Limitless - Skill Assessment Project

Challenge Description

The objective of this sample project is to evaluate the candidate's skill solving small tasks while still providing a representative setup and environment, similar to the actual project.

Tech Stack:

- Python v3.11
- Django v4.2
- Vue JS v3
- Tailwind v3.4
- Daisy UI v3.9

Evaluation criteria (in order of importance):

- Working code
- Ability to be consistent with project structure and styling
- Quality/Elegance of the solution

Assignments

Depending on the role you're being evaluated, choose one of the assignments below.

Tasks marked as *(Bonus)* are optional, but are small extra challenges that add to the evaluation.

For all of them:

- Setup the Project, start the services and load the page on http://localhost:8000
- *(Bonus)* Start a git repository and keep track of changes in a single branch while developing the challenge.

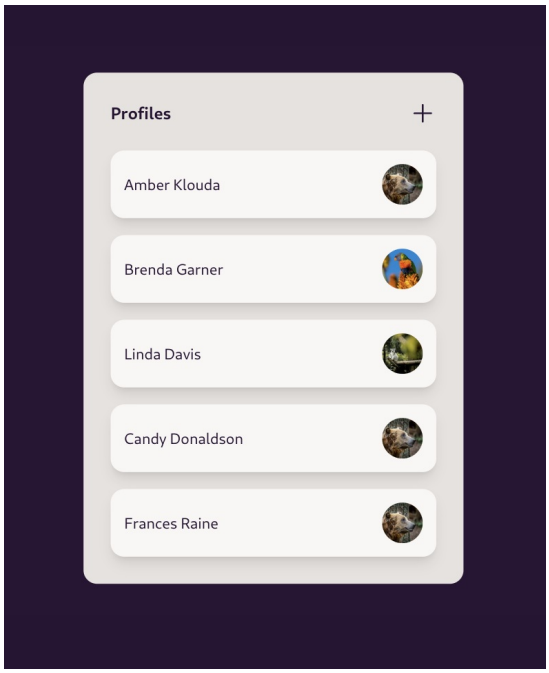
Not only you're allowed, you're actually encouraged to ask questions and make sure that the requirements in the assignment are clear.

Automated/AI tools are free to use.

Make sure to run the linters before submitting (see "Local Development" for pre-commit).

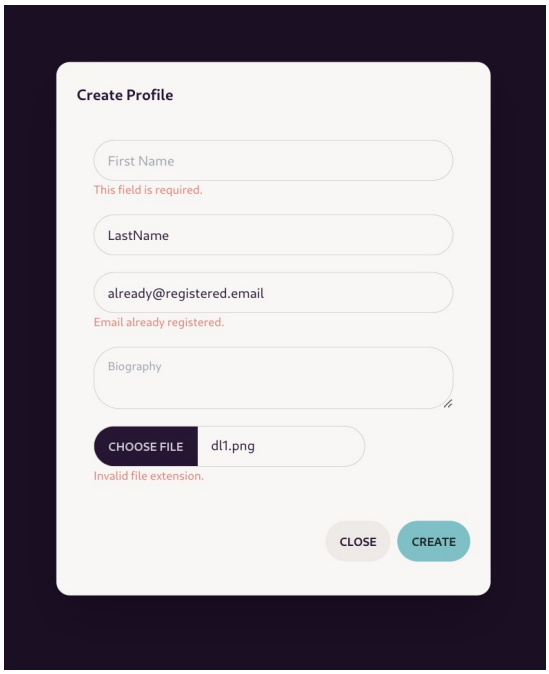
Full Stack Assignment

Make the "Create Profile" modal fully functional (triggered by the + icon on the Profile card):



The backend needs to validate the data received from the frontend and return 201 with the data of the newly create profile, on success.

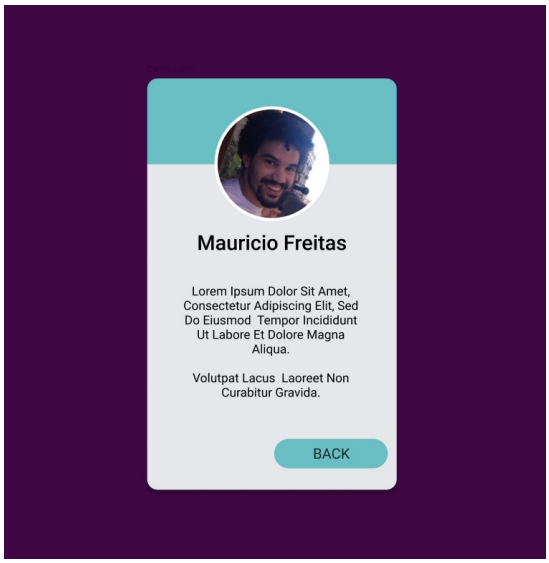
If there are validation errors, the messages need to be indicated in the modal, under each fields, for example:



(Bonus): Solve the problem using a single serializer.

Frontend Only Assignment

Style `ProfileDetailsView` to look and display data like in the following mock:



Use DaisyUI's components and theme colors as much as possible.

Change the cursor inside the ProfileEntry cards to a pointer.

(Bonus) Display an Avatar Placeholder, both in `ProfileListView` and `ProfileDetailsView`, if they don't have an image uploaded. Use the first and last name initials.

Environment Setup & Development

Start by copying the environment file template and building the docker images.

```
cp env.template .env
docker compose build
```

Install frontend requirements and build it:

```
cd frontend/
npm install
npm run build-only
cd ..
```

Start containers:

```
docker compose up -d
```

It's likely that the webapp service is loaded before the database, returning the following error:

```
django.db.utils.OperationalError: connection failed: Connection refused
Is the server running on that host and accepting TCP/IP connections?
```

Fix it by restarting the `webapp` service:

```
docker compose restart webapp
```

Setup Django:

```
docker compose run --rm webapp manage.py migrate
docker compose run --rm webapp manage.py collectstatic --no-input
```

To have some data to test, it's possible to generate some profile using the management command:

```
docker compose run --rm webapp manage.py generate_profiles
```

To have access to admin panel it's necessary to create a super user:

```
docker compose run --rm webapp manage.py createsuperuser
```

To access the services logs:

```
docker compose logs webapp -f
docker compose logs vite -f
```

Local Development

```
python -m venv .venv --prompt limitless
source .venv/bin/activate
pip install -e .[dev]
pre-commit install
```

The project is setup so that the `manage.py` script is available directly in the path. To generate migrations, for example, it's possible to simply run

```
manage.py makemigrations
```