Assignment 7 - Designing The Game

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Description

To use **Object Oriented Programming** mindset to clarify what we need to implement, what classes are needed, how those classes are related and finally to specifies how they will carry out their resposibilities.

Files

#	File	Description
1	Banner	Banner for Assignment
1	Diagram.png	Visual model of the classes using UML

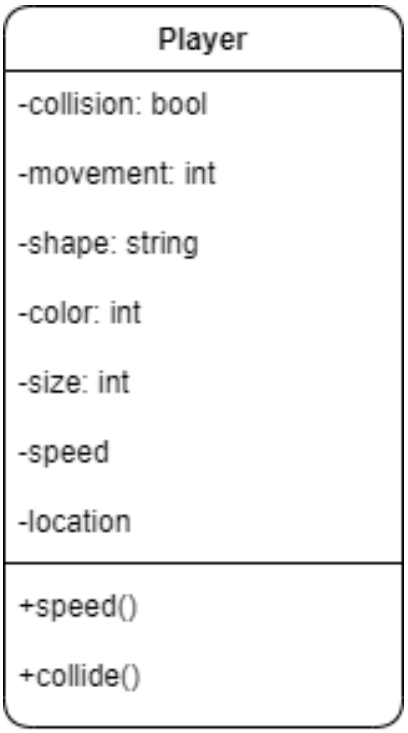
Instructions

1. **Identify the classes and objects to be used in the program.**
2. **Define the attributes for each class.**
3. **Define the behaviors for each class.**
4. **Define the relationship between classes.**

Possible Classes

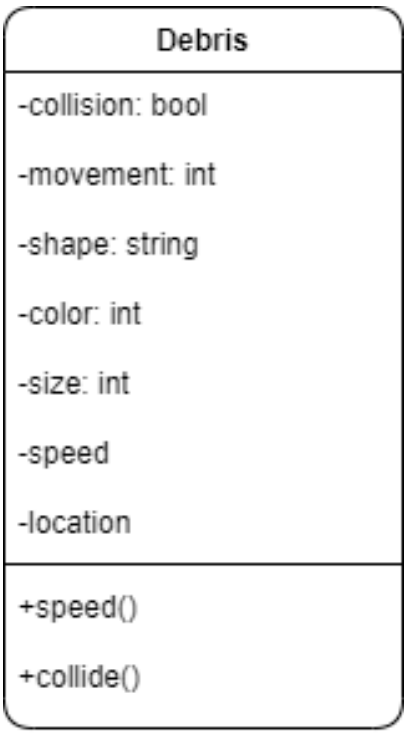
Player

- Has a Shape
- Has a Size
- Has a Color
- Has a Speed
- Has a Location (could change)
- Can move in any direction using keys
- Can collide with other "objects"



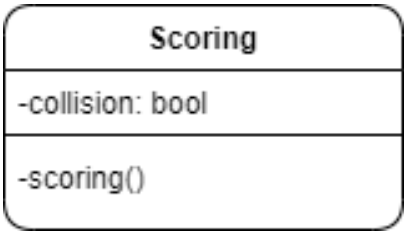
Debris

- Has a Shape
- Has a Size
- Has a Color
- Has a Speed
- Has a Location (could change)
- Can move in any direction
- Can collide with other "objects"



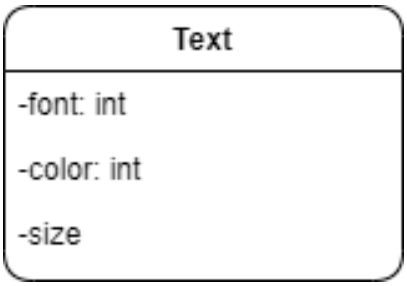
Scoring

- When a Player comes collides with Debris score is negatively effected.
- When a piece of Debris leaves game screen (on the left), score is positively effected.



Text

- Has a Font (can change)
- Has a Location
- Has a Color
- Has a Size

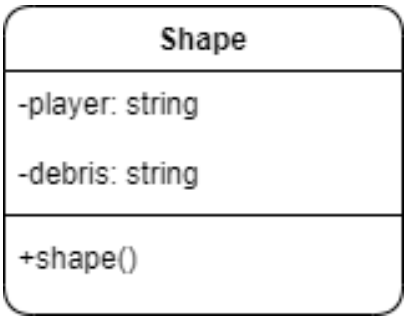


Game

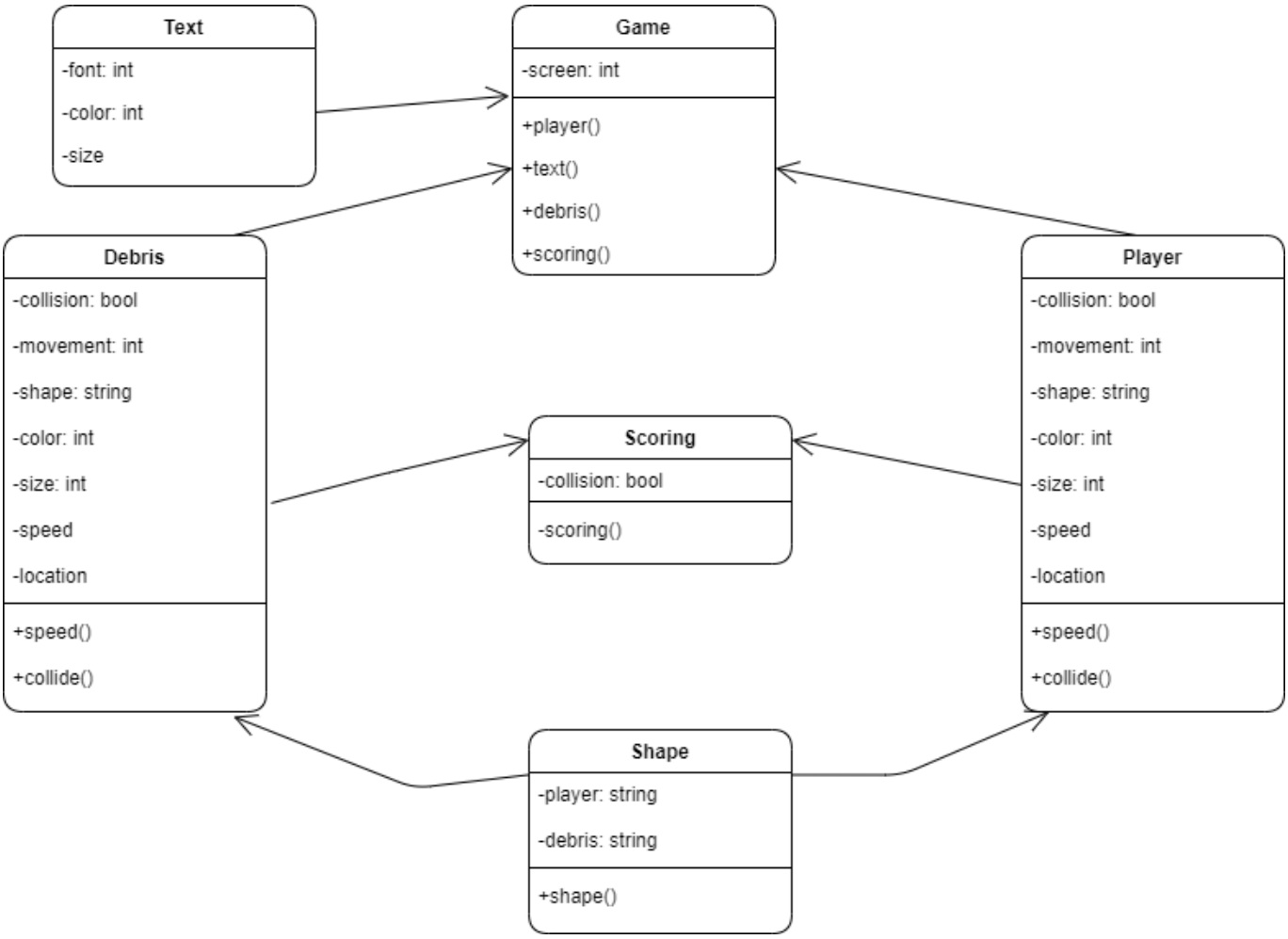
- Has player(s)
- Has score(s)
- Has debris(s) (yes "debris" can be plural but it doesn't make the point)

Shape

- Is a player
- Is a debris


Shape
-player: string
-debris: string
+shape()

Diagram


Text
-font: int
-color: int
-size
Game
-screen: int
+player()
+text()
+debris()
+scoring()
Debris
-collision: bool
-movement: int
-shape: string
-color: int
-size: int
-speed
-location
+speed()
+collide()
Scoring
-collision: bool
-scoring()
Player
-collision: bool
-movement: int
-shape: string
-color: int
-size: int
-speed
-location
+speed()
+collide()
Shape
-player: string
-debris: string
+shape()