# Services in Angular

An Angular service is plain Typescript class having one or more methods (functionality) along with @Injectable decorator.

Service is a piece of reusable code with a focused purpose. A code that you will use across multiple components in your application.

Our components need to access the data. You can write data access code in each Component, but this is very inefficient and breaks the rule of single responsibility. The Component should focus on presenting the data to the user.

The task of receiving data from the back-end server should be delegated to another class. We call a class a service class because it provides each Component with the data it needs.

**What is Angular Services used for?**

Features independent of components such a logging services

* Share logic or data across components
* Encapsulate external interactions like data access
* Services are easier to test.
* They are easier to Debug.
* We can reuse the service at many places.

Syntax For Create Service :

:=> ng g s post

Once above command execute post service will create

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

@Injectable({

  providedIn: 'root'

})

export class PostService {

}

Now we will register our service reference in app.module.ts

  ],

  providers: [PostService],

  bootstrap: [AppComponent]

})

export class AppModule { }

Now create one get method in service with Fake API Jsonplaceholder

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

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

@Injectable({

  providedIn: 'root'

})

export class PostService {

  private url = 'https://jsonplaceholder.typicode.com/posts';

  constructor(private httpClient: HttpClient) { }

  getPost() {

    return this.httpClient.get(this.url);

  }

Now we want to subscribe this method in our component class .

import { Component, OnInit } from '@angular/core';

import { UtilityService } from '../services/utility.service';

@Component({

  selector: 'app-crud',

  templateUrl: './crud.component.html',

  styleUrls: ['./crud.component.css']

})

export class CrudComponent implements OnInit {

  posts: any[];

  constructor(private utilityService: UtilityService) { }

  ngOnInit() {

    this.utilityService.getPost().subscribe((res: any) => {

      this.posts = res;

    })

  }

Note : here in constructor we have added service reference now our component is dependent on service. So provider will provide the instance of this service.

Now we will show data on HTML

<div class="row">

<ul class="list-group">

    <li  style="text-align: left;"

      \*ngFor="let post of posts"

      class="list-group-item ">

      <button

      (click)="updatePost(post)"

      class="btn btn-primary btn-sm">Update</button> {{ post.title }}

      <button

      (click)="deletePost(post)"

      class="btn btn-danger btn-sm pull-right">Delete</button>

    </li>

  </ul>

</div>

Note : We need to import HttpClientModule in app.modue.ts for communication between service to server side