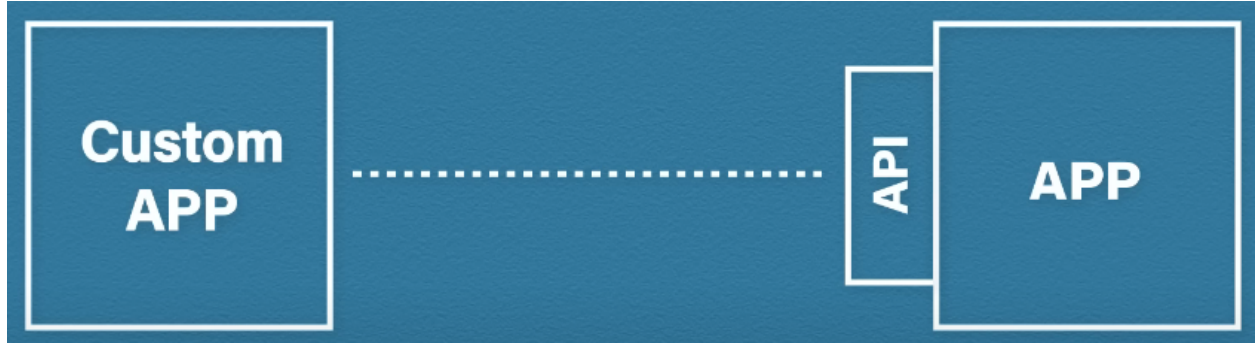


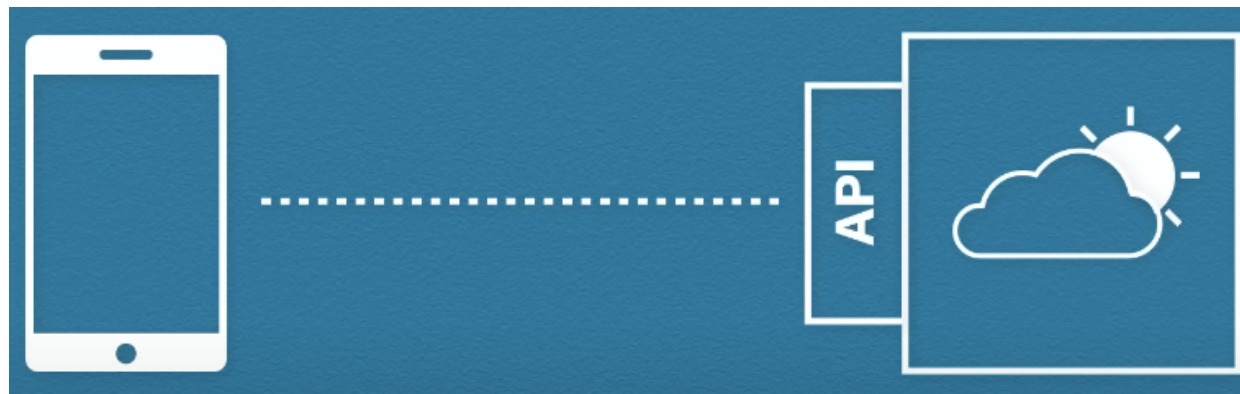
What is an API?

- API (Application Programming Interface) is a system that allows communication between two software components
- An API server is the connection between the client and the source of the data
- APIs connect data between applications

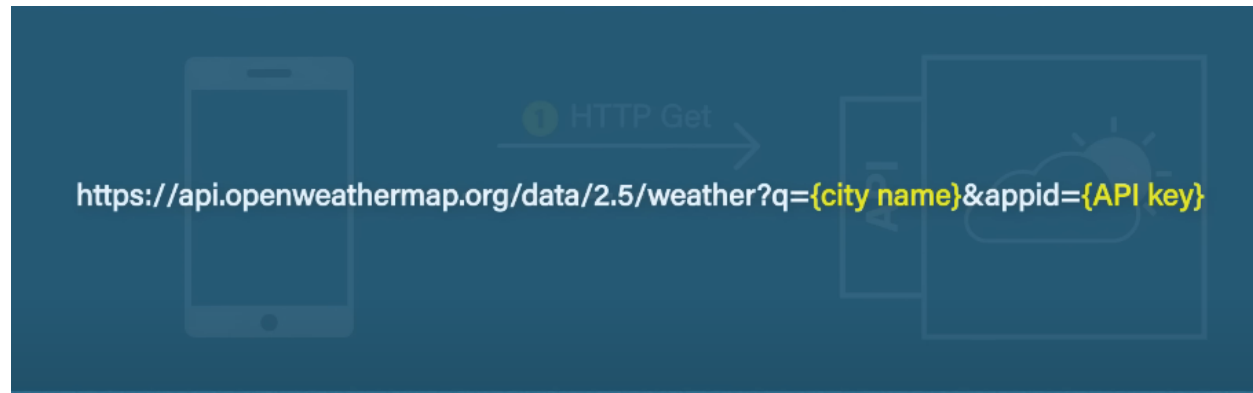


How does an API work?

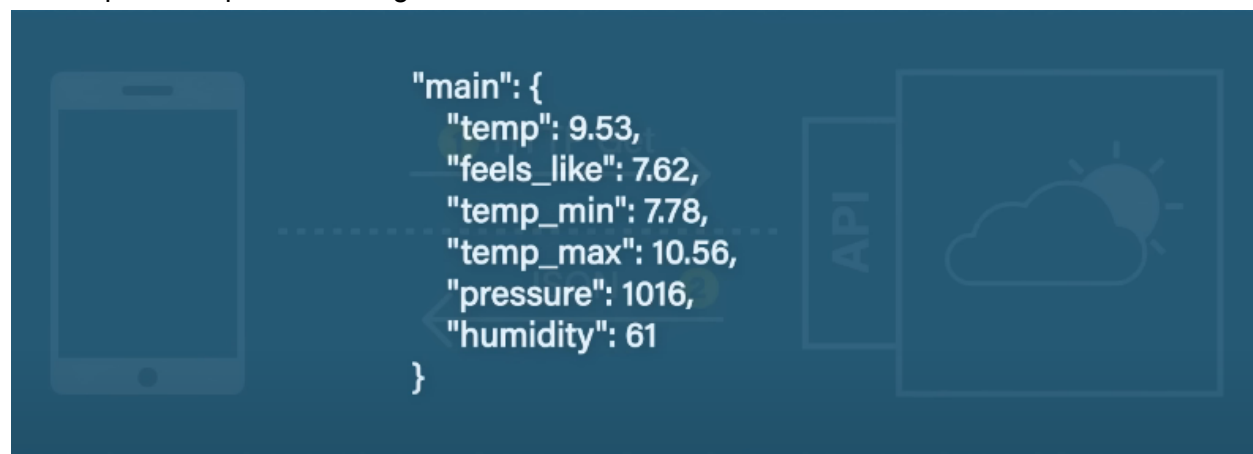
- When an application requests information, the API server will process the request and return an appropriate response
 - HTTP Methods used to request data
 - POST - creates on the web application
 - GET - reads from the web application
 - PUT - updates information (replace)
 - PATCH - updates information (modify)
 - DELETE - deletes information
 - The response is usually sent back in a JSON or XML format
- Take a mobile app and an existing weather application



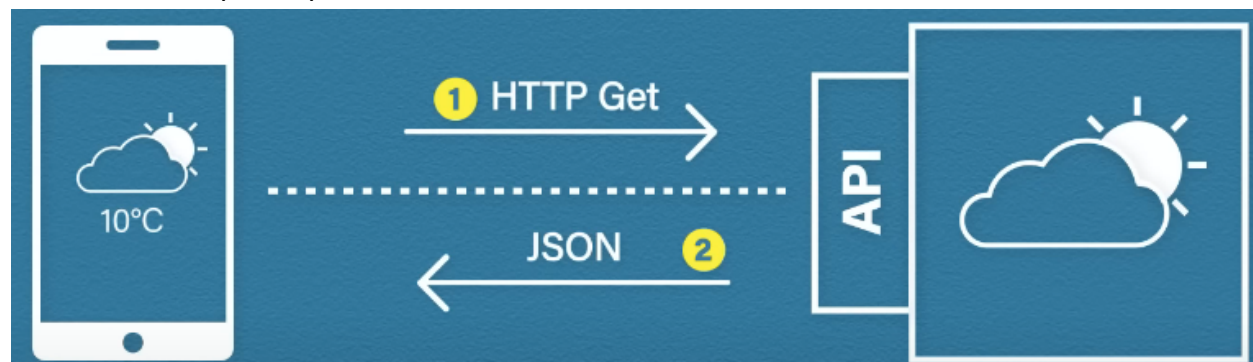
-
- We can send an API GET request from our mobile application to the weather application (see below for an example)



-
- An API key allows the application to keep track of the number of requests sent as well as prevent spams that might take the server offline



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- Here is an example response in JSON format




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- This information could be taken and programmed into our mobile application to display it.

API Use Cases

- API servers in connection to social media can allow third-party applications access and authorization to edit data such as retrieving user information and making posts
- Logging into a website requires authentication by checking the inputted credentials. If the login credentials are correct then the system will allow you to proceed.

Source

-  APIs Explained | Real World Examples
- <https://blog.interactor.com/what-is-an-api-server>