

Selected files

3 printable files

Flyweight-Class.puml
 Flyweight-Object_part1.puml
 Flyweight-Object_part2.puml

Flyweight-Class.puml

```
@startuml
'https://plantuml.com/class-diagram

Document *-- Character
Document *-- CharacterPropertiesFactory
Character *-- CharacterProperties
CharacterPropertiesFactory *-- CharacterProperties

class Character {
-character: char
-characterProperty: CharacterProperties

+Character(in character: char, characterProperty: CharacterProperties)
+setCharacter(in character: char): void
+setCharacterProperty(in characterProperty: CharacterProperties): void
+getCharacter(): char
+getFont(): String
+getColor(): String
+getSize(): int
}

class CharacterProperties {
-font: String
-color: String
-size: int

+CharacterProperties(in font: String, color: String, size: int)
+getFont(): String
+getColor(): String
+getSize(): int
}

class CharacterPropertiesFactory {
-flyweights: Map<String, CharacterProperties>

+setAndRetrieveFlyweightCharacterProperties(in font: String, color: String, size: int): CharacterProperties
+sizeOfMap(): int
}

class Document {
-characters: List<Character>
-propertiesFactory: CharacterPropertiesFactory

+addCharacter(in c: char, font: String, color:String, size:int): void
+editCharacter(in index: int, font: String, color: String, size: int): void
+saveToFile(in filename: String): void
+loadFromFile(in filename: String): void
}

@enduml
```

Flyweight-Object_part1.puml

```
@startuml
'https://plantuml.com/object-diagram

object "<u>testDocument:Document</u>" as testDocument{
characters
propertiesFactory
}

object "<u>propertiesFactory:CharacterProperties</u>" as propertiesFactory{
flyweights<String, CharacterProperties> = { ("ArialBlack16", fw1), ("ArialBlack14", fw2), ("VerdanaBlue18", fw3), ("VerdanaRed12", fw4)}
}

object "<u>characters:Character</u>" as characters{
List<Character> = { ("H", fw1), ("e", fw2), ("l", fw2), ("l", fw2), ("o", fw2), ("W", fw1), ("o", fw2), ("r", fw2), ("l", fw2), ("d", fw2)}
("C", fw3), ("S", fw3), ("5", fw4), ("8", fw4), ("0", fw4), ("0", fw4)
}

object "<u>fw1:CharacterProperties</u>" as fw1{
font = "Arial"
color = "Black"
size = 16
}

object "<u>fw2:CharacterProperties</u>" as fw2{
font = "Arial"
color = "Black"
size = 14
}
```

```

}
object "<u>fw3:CharacterProperties</u>" as fw3{
font = "Verdana"
color = "Blue"
size = 18
}
object "<u>fw4:CharacterProperties</u>" as fw4{
font = "Verdana"
color = "Red"
size = 12
}

```

```

testDocument *-- characters
testDocument *-- propertiesFactory
characters *-- fw1
characters *-- fw2
characters *-- fw3
characters *-- fw4
propertiesFactory *-- fw1
propertiesFactory *-- fw2
propertiesFactory *-- fw3
propertiesFactory *-- fw4

```

@endum1

Flyweight-Object_part2.puml

```

@startuml
'https://plantuml.com/object-diagram

```

```

object "<u>testDocument:Document</u>" as testDocument{
characters
propertiesFactory
}

```

```

object "<u>propertiesFactory:CharacterProperties</u>" as propertiesFactory{
flyweights<String, CharacterProperties> = { ("ArialBlack16", fw1), ("ArialBlack14", fw2), ("VerdanaBlue18", fw3), ("VerdanaRed12", fw4), ("CalibriBlue99", f
}

```

```

object "<u>characters:Character</u>" as characters{
List<Character> = { ("H", fw5), ("e", fw2), ("l", fw2), ("l", fw2), ("o", fw2), ("W", fw5), ("o", fw2), ("r", fw2), ("l", fw2), ("d", fw2)}
("C", fw3), ("S", fw3), ("5", fw4), ("8", fw4), ("0", fw4), ("0", fw4)
}

```

```

object "<u>fw1:CharacterProperties</u>" as fw1{
font = "Arial"
color = "Black"
size = 16
}

```

```

object "<u>fw2:CharacterProperties</u>" as fw2{
font = "Arial"
color = "Black"
size = 14
}

```

```

object "<u>fw3:CharacterProperties</u>" as fw3{
font = "Verdana"
color = "Blue"
size = 18
}

```

```

object "<u>fw4:CharacterProperties</u>" as fw4{
font = "Verdana"
color = "Red"
size = 12
}

```

```

object "<u>fw5:CharacterProperties</u>" as fw5{
font = "Calibri"
color = "Blue"
size = 99
}

```

```

testDocument *-- characters
testDocument *-- propertiesFactory
characters *-- fw1
characters *-- fw2
characters *-- fw3
characters *-- fw4
characters *-- fw5
propertiesFactory *-- fw1
propertiesFactory *-- fw2
propertiesFactory *-- fw3
propertiesFactory *-- fw4
propertiesFactory *-- fw5

```

@endum1