```
Affiche
                                                                                                                               +hexagon:Arene&;
                                                                                                                               +P1:Robot&;
                                                                                                                               +P2:Robot&;
                                                                                                                               +texture:sf::Texture ;
                                                                                                                               +sprite:sf::Sprite;
                                                                                                                               +nbPlayers:int=0;
                                                                                                                               +bonuses:std::vector<Bonus> ;
                                                                                                                               +P1Wins:int = 0;
                                                                                                                               +P2Wins:int = 0;
                                                                                                                               -Affiche(Arene& hexagone, Robot& rob1, Robot& rob2);
                                                                                                                               +refresh(sf::RenderWindow& window, sf::Time timePerMove, sf::Clock& clock, sf::Event&
                                                                                                                               event):bool;
                                                                                                                               +getNbPlayers():int;
                                                                                                                               -set_nbPlayers(int i);
                                                                                                                               -updateControls(Robot& robot);
                                                                                                                               -showEndMessage(sf::RenderWindow& window, const std::string& winner);
                                                                                                            Robot
                                                                        hexagon:Arene&;
                                                                        position:sf::Vector2f ; lastValidPosition:sf::Vector2f ;
                                                                        projectiles:std::vector<Projectile>;
                                                                        name:sf::Text ;
            Sniper
                                                                        rectangleShape:sf::RectangleShape
                                                                                                                                                                                                                                                                                                                   Init
                                                                        color:sf::Color ;
health: int = 100;
                                                                        health:int=10;
                                                                                                                                                                                                                                                                            texture: sf::Texture ;
speed: float = 5;
                                                                        attackPower:int;
                                                                                                                                                                                                                                                                                                     nbPlayers: int =0;
                                                                                                                                                                                                                                                                            sprite: sf::Sprite ;
attackPower: int = 50;
                                                                        defense:int;
defense: int= 10;
                                                                        speed:float=10;
                                                                                                                                                                                                                                                                            Init();
                                                                        lastPosX:float;
                                                                                                                                                                                                                                                                            menu(sf::RenderWindow& window,int* i): bool;
draw(sf::RenderWindow&
                                                                        lastPosY:float;
                                                                                                                                                                                                                                                                            choose(sf::RenderWindow& window,int* res): bool;
 vindow)override
                                                                        width:float = 40;
                                                                                                                                                                                                                                                                            name(sf:: RenderWindow& window, char*& player1Name, char*& player2Name): bool;
                                                                        height:float = 30;
                                                                                                                                                                                                                                                                            fin: bool= false;
                                                                        orientation:float;
                                                                                                                                                                                                                                                                            getNbPlayers(): int;
                                                                        lastOrientation:float;
                                                                        controlScheme:char;
                                                                        Robot(Arene& hex, float x, float y, char controlScheme, sf::Color color);
                                                                        ~Robot():virtual;
                                                                        moveForward():void;
                                                                         moveBackward():void;
                                                                                                                                                                                                                                               Arene
                                                                        rotateLeft():void;
                                                                        rotateRight():void;
                                                                                                                                                                                                                                   points[7]: sf::Vector2f ;
                                                                        setPosition(float x, float y):void;
                                                                        setHealth(int newHealth):void;
           Course
                                                                        setSpeed(int newSpeed):void;
                                                                                                                                                                                                                                   Hexagone() {};
                                                                         setDefense(int newDefense):void;
                                                                                                                                                                                                                                   Hexagone(int windowWidth, int
                                                                        set_Orientation(float newOrientation):void;
health: int = 100;
                                                                                                                                                                                                                                   windowHeight);
                                                                        set_name(const std::string& n, sf::Font& font):void;
                                                                                                                                                                                                                                   isInside(float x, float y):
speed: float = 15;
                                                                        setNamePosition(float x, float y):void;
attackPower: int=25;
                                                                                                                                                                                                                                   bool :
                                                                         getX():float const;
                                                                                                                                                                                                                                   drawHexagon(sf::RenderWindow&
defense: int=25;
                                                                                                                                                                                                                                   window, const sf::Color&
                                                                        getY():float const;
                                                                        getHealth():float const;
                                                                                                                                                                                                                                   color);
draw(sf::RenderWindow&
                                                                        getSpeed():float const;
                                                                                                                                                                                                                                   getPoint(int index):
 vindow)override
                                                                        getWidth():float const ;
                                                                                                                                                                                                                                   sf::Vector2f ;
                                                                                                                                                                                                                                   getHexagonSegments() :
                                                                        getDefense():int const;
                                                                        getHeight():float const ;
                                                                                                                                                                                                                                   std::vector<LineSegment>;
                                                                        getOrientation():float const ;
                                                                                                                                                                                                                                   getCenter(): sf::Vector2f;
                                                                        get_Orientation():float;
                                                                                                                                                                                                                                   getRadius() : float;
                                                                        getControlScheme(): char const
                                                                        getLineSegments(): std::vector<LineSegment> const;
                                                                         get name():sf::Text:
                                                                        get_name_draw():const sf::Text& ;
                                                                        get_Shape():sf::RectangleShape;
                                                                        getTransformedPoint(float offsetX, float offsetY):sf::Vector2f const;
                                                                        getProjectiles(): std::vector<Projectile>&;
                                                                        getProjectiles():const std::vector<Projectile>& const ;
             Tank
                                                                        saveLastPosition();
                                                                        saveLastOrientation();
health: int = 200;
                                                                        saveLastValidPosition();
                                                                                                                                                                                                                                                                                                                InputBox
speed: float = 2;
                                                                        revertToLastPosition():
attackPower: int=25;
                                                                         revertToLastOrientation();
                                                                                                                                                                                                                                                                                       isFocused: bool ;
defense: int= 40;
                                                                         canMove(float newX, float newY):bool;
                                                                                                                                                                                                                                                                                      box: sf::RectangleShape ;
                                                                         ensureInsideBoundary();
                                                                                                                                                                                                                                                                                      text: sf::Text;
                                                                        isInsideBoundary():bool const;
draw(sf::RenderWindow&
                                                                                                                                                                                                                                                                                      textString: std::string ;
                                                                        isTouchingBoundary():bool const;
window)override
                                                                        repositionToCenter();
                                                                                                                                                                                                                                               Bonus
                                                                                                                                                                                                                                                                                       InputBox(float width, float height, sf::Font& font) ;
                                                                         checkCollision(const Robot& other):bool const;
                                                                                                                                                                                                                                                                                      setPosition(float x, float y);
                                                                         handleCollision(Robot& other);
                                                                        handleCollsion(sf::RenderWindow& window, Robot& other);
                                                                                                                                                                                                                       position: sf::Vector2f ;
                                                                                                                                                                                                                                                                                       setFocus(bool focus) ;
                                                                                                                                                                                                                       circleShape: sf::CircleShape ;
                                                                        fire();
                                                                                                                                                                                                                                                                                       contains(float x, float y) : bool ;
                                                                                                                                                                                                                        rectangleShape: sf::RectangleShape ;
                                                                                                                                                                                                                                                                                       handleEvent(const sf::Event& event) ;
                                                                        update(sf::RenderWindow& window, Robot& other);
                                                                                                                                                                                                                       triangleShape: sf::ConvexShape ;
                                                                        draw(sf::RenderWindow& window)=0; drawDebugPoints(sf::RenderWindow& window);
                                                                                                                                                                                                                                                                                      draw(sf::RenderWindow& window);
                                                                                                                                                                                                                       shape: std::string ;
                                                                                                                                                                                                                                                                                      getString(): std::string ;
                                                                                                                                                                                                                       type: int= rand() \% 4 + 1;
                                                                                                                                                                                                                       apptime: int = 10;
                                                                                                                                                                                                                        Bonus(Hexagone& arene,const sf::RenderWindow&
                                                                                                                                                                                                                       getCircleShape(): const const sf::CircleShape& ;
                                                                                                                                                                                                                       getRectangleShape() :const sf::RectangleShape& ;
                                                                                                                                                                                                                       getTriangleShape():const sf::ConvexShape& ;
                                                                                                                                                                                                                       getShape(): const std::string&;
                                                                                                                                                                                                                        getBonusType():int ;
                                                                                                                                                                                                                       drawBonus(sf::RenderWindow& window) ;
                                                                                                                                                                                                                       getPosition(): sf::Vector2f
                                                                                                                                                             Projectile
                                                                                                                                    shape: sf::CircleShape ;
                                                                                                                                    velocity: sf::Vector2f ;
                                                                                                                                    Projectile(float x, float y, float angle, float speed);
                                                                                                                                    update();
```

draw(sf::RenderWindow& window);
getBounds(): sf::FloatRect;
getPosition(): sf::Vector2f;

isOffScreen(const sf::RenderWindow& window): bool;
isTouchingBorder(const sf::RenderWindow& window): bool;