

# Intro to Game Development

Lesson 2: Game Loop and User Input  
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# AIM: How can we use \_\_\_\_\_ to run our 2D game?

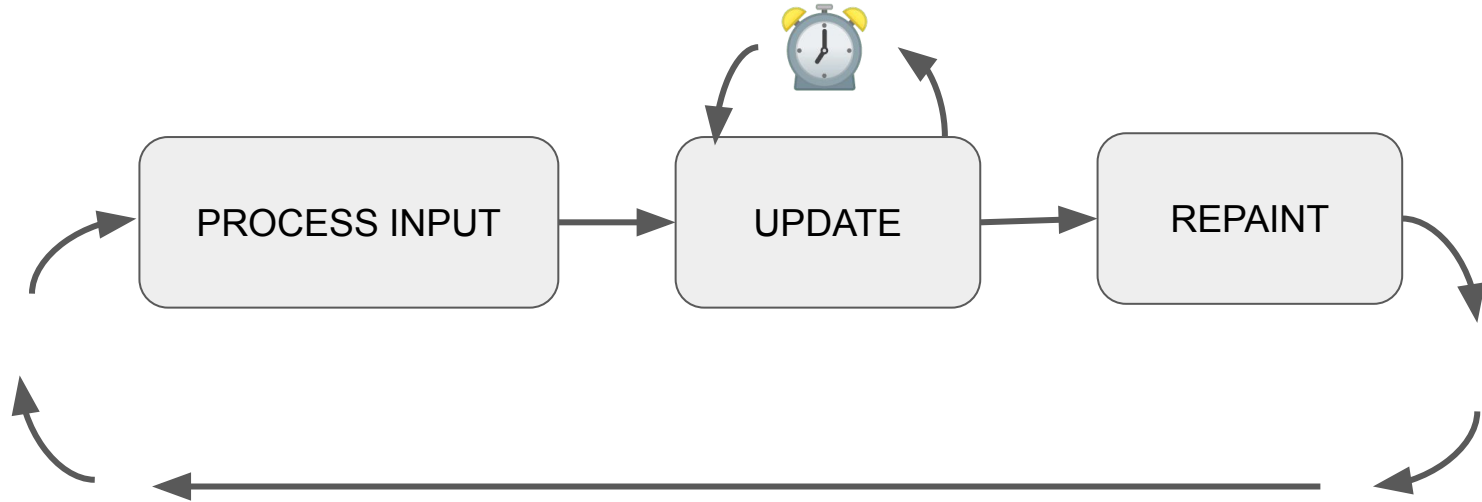
Do Now: How does the game know when we're done playing?

What do you think is needed to continuously allow our program to keep running?

Turn and talk with your partner!



# What is a Game Loop?



# paintComponent (repaint)

Graphics G

Graphics2D

This is what acts as the image being redrawn in the loop to look like it's moving when updated



# User Input

## KeyHandlers

- > Need KeyListener
- > Need KeyEvent

Each key has an associated keyCode

For example:

8 -- backspace      9 -- Tab      10 -- Enter

65 -- A      66 -- B      67 -- C

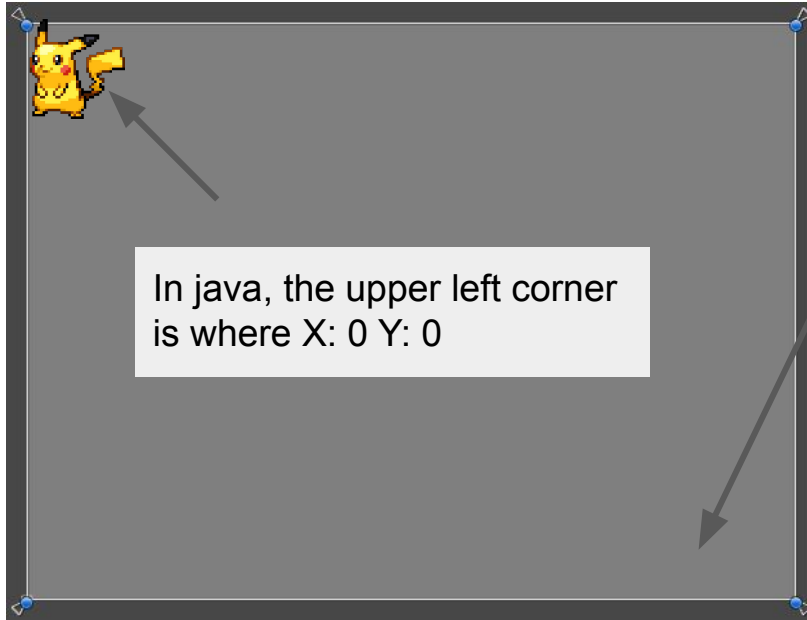
and more

CAN WE USE JOPTIONPANE OR SCANNER CLASS?



```
update()
```

The way the panel is created works such that...



So what do we have to do to our coordinate if we want to reach here?

So if we want our character to move down, our Y value has to increase

Similarly, if we want to move right, we have to increase our X Value

# System time and game fps

There are many methods to approach this but we will go over two popular ones

- System timer and Sleep
- Delta/Accumulator Method

