

Dependency Injection

1. What is Dependency Injection

Dependency Injection

- A design pattern used to supply object A other objects: B,C,D, ... that object A depends on
- For example we want to create a component that displays a todo list - **TodoListComponent**
- We want to grab the todo list from a server
- We have a service that helps us fetch the todo list from the server - **TodoService**
- To function properly the **TodoListComponent** depends on **TodoService**
- **TodoService** is a dependency of **TodoListComponent**

- **AppComponent** depends on **TodoList** that depends on **HttpClient**
- In Angular we usually ask for a dependency in the **constructor**

```
export class AppComponent implements OnInit {  
  constructor(private _todoService: TodoService) {}  
  // ...  
}
```

```
@Injectable({  
  providedIn: "root"  
})  
export class TodoService {  
  constructor(private _http: HttpClient) {}  
}
```

The benefits of using DI

- Reduce coupling
- Easy testing
- Manage Caching
- Cleaner code
- Easy service upgrade and replacement

Thank You

Next Lesson: 2. Injector