

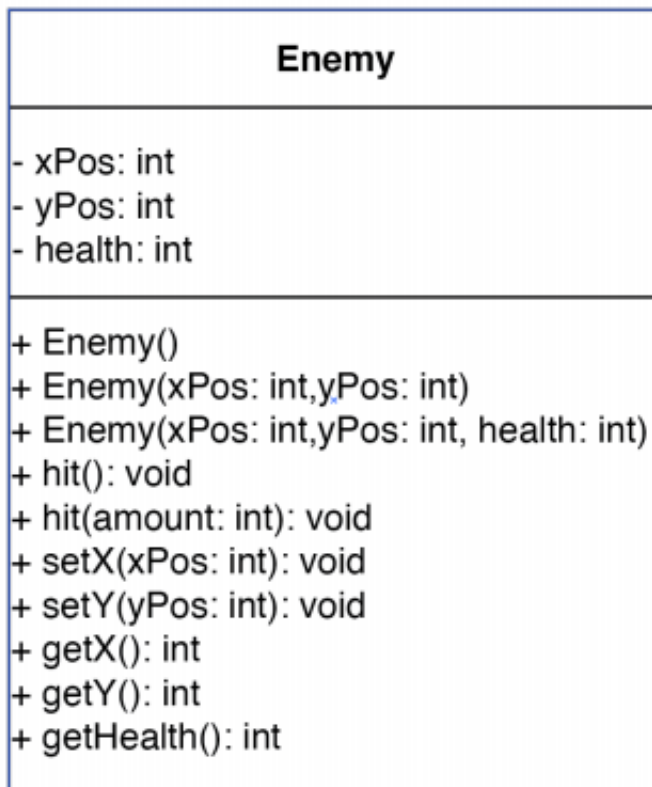
Homework assignment 07

Complete the following program for this week's homework.

Programming assignments

Extending Enemy (100 points)

Implement the `Enemy` class from the following UML diagram:



- The default constructor should create an `Enemy` that has an xy position of 100,50 and health of 100
- The `hit()` method without any parameters should decrease the health of the enemy by 10

Create 2 subclasses that inherit from the `Enemy` class - `Level1Enemy` and `Level2Enemy`

- `Level1Enemy` should inherit from `Enemy` and have an additional int data field `speed` that should be a default of 1 and an additional method `move` that increases the x position by the speed amount every time it is called

- `Level2Enemy` should inherit from `Enemy` and have an additional method `fire` that prints out "PEW PEW" to the console
- `Level1Enemy` should have default health of 150, and `Level2Enemy` should have default health of 200.

Lastly, create a `Game` class (like a test class):

- Create one instance of each class, hit them each with a random amount
- Print out the health of each class
- Call the `move` method on the `Level1Enemy` and then print out the x and y position
- Call the `fire` method on the `Level2Enemy`

Note:

- No Processing yet - just normal Java classes
- The subclasses so far will be fairly minimal



Remember that comments and good naming conventions factor into your grade! Don't forget.