# What you need to build

Deutsche Post in Berlin needs your help. The city is growing rapidly, new post offices are being built so a new software is needed:

# What we're looking for

- Completeness of solution does the app work as per the requirements?
- Quality of code is your code clean & well written?
- User interface does the page look ok, does it look broken?
- Tests What should be tested?

## Task 1: API

Build a restful Api With Scala and database of your choice to manage the offices and the shipments.

### The API consists of the following resources:

#### **Offices**

**GET** /offices Get all offices

**GET** /offices/:office\_id Get an office given its ID

**POST** /offices Create a new office

PUT /offices/:office\_id Update an office

**DELETE** /offices/:office\_id Delete an office

An office should

have:

- Zip code (unique)
- Name

### **Shipments**

**GET** /shipments Get all shipments

GET /shipments/:shipment\_id Get a shipment given its ID

**POST** /shipments Create a new shipment

PUT /shipments/:shipment\_id Update a shipment

**DELETE** /shipments/:shipment\_id Delete a shipment

### A shipment should have:

- Id (unique)
- Post Office
- $\bullet$  Type:  $_{\odot}$  Letter
  - Package
- Status:
  - o Received and processed in the parcel center of origin,
  - o Received and processed in the destination parcel center,
  - o Delivered
- Weight:
  - o Less than 1kg,
  - o Between 1kg and 5kg,
  - More than 5kg.

### Task 2: UI

Build a single page application where a user can:

- Add, Remove and Update shipments as well as post offices. Please use different routes in the application.
- List all offices and shipments in the system, paging should be supported.
- Filter shipments by shipments ID number, status, location (Post Office) and weight (use the frontend for filtering)

### **Tips**

- Please use the api from Task1 to manage the offices and the packages.
- Please use React to build the UI
- Feel free to use any HTML/CSS framework, e.g. Bootstrap, Material Design,...
- Please do not hesitate to let us know if you have any questions.

#### Result:

Please provide the result as a github repository:

- The project with all source files
- A README document that lists the architectural decisions you made during the development
- main steps of building your solution as well as all assumptions/decisions you made in case of unclear requirements or missing information.

Happy Coding!