# UD4. Activity 5

Read the following article about REST API and extract the main ideas in a summary of no more than 20 lines: https://blog.hubspot.com/website/what-is-rest-api

REST is a set of guidelines that software can use to communicate over the internet in order to make integrations simple and scalable. REST stands for Representational State Transfer. This means that when a client requests a resource using a REST API, the server transfers back the current state of the resource in a standardized representation. The REST API must follow six requirements to fully benefit from the functionality that REST provides.

1. Client-Server Separation
2. Uniform Interface
3. Stateless
4. Layered System
5. Cacheable
6. Code on Demand

The REST framework was introduced in 2000, and today it shapes how we view, modify, and transfer content online. Actually most of the popular and cloud companies use REST APIs for their applications like Twitter, Spotify, Instagram, etc.

The main benefits of this type of API is that it is flexible, scalable and incorporates existing web technologies making it much easier to build and use.

To use a REST API, the web applications with publicly available APIs, will have documentation available for the developers. Many APIs will require an API key to use it. API keys are often sent with client requests to identify the client to the server.