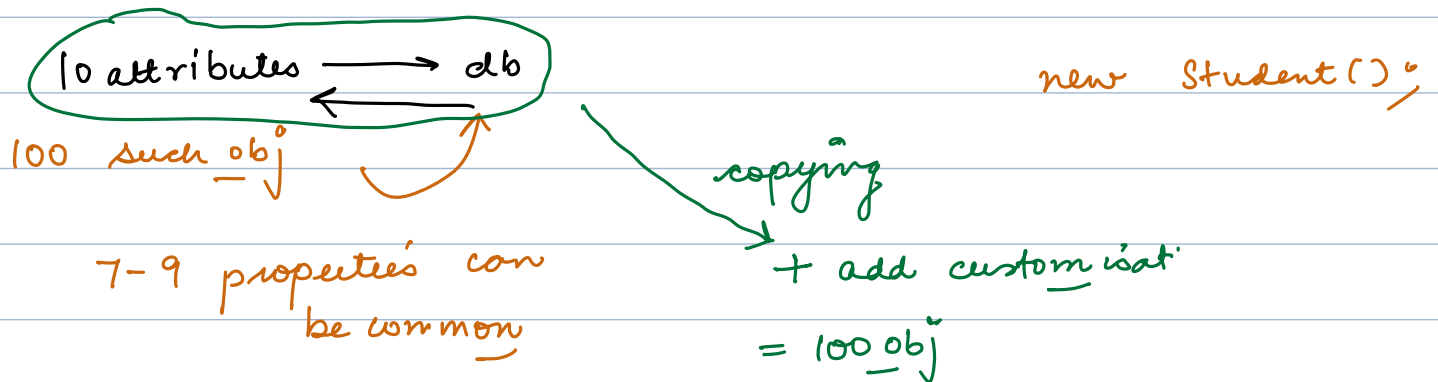


# Singleton Builder

## Agenda : Prototype & Registry

- given with an object of a class.



pubg  $\equiv$  100 players.

↓

55 + 45 bots.

↓

location + gun.

Student st = new Student();

Student st2 = st;

X no new obj, copying the ref.

Client {

Student st = new Student();

① not reusable ← `Student st1 = new Student();`

② private attributes

↓  
getters & setters =

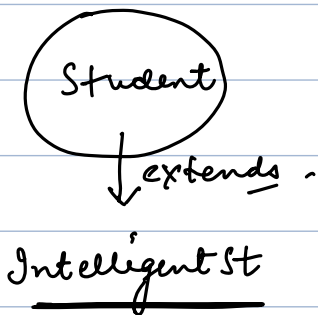
$$st \circ id = st \circ id$$

```
stl.name = st.name
```

•

3

③ client will need to know the complete details of the class.



void do ( Student st ) {

Student Intelligent

↓ ↓

type

~~Student st = new Student(st);~~

```
if (st.type == "Student")
```

```
else if (stotype == "Intst")
```

三

3

outsourcing the copying to the  
object itself.

copy().

```
Student st = new Student();
```

```
Student st2 = st.copy();
```

```
Student {
```

```
    copy() {
```

```
        Student n = new Student();
```

```
        n.id = this.id;
```

```
        n.name = this.name;
```

```
        :  
        .
```

```
    }
```

```
}
```

↓

```
Intelligent Student {
```

override

```
    copy() {
```

```
        new Instr()
```

```
    }
```

```
do ( Student st ) {
```

```
    st.copy();
```

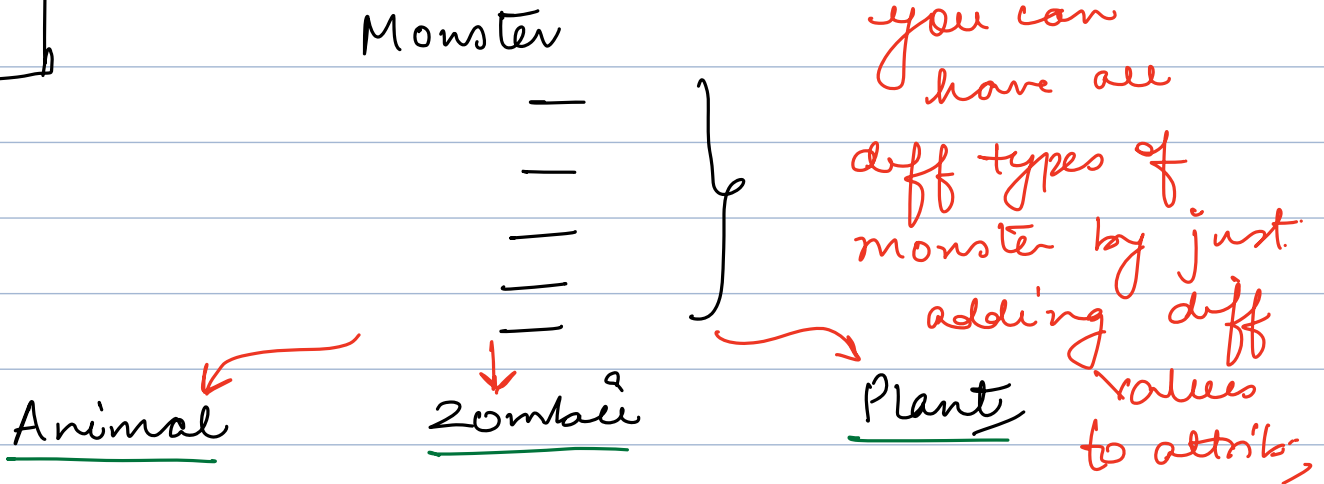
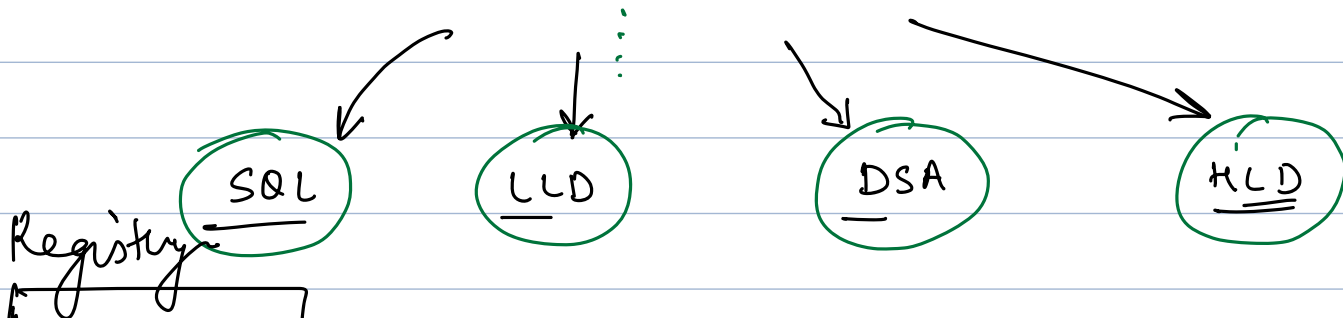
```
}
```

~~close()~~

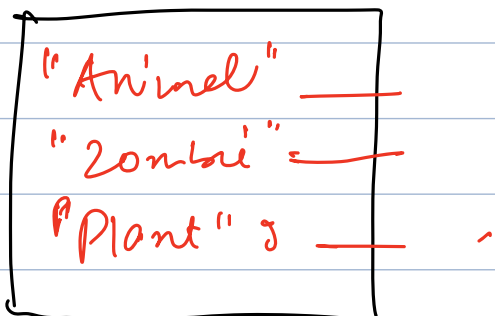
## Lecture

- assignment
- homework
- pre-read
- skill
- Instructor
- Notes

Same attributes  
but diff  
values.



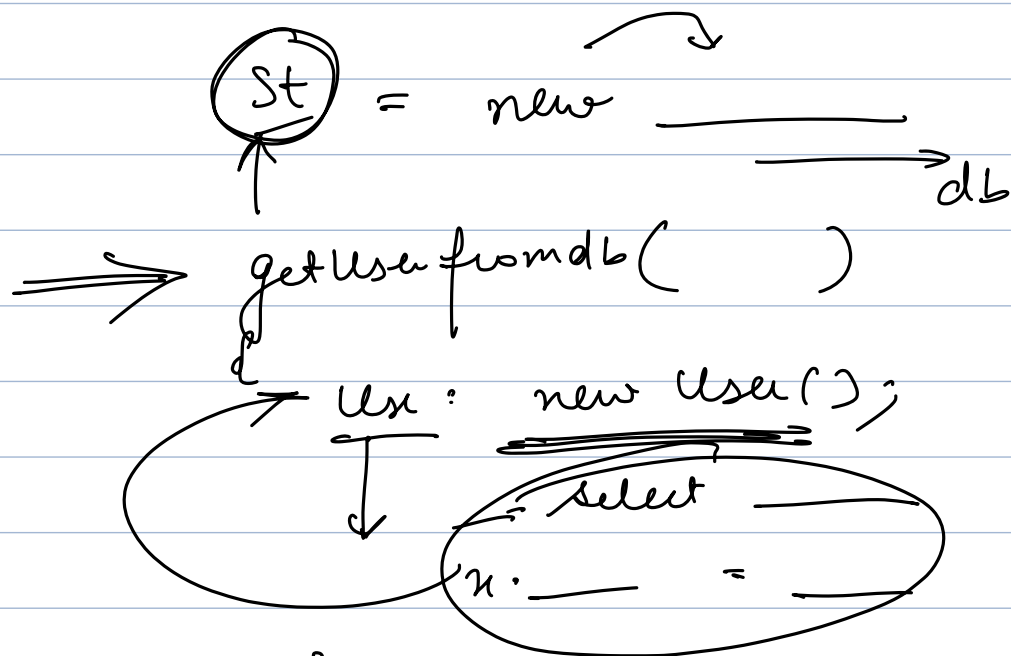
inheritance  
doesn't  
add anything



Prototype provides the flexibility of creating a new object by copying from existing one

+

storing multiple prototype to copy later on is registry.



getUsefromdb()  
getUsefromdb()  
getUsefromdb()  
getUsefromdb()  
getUsefromdb()

x = getUsefromdb()

(x1) =  $\frac{x \cdot copy()}{x \cdot copy() + x \cdot copy() + x \cdot copy() + x \cdot copy()}$  x1 = bath = "Apr"

Break: 10:16 pm

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