

# GamePanel Cheat Sheet

Code online at:

<https://github.com/spotco/GamePanel>

## Constants to use:

```
protected static int KEY_UP;  
protected static int KEY_DOWN;  
protected static int KEY_LEFT;  
protected static int KEY_RIGHT;
```

## Fields to use:

```
protected Graphics _g;
```

## Methods to use:

```
public void clear();  
public int get_width();  
public int get_height();  
public boolean is_key_down(int key);  
public boolean is_mouse_down();  
public int get_mouse_x();  
public int get_mouse_y();
```

## Methods to override:

```
public void update();
```

## Problems:

Modify SimpleGameMain (or make your own class)

1(\*) Make the player return to center or die when touching a wall. You'll want to use the `get_width()` and `get_height()` methods.

2(\*) Display the score and number of times died. There's a nice Graphics method for drawing a string. Also, maybe a Game Over when you die too many times.

3(\*\*) Make the food give you a powerup! When you eat the food, you turn blue and run faster for a few seconds. To do this, you'll want a counter that you store as a field.

4(\*\*) Give the player a tail. Keep track of the last 10 or so positions (in a list) that the player was at, and draw circles at each of them every update.

5(\*\*\*) Make this game multiplayer! Have one character controlled with arrow keys, another controlled with WASD. Try doing it the most redundant way possible...then think how you could make it better (hint: with objects)

4(\*\*\*) Make there be multiple foods on screen at once. You will want to make a class for the food object, and store (in your GameMain) an array of food objects. Maybe make the foods move around, or some bigger (and more points) than the others.

Or, do your own features that you'd like to see!