

In general,

1. We need more comments and documentation on how our code works.
 - a. Some methods need to be more specific on what they do, or just have comments in general
2. There are small errors in the code that could cause compilation errors.
 - a. The string variables are compared by `==`, not by `.equal()` function which may cause an error depending on what compiler you use.

Within Enemy.java,

3. There is poorly structured code with the constructor for the class.
 - a. There two constructors,
 - i. One constructor has no parameter and creates its own Point variable for usage. This constructor is not used by anyone.
 - ii. The other constructor has a parameter for Point and instantiates `this.pos` as that point. This constructor is used.
 - b. To refactor, I deleted the useless constructor.
4. `moveToPlayer()` does too much work and has a lot of duplicated code.
 - a. There are 8 cases for an enemy to chase the player, and all of the cases are coded in `moveToPlayer()` function. This can be simplified by creating a new function that gets a current position as an instance. Thus creates a new function called `moveHelp(int x, int y)`, which gets a distance as an instance.
 - b. Also, the code included both codes that move to a specific direction (i.e `moveUp();`) and changing the sprites to regarding direction (i.e `direction="up"`). Since it was quite inefficient, I included changing sprites code in the moving function, which was in character class. In this way it not only simplifies the code, but also increases the cohesion.
5. `attackPlayer()` is a useless function

- a. `attackPlayer()` serves no purpose because it is not used by anyone. It's function is also redundant because all of the work is done already in the `tick()` method, and therefore doesn't need to be called.
- 6. We have variables called `XPosition` and `YPosition` that keep getting initialized whenever `getXPosition()` or `getYPosition` is called and we want to have fields for these variables
 - a. Make a public variable that can be called from outside, and change the variables' name from "`newX`" and "`newY`" to "`currentX`" and "`currentY`" in order to be more easily understood.

Within `Player.java`

- 7. The player class has high coupling and low cohesion.
 - a. Especially in the `playerTick` method, making one small change causes multiple errors in other classes, and there is some unrelated code in this method and class that could be somewhere else to make `Player` more cohesive.
 - b. Creating some functions in `Background` and `Board` to allow for a tighter coupling. Removed some functions in `Player` to make the class more cohesive.