How does an Azure API work?

1 The client is any software application that runs on your phone, computer, or other smart devices. When you use the client, it sends a request.

Imagine a visitor who walks to a librarian's desk holding a key. The key is like a pass at the library, allowing the visitor to borrow a book. The visitor wants to make a request such as "I want Book A" or "I want a prediction of the weather".

2 Requests are sent through a network to an endpoint. The Application Programing Interface (API) at that endpoint performs a service to fulfill the request and send back a response.

The endpoint is like the library information desk. An API is the librarian who gets a request "I want Book A", goes to get Book A.
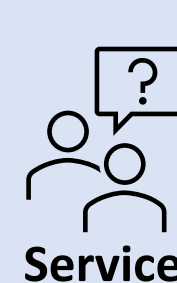

Request

Response

Client

Network
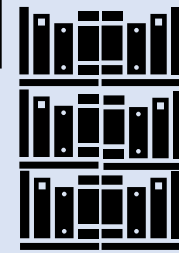
Request

Response

My name is API

Service

3 An AI-informed API can fulfill requests such as predictions and sends back a response. The client receives the response.

Azure AI services such as Cognitive Services consist of a trained machine learning models that behave like a function – accepting one or more input values and generating a predicted output based on probability.

An AI-informed librarian could get a request "I want a prediction of the weather" and goes to get a prediction that the weather will be sunny. The visitor takes that response back to the client.

Learn more about:

Azure's visual tools for Machine Learning

Azure's Computer Vision solutions

Azure's Natural Language Processing solutions

Introduction to Azure AI