

ASSIGNMENT SREAT-02

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Banking API and Web App

Objective

Your assignment is to build an internal API for a fake financial institution using Python Django framework.

Brief

While modern banks have evolved to serve a plethora of functions, at their core, banks must provide certain basic features. Today, your task is to build the basic HTTP API for one of those banks! Imagine you are designing a backend API for bank employees. It could ultimately be consumed by multiple frontends (web, iOS, Android etc).

Tasks

Implement assignment using:

- Language: Python
- Framework: Django
- Application must have custom login/logout pages with Multi factor/ 2 factor authentication using email based OTP.
- Django Rest framework is recommended for APIs.
- Banking operations must be done through UI as well as from API.

There should be API routes that allow them to:

- ✓ Create a new bank account for a customer, with an initial deposit amount. A single customer may have multiple bank accounts.
- ✓ Transfer amounts between any two accounts, including those owned by different customers.
- ✓ Retrieve balances for a given account.
- ✓ Retrieve transfer history for a given account.
- ✓ Write tests for your business logic
- ✓ Add application screenshots in documents.

Feel free to pre-populate your customers with the following:

```
[  
  {  
    "id": 1,
```

```
"name": "Arisha Barron"
},
{
  "id": 2,
  "name": "Branden Gibson"
},
{
  "id": 3,
  "name": "Rhonda Church"
},
{
  "id": 4,
  "name": "Georgina Hazel"
}
]
```

You are expected to design any other required models and routes for your API.

Evaluation Criteria

- Python django best practices
- Completeness: did you complete the features?
- Correctness: does the functionality act in sensible, thought-out ways?
- Maintainability: is it written in a clean, maintainable way?
- Testing: is the system adequately tested?
- Documentation: is the API well-documented?

Code Submit

Please organize, design, test and document your code- then push your changes to the Github/Gitlab master branch. After you have pushed your code, you may submit the assignment to the HR with documentation.

All the best and happy coding.