

Project Report

Project Title: Random Quote Generator using Python

1. Introduction

This project demonstrates how to fetch and display random motivational quotes using Python and public APIs. It emphasizes the use of the `requests` library to make HTTP GET requests and handle JSON responses.

2. Technologies and Tools Used

Component	Description
Language	Python 3.x
Library Used	`requests`
IDE	Any (VSCode, PyCharm, IDLE, etc.)
OS	Platform Independent

3. Setup Instructions

- Install Python from: <https://www.python.org>
- Install requests library using:
pip install requests

4. Project Description

The function `generate_quote()` makes a GET request to the public API endpoint, extracts the data in JSON format, and displays it. It also handles any error using conditionals.

Script (quote.py):

```
import requests

,

def generate_quote():
    ,
    response = requests.get("https://api.quotable.io/random")
    ,
    if response.status_code == 200:
        ,
        data = response.json()
    ,
```

```
        print(f"{data['author']} - {data['content']}")
    ,
    else:
    ,
        print("Error fetching quote!")
    ,
generate_quote()
```

5. Sample Output

Arnold Schwarzenegger - If you want to turn a vision into reality, you have to give 100% and never stop believing in your dream.

6. Applications

- Can be used in motivation apps
- Integrated into productivity tools
- Used for daily quote popups or widgets

7. Conclusion

This project provided a basic understanding of how Python interacts with web APIs. It's a beginner-friendly project that introduces networking, error handling, and JSON parsing.