

Dương Minh Phương

Part 2:

- Classes:

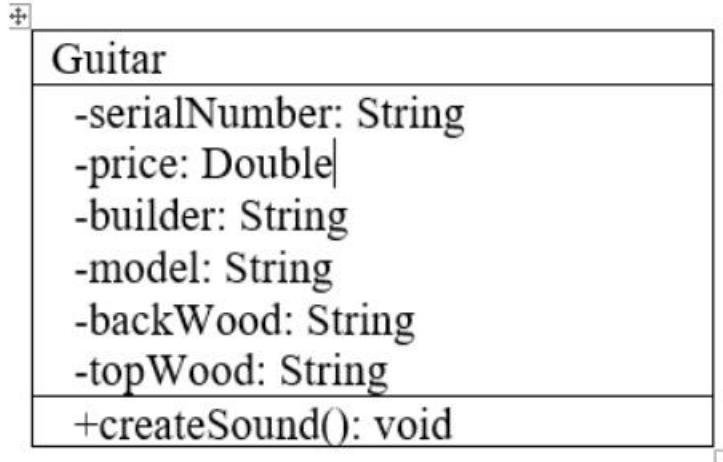
1. Guitar:

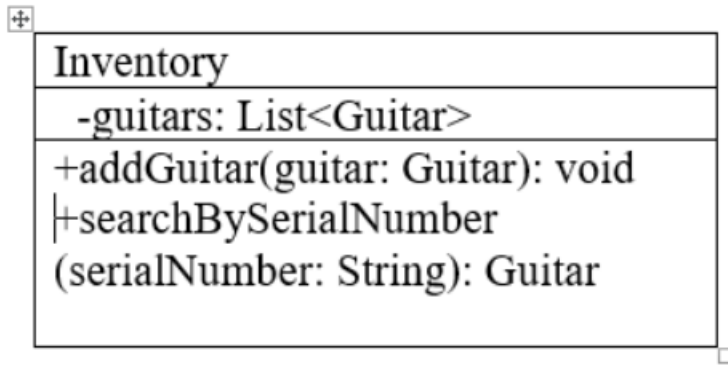
- Fields: serialNumber, price, builder, model, backWood, topWood
- Methods: createSound

2. Inventory:

- Fields: list of guitars
- Methods: addGuitar, searchBySerialNumber

-UML:





Part 4:

- Static heap, the class objects and static variables are stored.
- Stack, the method calls, local variables, and object references are stored.
- Dynamic heap, the objects are stored.
- The objects in the program are `obj1` and `obj2`.
- The state of `obj1` is empty values for all fields.
- The state of `obj2` is the values assigned during its constructor.
- No. - Because `obj1`'s fields are private and we can access all fields of `obj1` in its class.