**Coding Challenge**

3) Question: what are the key things you would consider when creating/consuming an API to ensure that it is secure and reliable?

**Answer :**

When creating an API, the following security and reliability considerations should be taken into account:

* Authentication and authorization: Implementing proper authentication and authorization mechanisms such as OAuth or JWT to ensure that only authorized users can access the API.
* Input validation: Validate all incoming data to ensure it is in the expected format and free of malicious content.
* Encryption: Use encryption to protect sensitive data transmitted over the network.
* Rate limiting: Implement rate limiting to prevent abuse and protect against denial of service attacks.
* Logging and monitoring: Keep a log of all API activity and monitor it regularly to detect and respond to security incidents.
* Backups: Regularly back up data to ensure it can be recovered in the event of a disaster.
* Disaster recovery: Have a plan in place for disaster recovery to minimize downtime and data loss in the event of a security incident.

When consuming an API, the following considerations should be taken into account:

* Documentation: Ensure that the API is well documented and that the documentation provides clear instructions on how to use it securely.
* Security: Verify the security measures in place for the API, such as encryption and authentication, to ensure sensitive data is protected.
* Reliability: Evaluate the reliability of the API, including its uptime, response times, and error handling, to ensure it meets your needs.
* Support: Ensure that support is available if you need help using the API or if there is an issue with it.