

Continue to explore JPacMan3 by answering the following questions:

1. What is the role of EmptySprite?

Static empty sprite serves as the end of a non-looping sprite. There are two types of animated sprites in JPacMan3, one is looping and the other is non-looping. An EmptySprite does not contain any data, and it has nothing to draw. So it can be used to marks the end of a non-looping one.

2. What is the role of MOVE_INTERVAL and INTERVAL_VARIATION?

- MOVE_INTERVAL is the base move interval of a ghost, which can be used to adjust the speed of a ghost in the game.
- INTERVAL_VARIATION is the random variation added to the MOVE_INTERVAL , which makes the ghosts look more dynamic and less predictable.

3. If you wanted to add a fruit, which files would you need to change?

- (1) We should add a class file which is similar to class Pellet (extends class Unit).
- (2) To add a createFruit method to LevelFactory in LevelFactory.java.
- (3) To add sprite loading method in PacManSprites.java.
- (4) To add remainingFruits method in Level.java.
- (5) To change the board.txt to add fruits in the board and to change MapParser.java to support the parsing of the board with fruits.
- (6) To add player/fruit collision processing methods in PlayerCollision.java.
- (7) To add unit tests files with regard to fruits.