

TEST TASK: PYTHON DEVELOPER

1. SOCIAL NETWORK

Object of this task is to create a simple REST API. You can use one framework from this list (**Django Rest Framework, Flask or FastAPI**) and all libraries which you are prefer to use with this frameworks.

Basic models:

- User
- Post (always made by a user)

Basic Features:

- user signup
- user login
- post creation
- post like
- post unlike
- analytics about how many likes was made. Example url
/api/analytics/?date_from=2020-02-02&date_to=2020-02-15 . API should return analytics aggregated by day.
- user activity an endpoint which will show when user was login last time and when he makes a last request to the service.

Requirements:

- Implement token authentication (JWT is preferred)

2. AUTOMATED BOT

Object of this bot demonstrate functionalities of the system according to defined rules. This bot should read rules from a config file (in any format chosen by the candidate), but should have following fields (all integers, candidate can rename as they see fit).

- number_of_users
- max_posts_per_user

- number_of_users
- max_posts_per_user
- max_likes_per_user

Bot should read the configuration and create this activity:

- signup users (number provided in config)
- each user creates random number of posts with any content (up to max_posts_per_user)
- After creating the signup and posting activity, posts should be liked randomly, posts can be liked multiple times

Notes:

- Clean and usable REST API is important
- Bot this is just separate python script, not a django management command or etc.
- the project is not defined in detail, the candidate should use their best judgment for every non-specified requirements (including chosen tech, third party apps, etc), however
- every decision must be explained and backed by arguments in the interview
- Result should be sent by providing a Git url. This is a mandatory requirement.