

Decorator

Flora Tsai

05/26/2017

Problem

- ◆ Add new feature to an object at run-time
- ◆ Inheritance is static and applies to entire class

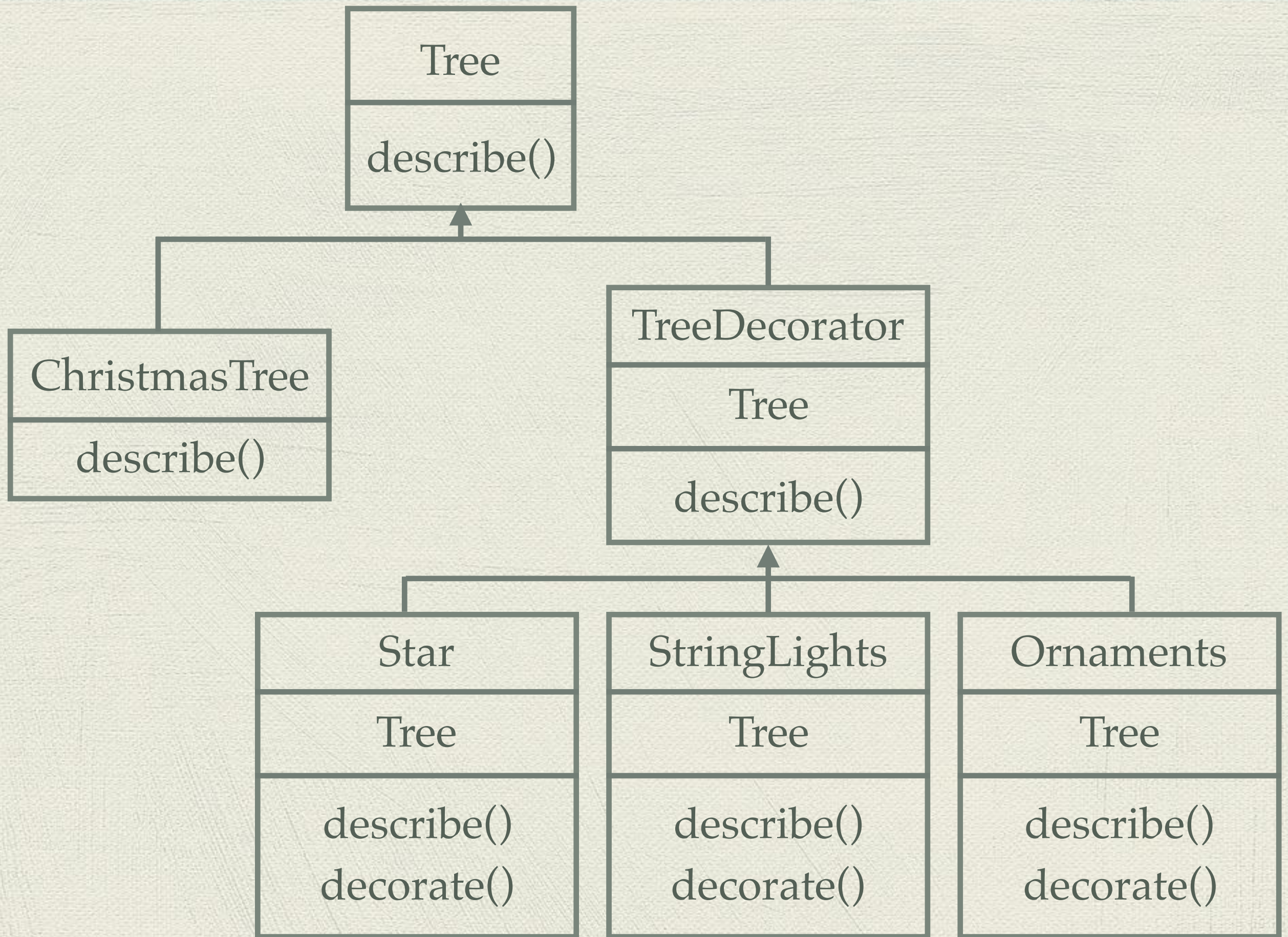
Benefits

- ◆ Intact object — add new functionality without changing the structure of the object at run-time
- ◆ Elasticity — specify whatever combination/order of features we want
- ◆ Unlimited number of decorator layers
- ◆ Reduce number of subclasses

Christmas Tree decoration

Participants

- ◆ Interface
- ◆ Core object
- ◆ Abstract Decorator class
- ◆ Decorator



Implementation

- ◆ Basic decorator usage
- ◆ Multiple decorator layers

Conclusion

- ◆ With decorators, functionalities can be added or removed at run-time easily
- ◆ Lots of objects look alike
- ◆ Core object access is a problem

Thank you