

Hello, how are you? I'm Jana and this file here is supposed to guide you through this task. Explain the structure as well as the assumptions I made.

First of all, this project is made using django-rest-framework for the backend, and react js for the front end. I'm also using django rest token authentication for authentication, as well as django's built in permissions. The backend is supposedly complete, but the frontend is definitely not complete and is not up to my standards. But given my circumstance it'll do.

Second, the backend structure. It has 3 applications:

1. Funds
2. Users
3. Loans

### **Funds**

Let's start with funds because it's fairly simple. The funds app is responsible for the allotted amounts for loans. We have 3 types of funds, Big Loans Fund, Medium Loans Fund and Small Loans Fund. Each fund is responsible for its corresponding loans. It has a starting value to represent how the fund started and a current value to measure whether the fund has lost money or gained money on interest.

### **Users**

When it comes to users, we have 3 types. Customers, Bank Personnels and Fund Providers. Customers are those who apply for funds and they have to give some info like monthly salary, current savings, as well as the number of dependents on them. Bank Personnels are the people who create loan plans and decide whether to approve loan requests or to reject them based on each customer's info. Fund providers are those who decide how much goes to which fund, they decide how much money the big loans fund or medium loans fund get to have.

### **Loans**

Loans represent the money people ask for, the loan requests customers apply for, and the profit fund providers make.

Third, the frontend structure.

A simple react project with components folder, assets and pages. The main idea was to create a separate registration for each user type but one universal login page that redirects you to the corresponding home page. The home page is where you're supposed to access all your features. Unfortunately, the frontend code is not complete.

**My vision and assumptions:**

Here's the app flow in my mind, fund providers decide how much each loan fund gets. Then bank personnels create different loan plans whether it be high interest for a long period of time, or low interest for a short time. Customers get to register and then choose the suitable loan plan for themselves and apply for a loan request. Once applied, bank personnels can then view loan requests; they can also view all information about the applying customer in order to determine if they are suitable for this loan request or not. Once loan request status is changed, customers can see if their application is accepted or denied. If denied, customers can apply to other loans, if accepted customers can then start making loan payments.

**Things I would've done:**

1. Completed frontend project
2. Implemented protected routes in react
3. Switched backend django rest tokens to jwt tokens
4. Created api documentation using swagger or something similar