Communication Between the Client & the Server

In this lesson, we will learn how communication takes place between the Client and the Server.

WE'LL COVER THE FOLLOWING

Request-Response Model

The client & the server have a *request-response* model. The client sends the request & the server responds with the data.

If there is no request, there is no response. Pretty simple right?

HTTP Protocol

The entire communication happens over the *HTTP* protocol. It is the protocol for data exchange over the World Wide Web. *HTTP* protocol is a *request-response* protocol that defines how information is transmitted across the web.

It's a *stateless* protocol, every process over HTTP is executed independently & has no knowledge of previous processes.

If you want to read more about the protocol, this is a good resource on it

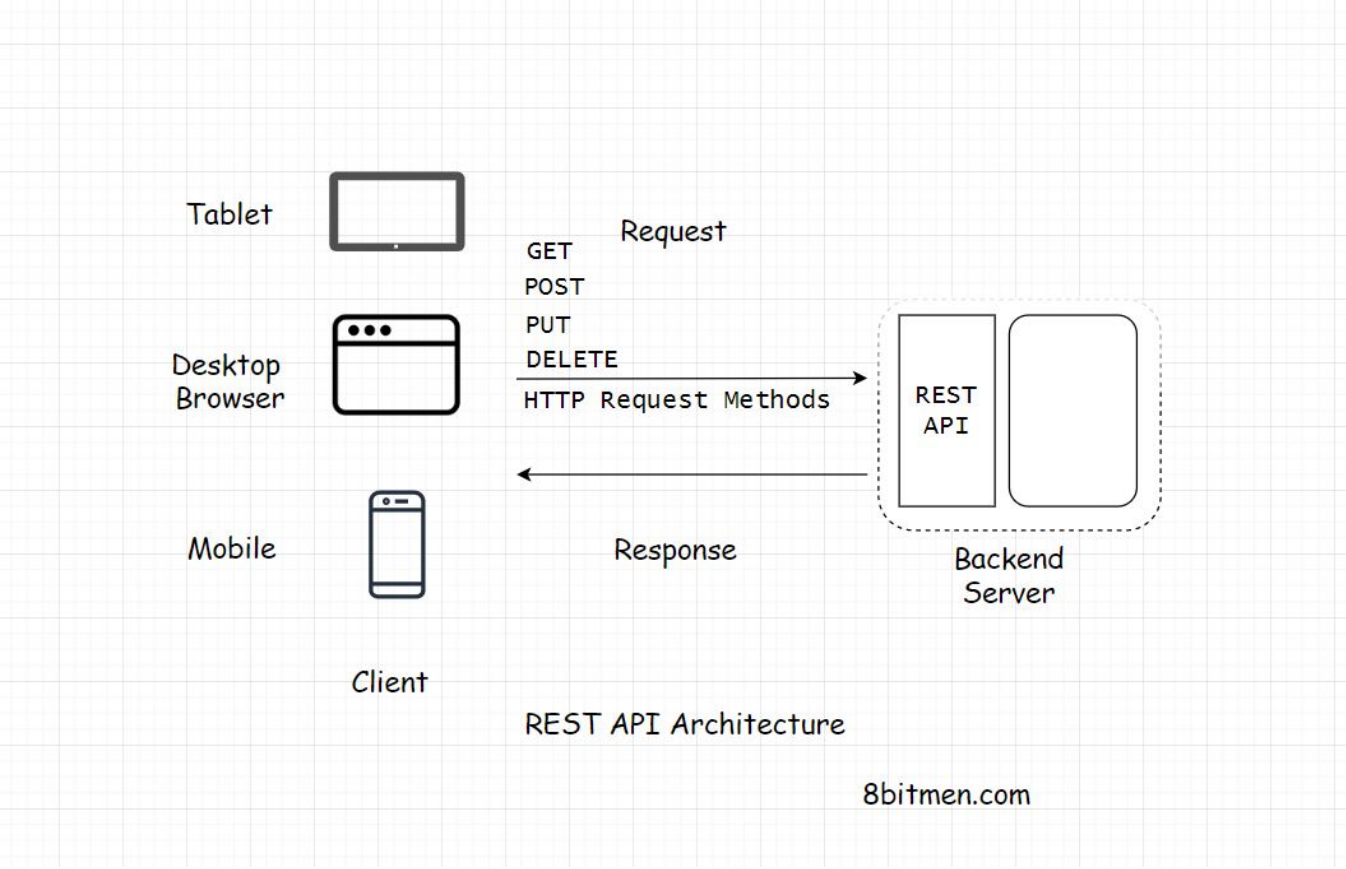
Alright, moving on...

REST API & API Endpoints

Speaking from the context of modern N-tier web applications, every client has to hit a *REST end-point* to fetch the data from the backend.

> **Note:** If you aren't aware of the REST API & the API Endpoints, I have discussed it in the next lesson in detail. I've brought up the terms in this lesson, just to give you a heads up on how modern distributed web applications communicate.

The backend application code has a *REST-API* implemented which acts as an interface to the outside world requests. Every request be it from the client written by the business or the third-party developers which consume our data have to hit the REST-endpoints to fetch the data.



Real World Example Of Using A REST API

For instance, let's say we want to write an application which would keep track of the birthdays of all our Facebook friends & send us a reminder a couple of days before the event date.

To implement this, the first step would be to get the data on the birthdays of all our Facebook friends.

We would write a client which would hit the Facebook Social Graph API which is a REST API to get the data & then run our business logic on the data

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Implementing a REST-based API has several advantages. Let’s delve into it in detail to have a deeper understanding.