## **Design Patterns - Bombic**

## **Creational Patterns**

- <u>Factory Methods</u> Enemies, items (bombs, bonus...) are using this design pattern because they have an abstract class that declare the main functions needed to manage this type of objects.
- <u>Object Pool</u> -\_Used for bombs, to reuse exploded bombs, in order to save memory.
- <u>Singleton</u> Screens are using this to pass the other classes only one instance of themselves.

## **Structural Patterns**

• <u>Composite</u> – Screens are using this pattern by constructing elements and concatenate them into a windows graphics.

## **Behavioral Patterns**

- Iterator Use to iterate objects along the entire project
- <u>Strategy</u> It will be used in enemy's behaviors.
- <u>Template Method</u> Used in enemies and items in which the superclass has abstract methods that are implemented in the child classes in the different ways.