Start Up Investor

Overview

The Startup Predictor API is a web-based application designed to provide users with information on startup companies, including estimated ROI values and details on individual companies.

API Endpoints

- **/roi/**: This endpoint allows users to input a startup name and investment amount and queries the database to calculate the estimated ROI value.

  Method: POST

  Input Parameters:
  - *organization_name***:** the name of the startup company to calculate the ROI for (string)
  - *investment_amount*: the amount of investment in the startup company (float)

  Response:
  The endpoint returns a JSON object with the following attributes:

  - *organization_name***:** the name of the startup company to calculate the ROI for (string)
  - *roi*: the estimated ROI value for the company (float)

  The user is not allowed to enter a startup name that is not present in the database. If the ROI is not found in the database, the endpoint returns a 404 error.

- **/topPicks/:** This endpoint displays the top 10 startup companies with the highest ROI values from the database.

  Method: GET

  Response:
  The endpoint displays the top 10 startup companies with the highest ROI values from the database. The endpoint returns a JSON object containing the names of the top 10 startups, which can be clicked to view further details. Clicking on a startup name redirects the user to the **/details/id/** endpoint to view more information about the company.

- **/details/id/:** This endpoint displays the details of a startup company based on the unique ID assigned to each company in the database. The user can obtain the ID by querying the **/roi/** endpoint using the startup name or can access this endpoint by clicking on a startup name returned by the **/topPicks/** endpoint.

  Method: GET

  Response:

  If the startup is found in the database, the endpoint returns a JSON object with the following attributes. If a particular attribute has no value in the database, it will not be displayed in the response:

  - *organization_name*: the name of the startup company (string)
  - *last_funding_amount_currency_usd*: the amount of the last funding round in USD (float)
  - *industries*: the industries that the startup operates in (string)
  - *headquarters_location*: the location of the startup's headquarters (string)
  - *description*: a brief description of the startup (string)
  - *founded_date*: the date when the startup was founded (string)
  - *estimated_revenue_range*: the estimated revenue range for the startup (string)
  - *website*: the startup's website URL (string) founders: the names of the startup's
  - founders (string)
  - *number_of_funding_rounds*: the total number of funding rounds for the startup (integer)
  - *funding_status*: the status of the startup's funding (string)
  - *last_funding_type*: the type of the last funding round (string)
  - *last_equity_funding_amount_currency_usd*: the amount of the last equity funding round in USD (float)
  - *last_equity_funding_type*: the type of the last equity funding round (string)
  - *total_equity_funding_amount_currency_usd*: the total amount of equity funding for the startup in USD (float)
  - *total_funding_amount_currency_usd*: the total amount of funding for the startup in USD (float)

  If the startup is not found in the database, the endpoint returns a 404 error.

Installation and Usage

1. Clone the repository to your local machine.
2. Install the required dependencies by running `*pip install -r requirements.txt*`.
3. Set up the database by running the appropriate commands (`*python manage.py migrate*`).
4. Run the server with `*python manage.py runserver*`.

5. Use a web browser or API client to access the endpoints.

Technologies Used

The Startup Predictor API was built using the following technologies:

1. Python
2. Django
3. PostgreSQL

Python Packages Used

The following Python packages were used in this project:

- asgiref==3.6.0
- Django==4.1.6
- joblib==1.2.0
- numpy==1.24.2
- pandas==1.5.3
- psycopg2-binary==2.9.6
- python-dateutil==2.8.2
- pytz==2022.7.1
- scikit-learn==1.2.1
- scipy==1.10.1
- six==1.16.0
- sqlparse==0.4.3
- threadpoolctl==3.1.0
- tzdata==2022.7
- Gunicorn

Contributors

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