITA.KIWI.COM

Illustrator CS6AppleBingWikipediaSeznamFacebookTwitterLinkedInYelpTripAdvisorMAPSAppleiCloudTwitter

KIWI.COM

Use **Margarita** and create your own Kiwi.com for free

We prepared everything you will need — data, web and mobile apps. All is based on modern technologies and it's open source.

Read more

View on GitHub

React Native

for iOS, Android and web


GraphQL

server

Tequila

API from Kiwi.com

1:12



Return

1

From: Prague

To: Oslo

Departure: Sat 18 May

Return: Mon 20 May

Search

Search

Booking

Profile

OPENSOURCE

GITHUB.COM /KIWICOM/MARGARITA

WE HANDLE

- > BACKEND**
- > PAYMENTS**
- > CUSTOMER SUPPORT**

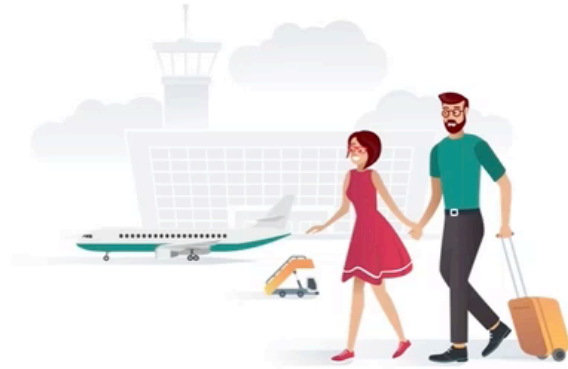
YOU ENJOY

- GRAPHQL
- MULTIPLATFORM UI COMPONENTS
 - PROFIT

HOW TO MULTIPLATFORM UI

REACT NATIVE FIRST

REACT NATIVE WEB
FOR BROWSER



RETURN ONE WAY 1 Adult

From: Prague

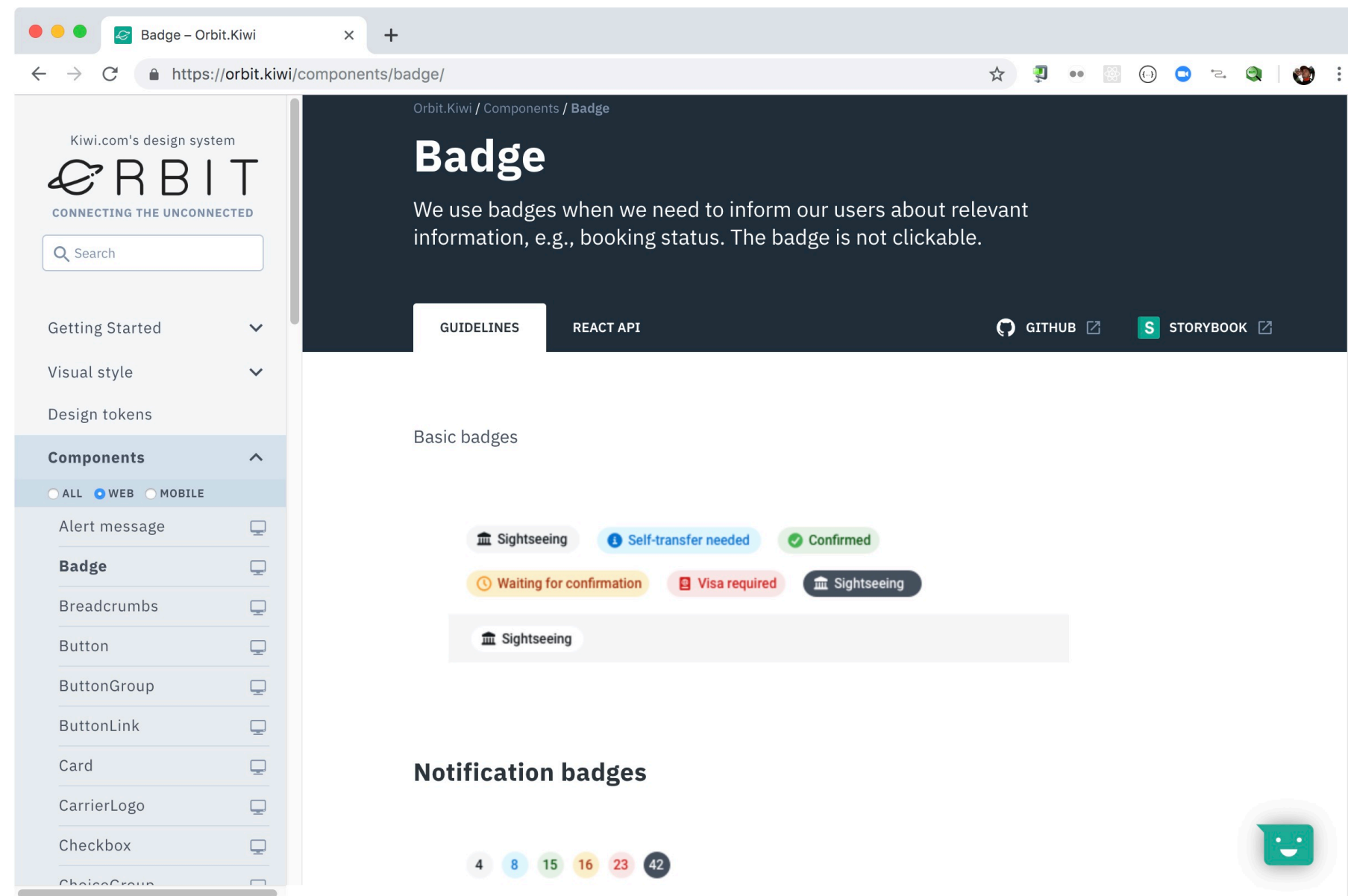
To: Oslo

Departure: 2019-04-02

No return

Search >

REWORK HTTPS://ORBIT.KIWI



SHARED UI

SHARED KNOW-HOW

MULTIPLATFORM ORBIT
NPM PACKAGE SOON™

MARGARITA.KIWI.COM

GITHUB.COM /KIWICOM /MARGARITA

LEARN RELAY

GITHUB.COM/KIWICOM/RELAY-EXAMPLE







LEARN RELAY

- **GRAPHQL FRAGMENTS**
- **SIMPLE FETCHING**
- **ENDLESS PAGINATION**
- **BI-DIRECTIONAL PAGINATION**

Relay pagination showcase

Bi-directional pagination

See: [Refetch Container](#)

















1.  Rome
2.  Paris
3.  Barcelona
4.  San Francisco
5.  Boston
6.  Washington, D.C.
7.  Denver
8.  Las Vegas
9.  Atlanta
10.  Miami
11.  Tampa
12.  Orlando
13.  Manila
14.  New York
15.  London
16.  Los Angeles
17.  Chicago
18.  Athens International
19.  Hartsfield–Jackson Atlanta International
20.  Barcelona–El Prat

< Previous page

Next page >

Incremental pagination 1








See: [Refetch Container](#)

1.  Rome
2.  Paris
3.  Barcelona
4.  San Francisco
5.  Boston
6.  Washington, D.C.
7.  Denver
8.  Las Vegas
9.  Atlanta
10.  Miami
11.  Tampa
12.  Orlando
13.  Manila
14.  New York
15.  London
16.  Los Angeles
17.  Chicago
18.  Athens International
19.  Hartsfield–Jackson Atlanta International
20.  Barcelona–El Prat

Load more!

Incremental pagination 2

See: [Pagination Container](#)

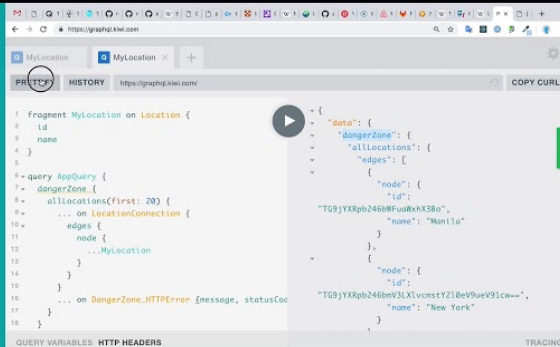
1.  Rome
2.  Paris
3.  Barcelona
4.  San Francisco
5.  Boston
6.  Washington, D.C.
7.  Denver
8.  Las Vegas
9.  Atlanta
10.  Miami
11.  Tampa
12.  Orlando
13.  Manila
14.  New York
15.  London
16.  Los Angeles
17.  Chicago
18.  Athens International
19.  Hartsfield–Jackson Atlanta International
20.  Barcelona–El Prat

Load more!

RELAY TALKS

Martin Zlamal

Relay: Refetching

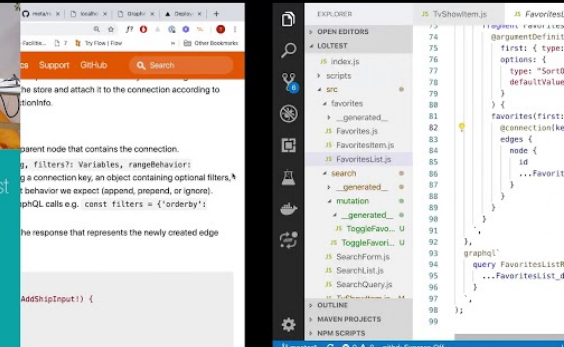


```
1 fragment MyLocation on Location {
2   id
3   name
4 }
5 query AppQuery {
6   dangerZone {
7     allLocations(first: 20) {
8       ... on LocationConnection {
9         edges {
10           ... MyLocation
11         }
12       }
13     }
14     ... on DangerZone_HTTPError { message, statusCode }
15   }
16 }
17
18 QUERY VARIABLES HTTP HEADERS TRACING
```

```
{
  "data": {
    "dangerZone": {
      "allLocations": {
        "edges": [
          {
            "node": {
              "id": "TG9jYXRpb246bWV3LXlvcnN1Y210eV9ueV93c2w=",
              "name": "Manila"
            }
          },
          {
            "node": {
              "id": "TG9jYXRpb246bWV3LXlvcnN1Y210eV9ueV93c2w=",
              "name": "New York"
            }
          }
        ]
      }
    }
  }
}
```

Trond Bergquist

Relay: Mutations - Range Add

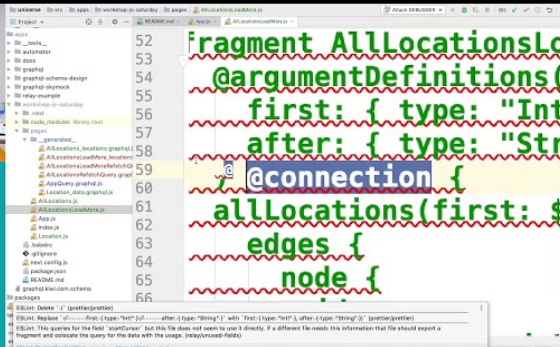


```
1 mutation {
2   addShipInput {
3     ... on ShipCreated {
4       id
5       name
6       range
7     }
8   }
9 }
10
11 QUERY VARIABLES HTTP HEADERS TRACING
```

```
{
  "data": {
    "addShipInput": {
      "id": "TG9jYXRpb246bWV3LXlvcnN1Y210eV9ueV93c2w=",
      "name": "New York",
      "range": 100
    }
  }
}
```

Martin Zlamal

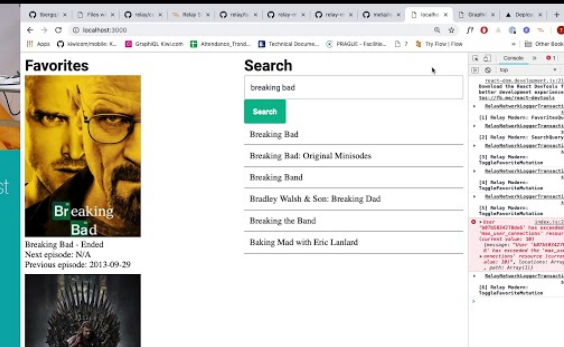
Relay: Pagination



```
1 fragment AllLocationsLo
2 @argumentDefinitions(
3   first: { type: "Int"
4   after: { type: "Str"
5 }
6 @connection {
7   allLocations(first: $
8   edges {
9     node {
10
```

Trond Bergquist

Relay: Mutations - Updater



```
1 mutation {
2   addShipInput {
3     ... on ShipCreated {
4       id
5       name
6       range
7     }
8   }
9 }
10
11 QUERY VARIABLES HTTP HEADERS TRACING
```

BETTER FETCH LIBRARY

@KIWICOM/FETCH

KIWI FETCH

- RETRIES
- TIMEOUTS
- ERROR HANDLING

FETCH – TIMEOUT, RETRIES

```
import fetchWithRetries from '@kiwicom/fetch';

fetchWithRetries(
  'https://example.api',
  {
    fetchTimeout: 15000,
    retryDelays: [1000, 3000],
    // ... standard Fetch options
  },
);
```

FETCH – ERROR HANDLING

```
import fetchWithRetries, { TimeoutError, ResponseError } from '@kiwicom/fetch';

try {
  const response = await fetchWithRetries('//localhost');
} catch (error) {
  if (error instanceof TimeoutError) {
    console.error('request timed out');
  } else if (error instanceof ResponseError) {
    console.error('unsuccessful response', error.response);
  } else {
    console.error('unknown error');
  }
}
```

OPINIONATED ESLINT RULES

@KIWICOM/ESLINT-CONFIG

KIWI ESLINT CONFIG

- **REACT, RN, HOOKS, RELAY**
 - **PRETTIER, JEST**
 - **FLOW, NODE**
 - **EXTENDABLE**

ESLINT - SETUP

```
//.eslintrc.js
module.exports = {
  root: true,
  extends: [
    '@kiwicom/eslint-config',
  ],
};
```

ESLINT RUNNER

- **PARALLEL EXECUTION**
- **ONLY CHANGED FILES**
 - **AUTO FIX**

Michal at Michals-MacBook-Pro-2 in ~/projects/kiwi/graphql on master

\$ yarn lint

yarn run v1.15.2

\$ eslint --print-config . | yarn run eslint-config-prettier-check && yarn run jest --config=.jest-eslint.config.js

\$ /Users/michal/projects/kiwi/graphql/node_modules/.bin/eslint-config-prettier-check

No rules that are unnecessary or conflict with Prettier were found.

\$ /Users/michal/projects/kiwi/graphql/node_modules/.bin/jest --config=.jest-eslint.config.js

PASS	lint	src/packages/monorepo-shipit/src/__tests__/requireAndValidateConfig.test.js
PASS	lint	src/packages/monorepo-shipit/src/iterateConfigs.js
PASS	lint	src/packages/monorepo-shipit/bin/importit.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/vault2env.test.js
PASS	lint	src/packages/monorepo-shipit/bin/shipit.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/graphql-resolve-wrapper.test.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/example-relay.test.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/graphql-bc-checker.test.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/monorepo-shipit.test.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/graphql-global-id.test.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/testExportedPaths.js
PASS	lint	src/packages/monorepo-shipit/config/__tests__/babel-preset-kiwicom.test.js
RUNS	lint	src/packages/monorepo-shipit/config/__tests__/monorepo-npm-publisher.test.js
RUNS	lint	src/packages/monorepo-shipit/config/__tests__/relay.test.js
RUNS	lint	src/packages/monorepo-shipit/config/__tests__/babel-preset-kiwicom.test.js

Test Suites: 53 skipped, 11 passed, 11 of 890 total
Tests: 53 skipped, 11 passed, 64 total
Snapshots: 0 total
Time: 5s

BABEL PRESET

@KIWICOM/BABEL-PRESET-KIWICOM

BABEL PRESET

- FLOW, JSX
- CLASS PROPERTIES
- RELAY FRAGMENTS
- SYNTACTIC SUGAR

GITHUB.COM / KIWICOM /