## Excercise 2

Each class we split into several subclasses will have one single responsibility. Game:

## Controller

Controller: this interface class will provide template for the Controller classes of different game elements.

- UnitController: this abstract class has the responsibility of controlling the non moving units in the game
  - ExplosionController: this class is responsible for modifying the explosions in the game.
  - BarricadeController: this class is responsible for modifying the barricades in the game.
  - MovingUnitController: this abstract class is a class that has the responsibility of controlling the moving units in the game.
    - \* AlienController: this class has the responsibility of modifying the aliens in the game.
    - \* SpaceShipController: this class is responsible for modifying the spaceship.
    - \* BulletController: this class is responsible for modifying the bullets in the game.
      - · AlienBulletController this class is responsible for modifying the alienbullets in the game.
      - $\cdot$  Space ShipBulletController this class is responsible for modifying th spaceship bullets in the game.

## GameUiController

## Draw:

- UiElement: this clas is responsible for drawing all the (non unit) ui parts on the screen.
  - \* UiUnit: this abstract class is responsible for the units on the screen.
    - $\cdot$  UiAlien: this class is responsible for drawing the aliens on the screen.
    - · UiSpaceShip: this class is responsible for drawing the spaceship on the screen.
    - · UiBarricade: this class is responsible for drawing the barricades on the screen.
    - · UiExplosion: this class is responsible for drawing the explosions on the screen.
    - · UiBullet: this abstract class is responsible for drawing the bullets on the screen.
    - · UiSpaceShipBullet: this class is responsible for drawing the SpaceShipBullets on the screen.

- $\cdot$  UiShipBullet: this class is responsible for drawing the SpaceShipBullets on the screen.
- DrawScore: this class is responsible the score on the screen.
- DrawLives: this class is responsible the lives on the screen.