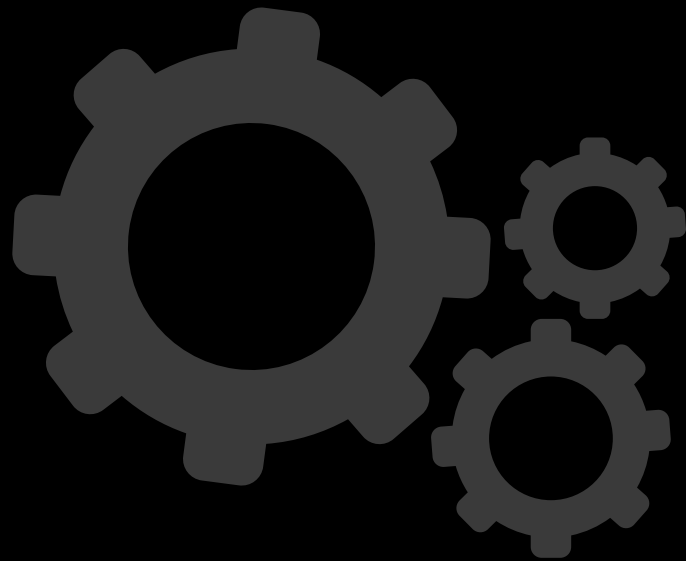




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S.O.L.I.D

OPEN - CLOSED

PRINCIPLE

Swipe →



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OPEN - CLOSED PRINCIPLE

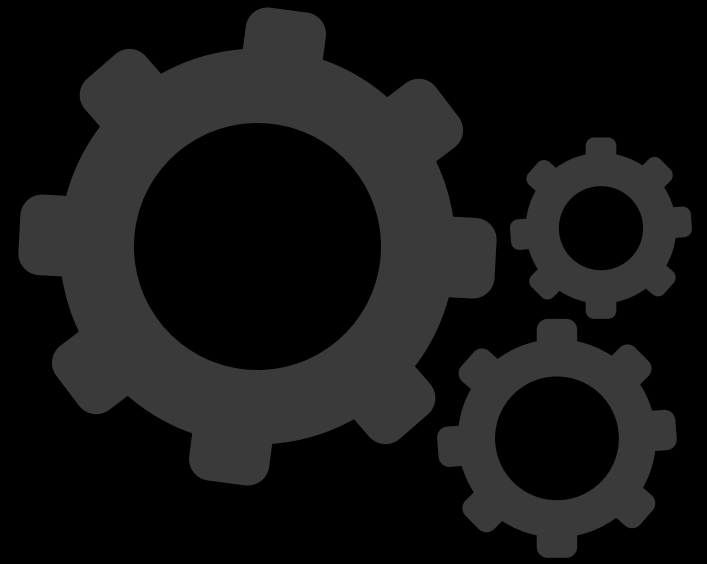
SOFTWARE ENTITIES SHOULD BE OPEN FOR EXTENSION BUT CLOSED FOR MODIFICATION.

THE OPEN-CLOSED PRINCIPLE STATES THAT WHEN YOU DEFINE SOFTWARE ENTITIES, YOU SHOULD BE ABLE TO EXTEND THEIR FUNCTIONALITY, BUT YOU SHOULD NOT BE ABLE TO MODIFY THE EXISTING ENTITY. INSTEAD, YOU SHOULD JUST ADD A NEW MAPPING OR CONFIGURATION THAT ALLOWS THE RIGHT STRATEGY TO BE APPLIED WHEN RUNNING IT.

Swipe →



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CONSIDER A USER MODEL



```
class User {  
    private username: string;  
    private email: string;  
    private password: string;  
  
    constructor(username: string, email: string, password: string) {  
        this.email = email;  
        this.password = password;  
        this.username = username;  
    }  
}
```

Swipe →



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SUPPOSE WE NEED TO ADD A NEW FIELD CALLED ACCOUNT TYPE



```
private accountType: Account = "Admin";
```

BUT WHAT IF YOU HAD TO ADD ANOTHER USER TYPE?



```
isHR(): boolean {  
    return this.accountType === "HR"; // ✗  
}
```

Swipe





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INSTEAD OF THAT, DO THE FOLLOWING



```
getAccountType(): Account {  
    return this.accountType;  
}
```



Swipe →



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CREATE A ROLES RECORD AND ROLE SERVICE



```
const Roles: Record<Account, string> = {
  "Admin": "/dashboard",
  "Employee": "/",
  "Manager": "/employee-list",
  "HR": "/salaries"
}

class RoleService {
  getRole(user: User): string {
    return Roles[user.getAccountType()];
  }
}
```

Swipe →



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BENEFITS

THE MAIN BENEFIT HERE IS THAT FOR ANY SIMILAR FUTURE CHANGES, YOU WILL HAVE TO CHANGE THE CODE IN FEW PLACES IN A MORE PREDICTABLE WAY.

Swipe →



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**HAVE ANY
VIEWS ON THIS?**

COMMENT BELOW