# Job Description: Backend Developer

**Overview:**

We are looking for a talented Backend Developer to join our dynamic team. As part of the application process, candidates will be required to complete a small assignment that involves integrating several technologies using Django as the backend framework. This assignment will help us assess your skills and fit for our team.

**Assignment Overview:**

The assignment involves creating a comprehensive template for integrating the following technologies:

- **Google OAuth 2.0 API** for user authentication.
- **Google Picker API** for file uploads and reading data in JSON format.
- A **WebSocket** for real-time communication between users.

**Detailed Requirements:**

1. **Google Authentication Flow**

   - Create an endpoint that initiates the Google Auth flow.
   - Implement a callback URL where Google sends the authentication data.
   - Simply return the data received from Google.

2. **Google Drive Integration**

   - Develop an endpoint that allows users to connect their Google Drive.
   - Implement functionality for users to upload files to their Google Drive.
   - Provide an option to fetch and download files locally from Google Drive.

3. **WebSocket for User Chat**

   - Implement a WebSocket that enables real-time chat between two pre-configured users.
   - Ensure that messages are sent and received in real-time.

**Submission Guidelines:**

- Host your application on any hosting provider like Railway, Render, Heroku, etc.
- Provide a Postman collection that includes all the API endpoints you have created.
- Ensure that the Postman collection is well-documented, detailing the request and response formats.

To complete your submission, please follow these steps:

1. **GitHub Repository:**

   - Create a GitHub repository containing all relevant code and Postman collections.
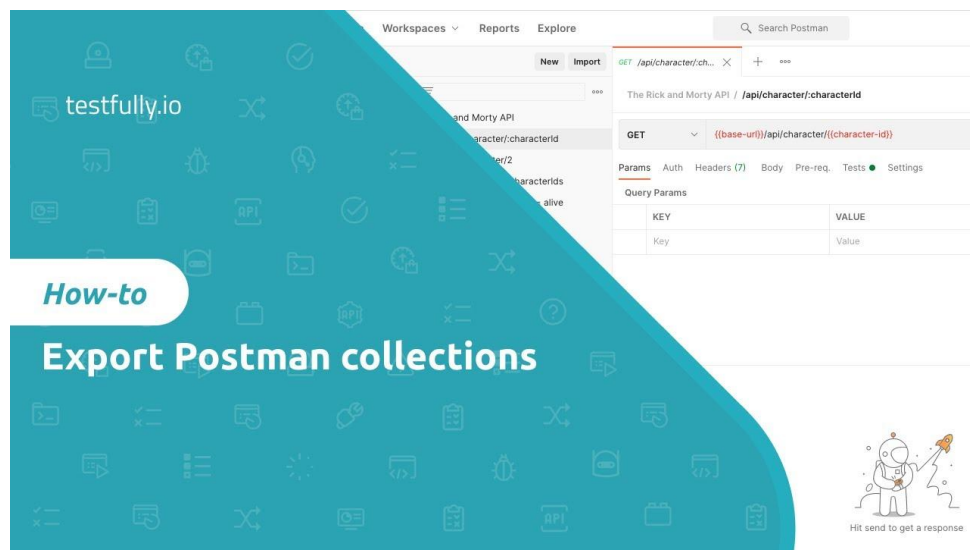   - Ensure the repository includes a comprehensive README file.

2. **README File:**

   The README file must provide clear and detailed instructions on how to:

   - Run the API
   - Test each API endpoint

3. **Video Explanation: (Mandatory)**

   - Create a brief video explaining your project.
   - Upload the video to YouTube or Loom and include the link in your application materials.

**Resources:**



[https://youtu.be/BWofbshDneQ](https://youtu.be/BWofbshDneQ)

**Qualifications:**

- Proficiency in Python and the Django framework.

- Experience with integrating 3rd party API's.

- Strong understanding of REST-ful API design and implementation.

- Familiarity with WebSocket implementation for real-time communication.

- Ability to work collaboratively in a team environment and communicate effectively.

**Preferred Skills:**

- Experience with cloud services and deployment (e.g. AWS, Google Cloud)

- Knowledge of database management systems (e.g. PostgreSQL, MongoDB)

- Familiarity with version control systems (e.g. GitHub)