



# Web Services: **API** and **YouTube.**



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# What is a Web Service?

# 1

## Web Services

### Definition

Web services are a key component in achieving **interoperability** between applications and systems on the web, allowing them to **communicate** and share data seamlessly. They play a **crucial** role in the development and operation of modern web applications.





# Benefits/Properties of Web Services

1

Interoperability

2

Loose Coupling

3

Location Transparency

4

Communication Protocols



# Difference between SOAP and REST

# 2

## 2 approach, 2 scenarios

### SOAP

SOAP is a messaging protocol that allows programs running on disparate operating systems to communicate with each other. It uses XML for message format and relies on application layer protocols, most often Hypertext Transfer Protocol (HTTP) or Simple Mail Transfer Protocol (SMTP), for message negotiation and transmission.

### REST

REST is an architectural style for web communication, facilitating interaction between systems. These systems are stateless, using standard HTTP methods for data transactions. Known for its simplicity and scalability, REST is often used in cloud services and social networking sites. A web service following REST principles is termed RESTful.

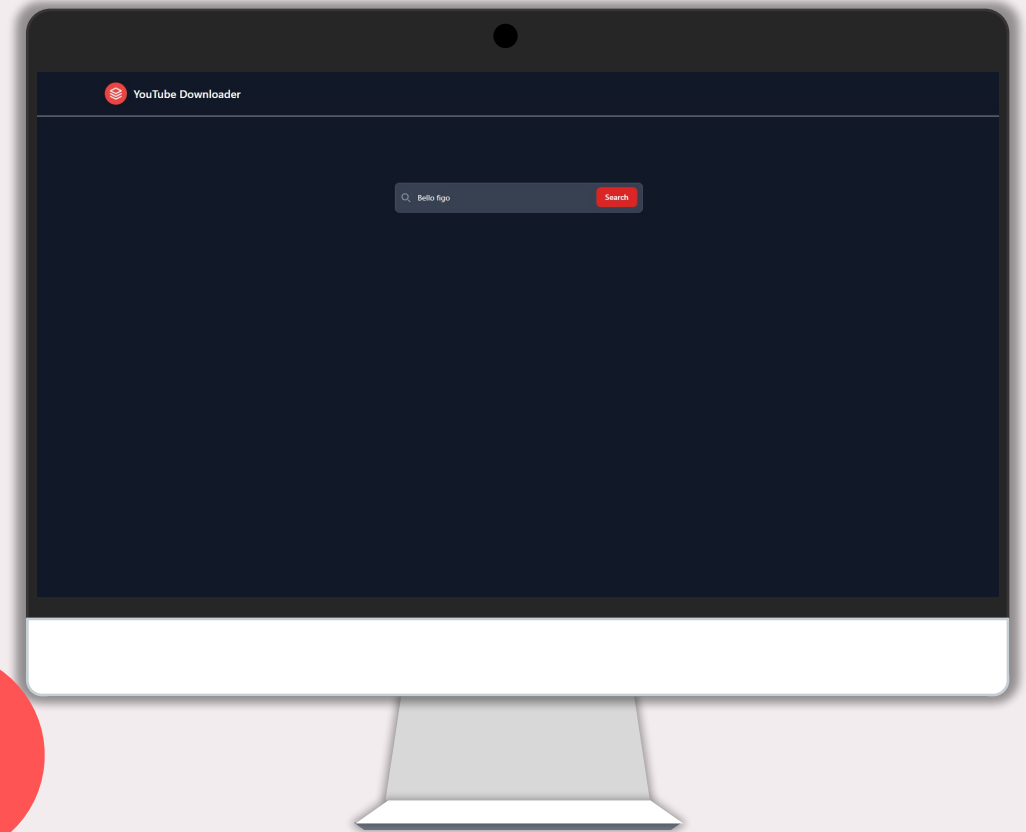


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# Youtube **Downloader**

It is a software that allows to search for videos on YouTube and the ability to download them in various formats and qualities.







Client

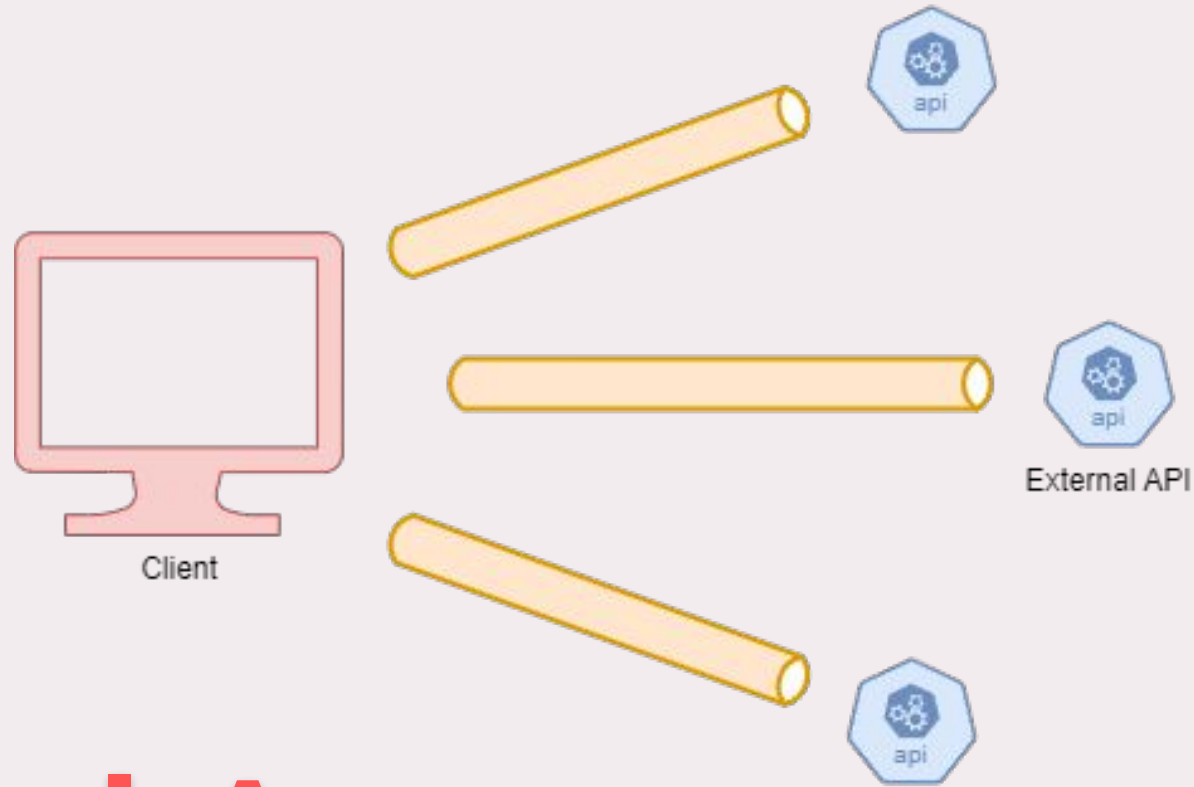


My API



External API

# My App Scheme



# Normal App Scheme



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