Hierarchy:

\*Character super class

\*\*Nearby derives from character

\*\*Hider and Jumper derives from nearby

\*Interceptor derives from character

\*\*Chaser derives from interceptor

**Chaser-** Moves closer to the player every time act is called

**Interceptor-** Moves towards the character every time act is called but can only move along the

y-axis

**Hider-** Checks isVisible( ) every time act is called if the character is within 2 squares.

**Jumper-** Changes it’s x coordinate to a random number between 0-8 every time play( ) is called

**Character Super class-** Super

Abstract methods:

1. Act( ) – is overwritten by ever method.
2. isVisible( ) – is overwritten by the hider class overridden
3. isActivated( ) – overwritten by hider, jumper, and chaser

Protected Methods:

SetX( ) – gives the derived methods access private int x

SetY( ) – gives the derived methods access to private in y

Act methods for each subclass:

Chaser

\* increments x and y, up or down with the player

Interceptor

\*increments x up and down with player

Hider

\*If nearby, is practically a chaser (!isVisible)

Jumper

\*Random(0-8) changes the x coordinate