# **What is HttpClient?**

* HttpClient is a built-in service class available in the @angular/common/http package.
* Angular communicate REST APIs using HttpClient.
* HttpClient will help us fetch external data, post to it through REST API
* It uses the RxJS observable-based APIs, which means it returns the observable and what we need to subscribe it.

# **Angular HttpClient**

* Web pages get data from remote services(API) and present it on the page(component).
* These pages communicate with server-side API using the HTTP protocol.
* Angular applications need an easy way to interact with these services(APIs) over HTTP for data retrieval and updation. For this purpose, Angular provides the HttpClient service.

# **Features of HttpClient**

# Provides typed request and response objects

# Contains testability features

# Intercepts request and response

# Supports RxJS observable-based APIs

# Supports streamlined error handling

# Performs the GET, POST, PUT, DELETE operations

**What Is an RxJS Observable?**

* An observable is a unique object similar to Promise and it helps to manage async code.
* It’s not from the JavaScript language, so to use it we need the most popular observable library, called RxJS (Reactive Extension for JavaScript).
* RxJS is a library for reactive programming using observables that makes it easier to compose asynchronous or callback-based code.
* Angular uses observables as an interface to handle the common asynchronous operations.

Following are the points to consider when we use HttpClient and it returns the observables :

* When we subscribe, it will initiate the request, otherwise nothing happens.
* When the get() request returns successful, the observable emits the result and is then complete.
* When the get() request fails, the observable emits the error.

# Setting up Angular HttpClient

Next, open the src/app/app.module.ts file then import HttpClientModule and add it to the imports array:

// [...]

import { HttpClientModule } from '@angular/common/http';

@NgModule({

declarations: [AppComponent],

entryComponents: [],

imports: [

// [...]

HttpClientModule,

],

// [...]

})

export class AppModule {}

### Injecting HttpClient in The Angular Service

Next, open the src/app/api.service.ts file and inject HttpClient via the service constructor:

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({

providedIn: 'root'

})

export class ApiService {

constructor(private httpClient: HttpClient) { }

}