**Title**: **Episode 1:** **Understanding RESTful API in easier way as beginner.**

**Introduction**

In todays’ world of interconnected digital services and devices ecosystem. Application Programming Interfaces) are the burden lifters that facilitates easy software communication. Among the various types of APIs available, RESTful APIs are the most common

**Defining RESTful API**

**RESTful API: REST** – representational state transfer, **API** represents the Application Programming Interface – which is the mechanics by which two or more programs communicate to exchange data or share resources. When we interact with let’s say for example Facebook, we can do so by using either web application or mobile app installed in our phones. These are two different type of applications which are probably built with different technologies which can also mean that they have different way of processing and presenting data and yet we can view our feeds seamlessly and even modify some of our data. These data we access are coming from **database** somewhere. Therefore, API seats between an Application / client (web or mobile) and the data storage (database) / server.

**[Illustration goes here]**

Is it possible to access data directly from database without adding complexity of API? the answer is big Yes.

**Why RESTful API**

There many reasons to why RESTful API are used, but just to name few that you can resonate with

* **Security RESTful API** provides an extra layer of security that prevent clients to have direct access to the database which puts data vulnerable to various attacks.
* **Interoperability** RESTful APIs work over HTTP protocol, which is a widely adopted and standardized protocol, this protocol allows for the exchange of various types of data, such as text, images, and multimedia, between a web server and a client. This enables interoperability between different systems and technologies.
* **Uniform Interface:** Two common data format used in internet exchange are JSON (JavaScript Object Notation) and XML (eXtensible Markup Language). RESTful APIs uses JSON data format and reasons being JSON is often more human-readable than XML as well as JSON tends to be more compact than XML, resulting in smaller data payloads. This can be especially important in scenarios where bandwidth is a concern, such as in mobile applications or when dealing with limited network resources to name the least, thus providing a uniform interface that helps in separating the concerns between the client and the server. This uniformity makes it easier to understand and use APIs.

**How RESTful API works**