

CSE443 - Object Oriented Analysis And Design HW1

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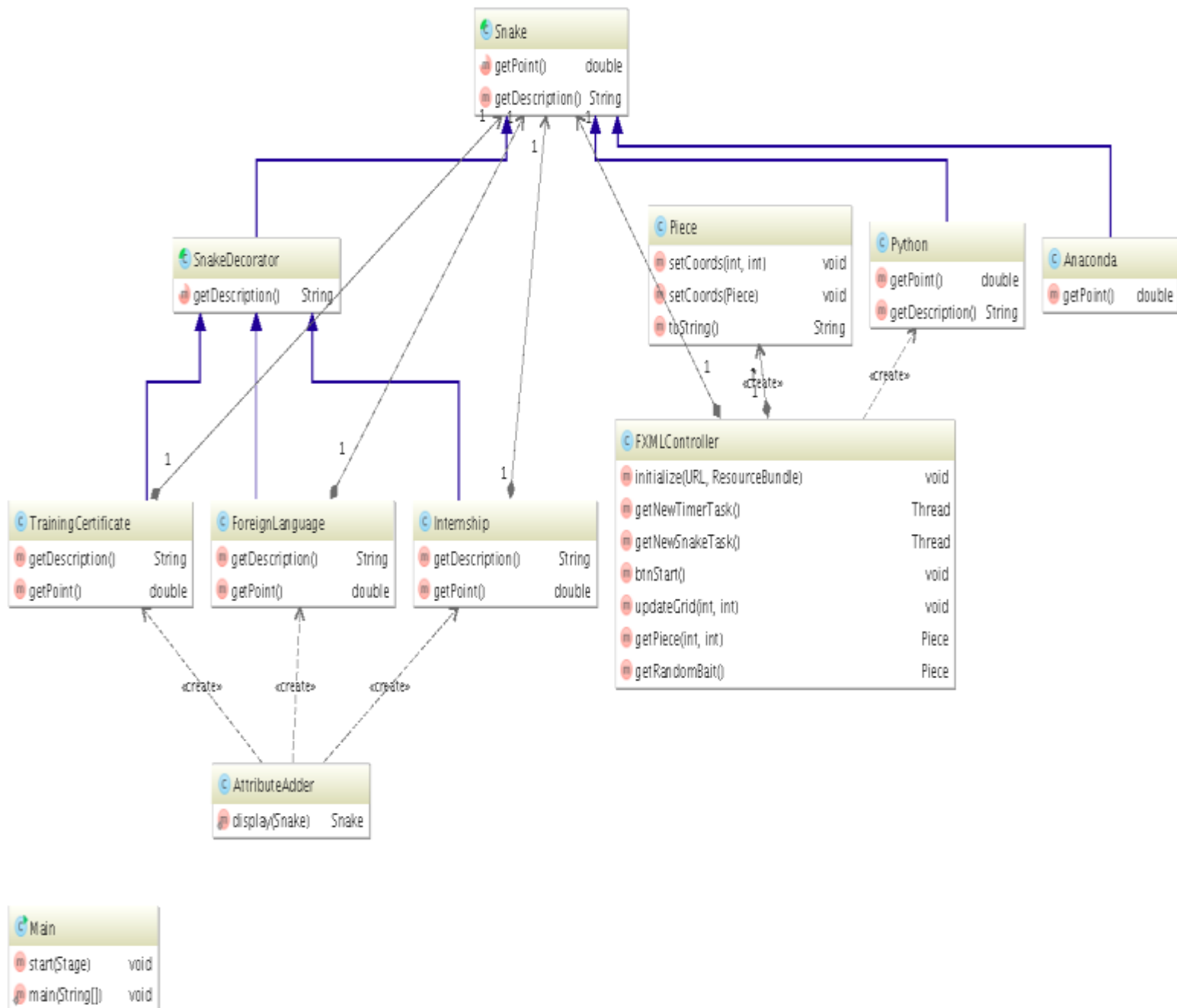
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PROJECT NAME: SNAKE GAME
WITH DECORATOR PATTERN

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1-UML DIAGRAM:



2- CLASSES AND THEIR DESCRIPTIONS

Snake: Abstract Class

In uml diagram , it does not show that it is an abstract class. But it is an abstract class and it has got two methods:

- `getPoint()`:It indicates the value of the points.The other classes override this method.
- `getDescription()`:It indicates the description.The other classes override this method.

Snake Decorator:Abstract Class

In uml diagram , it does not show that it is an abstract class. But it is an abstract class and it has got one methods:

- `getDescription()`:It indicates the description.The other classes override this method.

Training Certificates:Extends Snake Decorator

This class has got two methods:

- `getDescription()`:It inherits this method from its superclass(Snake Decorator)And it explain its description and in the game it shows That.
- `getPoint()`:It returns game point.

Foreign Languages:Extends Snake Decorator

This class has got two methods:

- `getDescription()`:It inherits this method from its superclass(Snake

Decorator)And it explain its description and in the game it shows That.

- getPoint():It returns game point.

Internship:Extends Snake Decorator

This class has got two methods:

- getDescription():It inherits this method from its superclass(Snake Decorator)And it explain its description and in the game it shows That.
- getPoint():It returns game point.

AttributeAdder:

This class has got one method:

- displaySnake(Snake):Snake→This function add their (training certificates,foreign languages,internships) attributes in the game.

Piece:

This class has got three method:

- setCoordinate(int,int):
- setCoordinate(Piece):These methods determine the coordinates of the created baits.

Python:

This class has got two method:

- getDescription():It inherits this method from its superclass(Snake Decorator)And it explain its description and in the game it shows That.
- getPoint():It returns game point.

Anaconda class is in the hirearchy. But the game does not work as Snake or anaconda. So its functionalities are empty.

FXML Controller:

This class has got seven method:

- `initiliaz()`:It requires for the start of game.
- `getNewTimerTask()`:It create task/thread for scheduling in the game.
- `getNewSnakeTask()`:It create task/thread for movement of the snake.
- `btnStart()`:It activates start the game.
- `updateGrid`:This function update the grid during game flow.
- `getPiece()`:This function provides the flow of created objects.
- `getRandomBait()`:This function provides the flow of created baits.(Randomly generated)

3- GENERAL EXPLANATIONS:

- >The game only works for snake. But anaconda class is in hierarchy.
- >This game works with two tasks/threads. These tasks require time and movement of snake.
- >Time changes depending on the feed.
- >The game presents to selection which objects will advance on the pop-up screen.

****Foreign Languages, Training Certificates, Internships.**

- >It was not handled pass on its own. But the game ends when it reaches the edges.
- >It is shown how many objects (Foreign Languages, Training Certificates, Internships.) you feed on the screen end of the game.