

Open/Close Principle

```
public class Users {  
  
    private String user;  
    private String password;  
  
    public Users(String user, String password) {  
        this.user = user;  
        this.password = password;  
    }  
  
    public String getUser() {  
        return user;  
    }  
  
    public void setUser(String user) {  
        this.user = user;  
    }  
  
    public String getPassword() {  
        return password;  
    }  
  
    public void setPassword(String password) {  
        this.password = password;  
    }  
  
    @Override  
    public String toString() {  
        return "\n" + " user=" + user + ", password=" + password ;  
    }  
}
```

We first fix the name of the class "Users" by making it singular. Second, we make the abstract "User" class and two child classes "Administrator" and "Cashier".

```
abstract class User {
```

```
    protected String username;
```

```
    protected String password;
```

```
    public User(String user, String password) {
```

```
        this.username = user;
```

```
        this.password = password;
```

```
    }
```

```
}
```

```
public class Administrator extends User{
```

```
    public Administrator(String username, String password) {
```

```
        super(username, password);
```

```
    public String getUser() {
```

```
        return username;
```

```
    public void setUser(String username) {
```

```
        this.username = username;
```

```
    public String getPassword() {
```

```
        return password;
```

```
    public void setPassword(String password) {
```

```
        this.password = password;
```

```
    @Override
```

```
    public String toString() {
```

```
        return "Administrator[" + ' '];
```

```
    }
```

```
}
```

```
public class Cashier extends User{
```

```
    public Cashier(String username, String password) {
```

```
        super(username, password);
```

```
    public String getUser() {
```

```
        return username;
```

```
    public void setUser(String username) {
```

```
        this.username = username;
```

```
    public String getPassword() {
```

```
        return password;
```

```
    public void setPassword(String password) {
```

```
        this.password = password;
```

```
    @Override
```

```
    public String toString() {
```

```
        return "Cashier[" + ' '];
```

```
    }
```

```
}
```