

## Part 1

Guitar
-SerialNumber : String -price : double -builder: String -model: String -backWood: String -topWood: String
//constructors +Guitar(); +Guitar(String SerialNumber, double price , String builder, String model, String backWood, String topWood) //getters and setters all the value // other logic methods +createSound(): void

Inventory
-guitar : List<Guitar>
+addGuitar(guitar:Guitar): void +searchGuitarBySerialNumber (serialNumber: String): Guitar

## Part 4

Static heap : contains static variables and methods

Stack: stored methods, local variable

Dynamic heap: stored objects and their instance variables

Objects in program : obj1 , obj2

State of obj1, obj2 : (serialNumber, builder,model,backWood,topWood,price):private