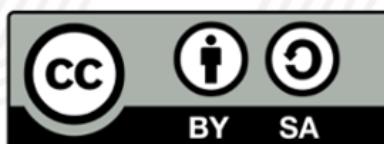
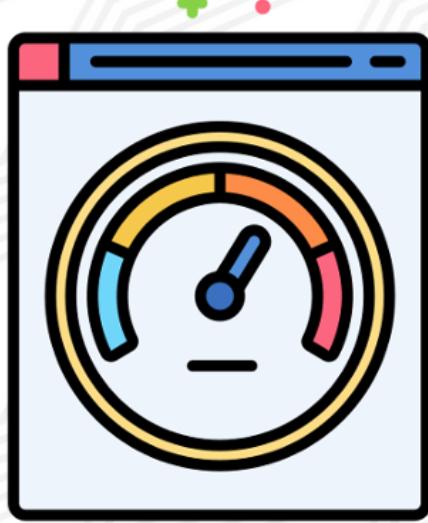


API 360°

PLAY TO LEARN API CONCEPTS!





ACTIVITY OF FILTERING, SORTING AND AGGREGATING API DATA TO BUILD INDICATORS AND CHARTS. THE AIM IS TO MEASURE AND UNDERSTAND API USAGES.

IT GLOBALLY HELPS TO STEER AN API PROGRAM.

API ANALYTICS



THE API BACKEND IS AN IT SYSTEM,
EXPOSING ONE OR SEVERAL APIs.

API BACKEND



THE API CONSUMER IS A DEVELOPER. THIS IS THE PERSON WHO USES THE API.

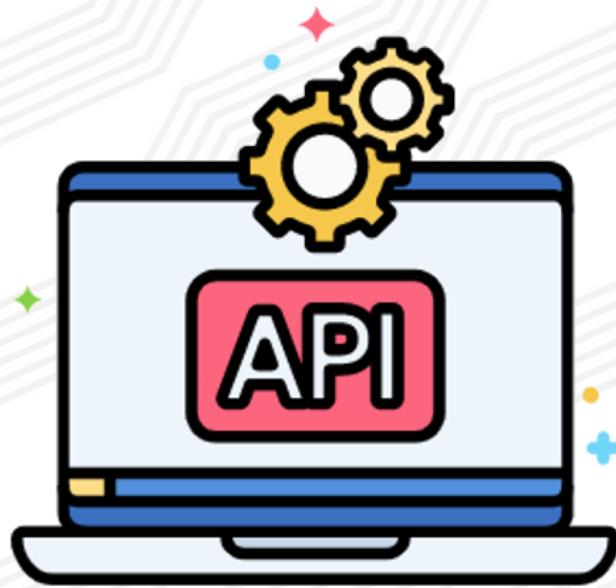
THE API CONSUMER IS INTERESTED BY APIs TO ADD FEATURES ON HIS/HER APPLICATION.

API CONSUMER



THE HOST IS THE PLACE WHERE THE API BACKEND IS LOCATED. IT CAN EITHER BE ON-PREMISE SERVERS OR IN THE CLOUD.

API HOST



AN APPLICATION PROGRAMMING INTERFACE (API) IS A COMPUTING INTERFACE WHICH DEFINES INTERACTIONS BETWEEN MULTIPLE SOFTWARE INTERMEDIARIES.

WEB APIs ENABLE DEVELOPERS TO ACCESS A SYSTEM'S SERVICES REMOTELY AND WITHOUT KNOWING THE SYSTEM'S DETAILS.

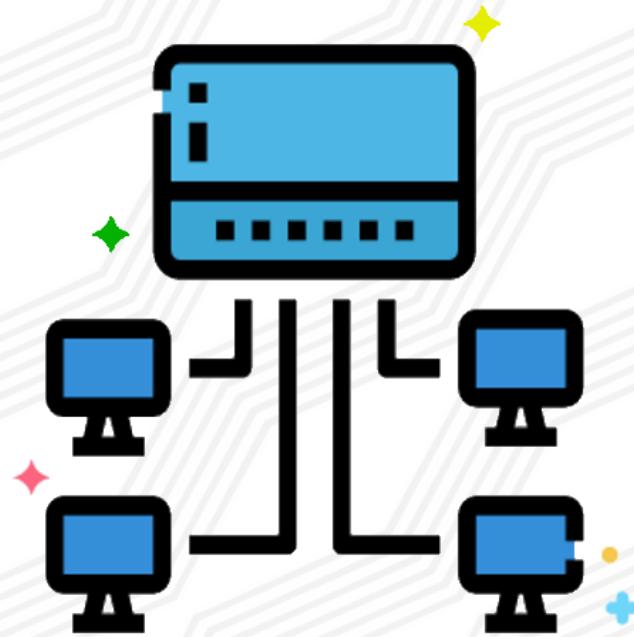
API



AN API KEY IS A STRING THAT THE CONSUMER PROVIDES WHEN CALLING AN API.

THE API KEY IS USED TO IDENTIFY A CONSUMER.

API KEY



APPLICATIVE "PROXY" WHICH ENABLES TO CENTRALIZE, STANDARDIZE AND SECURE THE EXPOSITION OF ONE OR SEVERAL APIs.

THE API MANAGER APPLIES POLICIES ON API CALLS AND ROUTES IT TO THE API BACKENDS.

API MANAGER



THE API MONETIZATION IS USING APIS TO MAKE MONEY, EITHER DIRECTLY OR INDIRECTLY.

API MONETIZATION



THE API OWNER IS ACCOUNTABLE FOR ONE OR SEVERAL APIs. HIS/HER ROLE IS TO DEFINE THE ROADMAP OF THE API, AS A PRODUCT AND TO COMMUNICATE AROUND IT. TO DO SO, THE API OWNER IS CLOSE TO THE COMMUNITY OF USERS.

THE API OWNER IS ALSO THE POINT OF CONTACT FOR CONSUMERS.

API OWNER



WEBSITE ON WHICH CONSUMERS CAN FIND INFORMATION ON EXPOSED APIS. IT IS ALSO POSSIBLE TO TRY APIS, AND REGISTER TO CONSUME IT.

THE API PORTAL IS ALSO CALLED "THE DEVELOPER PORTAL".

API PORTAL



THE API PRODUCER IS A DEVELOPER. THIS IS THE PERSON WHO CREATES THE API.

THE API PRODUCER ALSO DEVELOPS EVOLUTIONS ON THE API AND MAINTAINS ITS CODE.

API PRODUCER



AN API PROXY IS THE CONFIGURATION OF THE API MANAGER FOR ONE SPECIFIC API.

THE API PROXY IS HENCE THE INTERFACE BETWEEN THE CONSUMER AND THE API ITSELF. IT APPLIES POLICIES.

API PROXY



DOMAIN WHICH AIMS TO SECURE APIS AND API FLOWS.

IT COVERS BACKEND SECURITY, API POLICIES AND AUTHENTICATION.

API SECURITY



AN APPLICATION IS AN OBJECT REPRESENTING THE CONSUMPTION IN API MANAGEMENT.

IT IS MOST OF THE TIME THE REPRESENTATION OF A SOFTWARE OR A MOBILE APP, WHICH USES AN API.

APPLICATION



THE AUTHENTICATION IS THE ACTION OR PROCESS OF PROVING THE IDENTITY OF SOMEONE OR SOMETHING.

AUTHENTICATION



PROCESS OF GIVING A USER THE
PERMISSION TO ACCESS A SPECIFIC
RESOURCE OR FUNCTION.

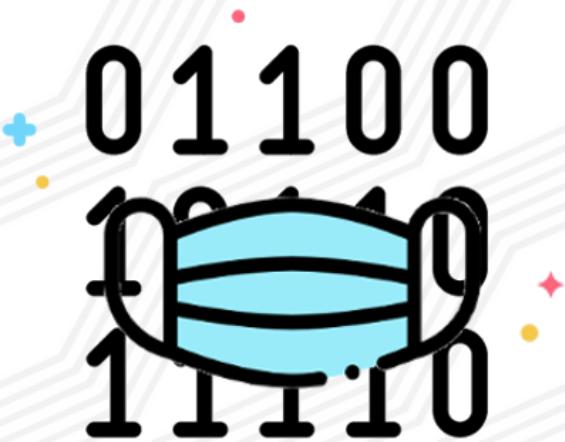
AUTHORIZATION



AUTHENTICATION MODE USED ON HTTP(S) REQUESTS. THE USER'S LOGIN AND PASSWORD ARE ENCODED IN BASE64.

THE BASE64 IS VERY EASY TO DECODE, THIS IS WHY IT NEEDS TO BE USED WITH HTTPS.

BASIC AUTHENTICATION



THE DATA MASKING IS THE ABILITY TO MASK A PART OF THE DATA THAT IS RETURNED BY THE API, FOR INSTANCE A SENSITIVE INFORMATION.

INSTEAD OF HAVING THE VALUE OF THE INFORMATION, THE CONSUMER WILL ONLY SEE A SERIES OF "/*" CHARACTER.

DATA MASKING



THE DESCRIPTION FILE DESCRIBES THE CONTRACT THAT IS AN API. THIS FILE DETAILS ALL THE ACTIONS THAT IS POSSIBLE TO DO WITH THE API AND HOW TO ACCESS IT.

THE DESCRIPTION FILE IS OFTEN CALLED "OPENAPI" OR "SWAGGER".

DESCRIPTION FILE



AN END USER IS SIMPLY A USER OF AN APPLICATION.

EVERYDAY ON YOUR PHONE YOU USE APPS. YOU ARE HENCE END USERS OF THESE APPS... AND THEIR SUBSEQUENT APIs.

THE END USER IS NOT NECESSARILY A TECH PERSON.

END USER



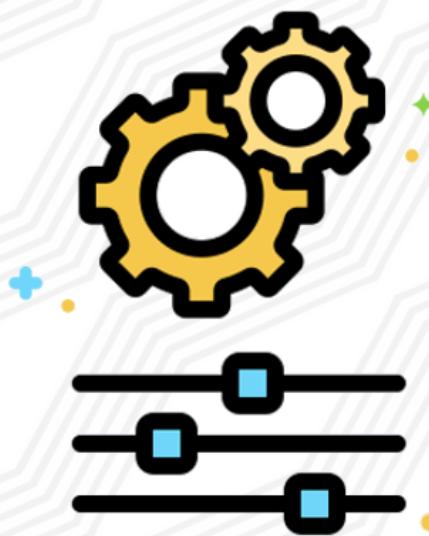
AN ENVIRONMENT IS THE CONTEXT OF EXECUTION OF AN APPLICATION. AN APPLICATION WILL BE INSTANTIATED SEVERAL TIMES FOR SEVERAL USAGES (DEVELOPMENT, TEST, PRODUCTION, ETC.).

ENVIRONMENTS



THE FREEMIUM IS A SYSTEM WHERE A CUSTOMER CAN USE A SERVICE FOR FREE TO A CERTAIN THRESHOLD AND IS CHARGED THEREAFTER.

FREEMIUM



ABILITY TO REMOVE, UPDATE OR ADD HTTP HEADERS AT RUNTIME.

***HTTP HEADERS
MODIFICATION***



THE IDENTIFICATION IS SIMPLY THE ACTION OF DECLARING THE IDENTITY OF SOMEONE OR SOMETHING.

IDENTIFICATION



THE ACTION OR PROCESS OF PROVING THE IDENTITY OF SOMEONE OR SOMETHING.

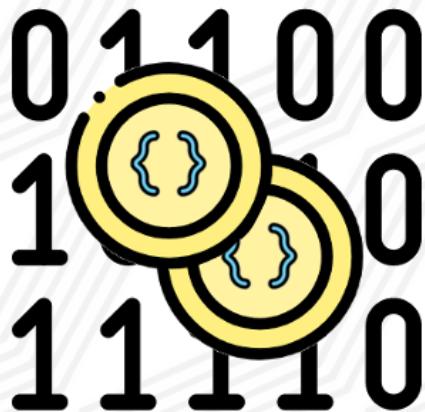
THE INBOUND AUTHENTICATION IS MANAGED BY THE API MANAGER.

INBOUND AUTHENTICATION



ACTION TO FILTER INBOUND HTTPS CALLS
ACCORDING TO SOURCE IP.

IP FILTERING



THE JSON WEB TOKEN (JWT) IS A STANDARD THAT ENABLES THE SECURE EXCHANGE OF TOKENS BETWEEN TWO PARTIES.

JWT



AUTHENTICATION TYPE IN WHICH TWO PARTIES AUTHENTICATE EACH OTHER USING THE TLS PROTOCOL.

MUTUAL TLS



AUTHENTICATION MODE USED ON HTTP(S) REQUESTS, WHICH HAPPENS IN TWO STEPS.

THE USER FIRST PROVIDES AN ID AND A PASSWORD TO AN AUTHORIZATION SERVER WHICH DELIVERS A TEMPORARY TOKEN. THE TOKEN CAN THEN BE USED TO ACCESS SECURED RESOURCES.

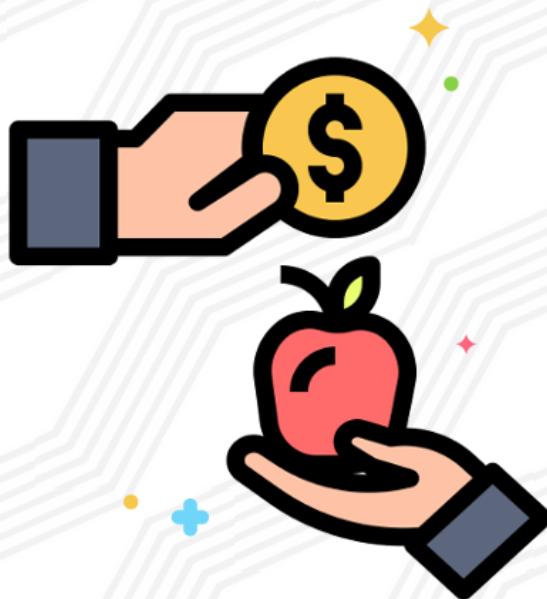
OAUTH 2.0



THE ACTION OR PROCESS OF PROVING THE IDENTITY OF SOMEONE OR SOMETHING.

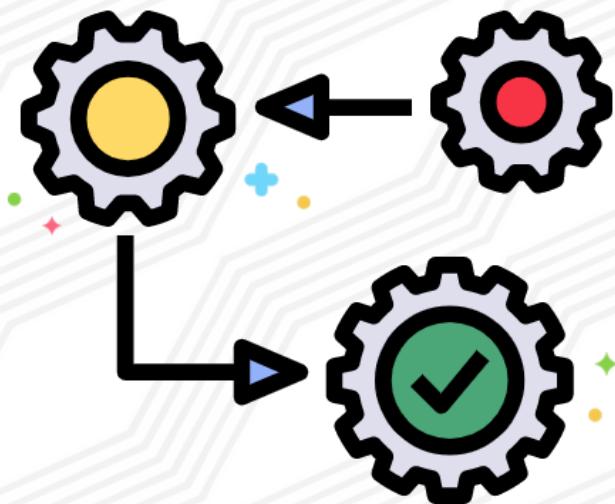
THE OUTBOUND AUTHENTICATION IS MANAGED BY THE API BACKEND.

OUTBOUND AUTHENTICATION



THE PAY-AS-YOU-GO IS A SYSTEM WHERE A CUSTOMER PAYS FOR A SERVICE WHEN IT OCCURS RATHER THAN BEFORE.

PAY AS YOU GO



A POLICY IS A PROCESS THAT IS BOUND TO AN API PROXY.

SEVERAL POLICIES CAN BE BOUND TOGETHER.

POLICIES



A PRODUCT BUNDLE IS A MONETIZED CONTAINER, CONTAINING ONE OR SEVERAL API PRODUCTS.

PRODUCT BUNDLE



THE PROMOTION IS THE ACTION TO PUSH AN API PROXY'S CONFIGURATION ON ANOTHER ENVIRONMENT OF THE API MANAGER.

PROMOTION



A RATE PLAN IS A WAY TO CONSUME AN API BUNDLE.

IT CAN BE MONETIZED OR FREE, IT CAN INCLUDE A QUOTA OF CALLS OR BE UNLIMITED, ETC.

RATE PLAN



USING DATA OR SERVICES FOR OTHER USAGES THAN THE INITIAL ONE.

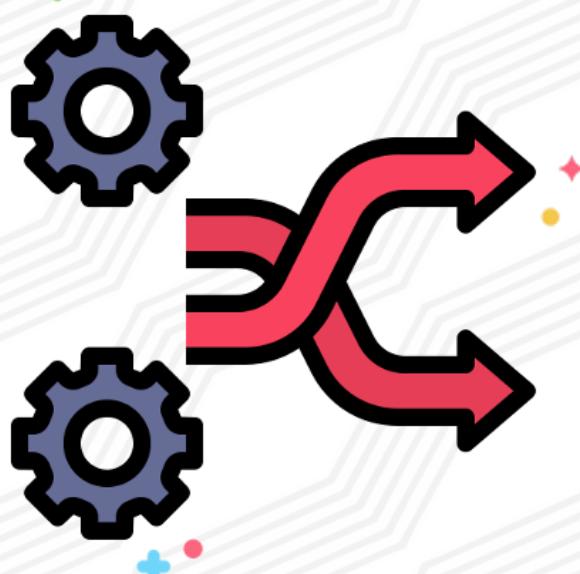
EXPOSING AN API ENABLES PEOPLE THAT YOU DON'T KNOW FROM CONTEXTS THAT YOU DON'T KNOW, WITH KNOWLEDGES THAT YOU DON'T HAVE, TO USE YOUR API IN A WAY THAT YOU'D NEVER HAD IMAGINED.

REUSE

RULES FOR FACILITATION

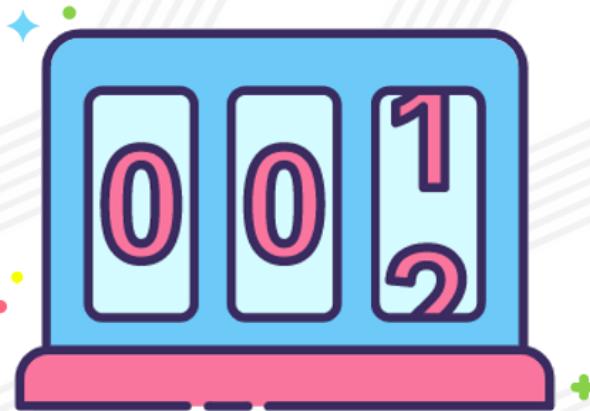
- 1. SELECT YOUR DISTRIBUTION AMONG THE PRE-SELECTED ONES ON
<https://github.com/michelin/API-360/>**
- 2. ASK EACH PLAYER TO READ ONE CARD OF THE WAVE 1 AND TO POSITION IT ON THE MAP.**
- 3. GIVE INSIGHTS ABOUT THE LINKS BETWEEN THE CONCEPTS.**
- 4. COME BACK TO STEP 2 WITH THE REMAINING WAVES.**
- 5. GIVE US YOUR FEEDBACK, IMPROVEMENTS IDEAS AND CONTRIBUTE ON <https://github.com/michelin/API-360/> !**





ABILITY TO EXPOSE A SOAP API AS REST ENDPOINTS.

SOAP TO REST



THE THROTTLING IS THE ABILITY TO BLOCK THE API CALLS FOR A USER IF THIS USER REACHED A THRESHOLD IN TERMS OF NUMBER OF CALLS IN A SPECIFIC TIMERANGE.

THROTTLING



THE TIERED MONETIZATION MODEL OFFERS DIFFERENT MODELS -AND PRICES, TO CUSTOMERS. THEY THEN CHOOSE THE TIER THEY BELIEVE THEY NEED AND PAYS FOR IT.

TIERED MONETIZATION