



Python Backend Developer Assignment

Task 1:

Shortly - You are to develop a web app which can create a short url for a given url.

What is Expected:

1. A form where we can post any url and obtain a short version of the url.
2. Accessing the short url should redirect to the random url.
3. Design and code models/views/forms in your choice of framework.
4. Bonus: Code to handle all edge cases and optimize for space/time etc.

Task 2:

PasteLockly - You are to develop a web app where people can anonymously share text snippets.

What is Expected:

1. A form where we can enter a text and create a shareable url.
2. Shareable url should lead to the view only snippet.
3. Optionally, the creator of the snippet url can add a secret key which will be used to encrypt the content in the database.
4. The viewer must supply the key to decrypt the content.

Task 3:

Web Scraper – You are to develop a web app where Data must be scrapped every 5 mins from a URL and display it in the Card Layout.

What is Expected:

1. Build a stand-alone web app using any Python Framework
2. Scrape the 'Nifty 50' table (URL in Point 3) values every 5 minutes (in the background and on a different thread) and persist in a Redis instance.
3. URL:
http://www.nseindia.com/live_market/dynaContent/live_analysis/top_gainers_losers.htm?cat=G
4. On the webapp, display the values stored in Redis in a cards layout (unlike the original table).
Use valid HTML5 + CSS3 to make the view look nice

Points to Follow:

- Focus on code quality and architecture.
- How will you scale this solution, where will be the failure points as you scale?

Task Delivery:

- Comm

it the code to a GitHub repo, host the app on a free AWS instance and submit the details.