

KeyboardManager Worksheet

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KeyboardManager is a collection of tools that make working with the keyboard very simple and efficient. It includes tools for handling:

- key down events
- key up events
- key combo events
- key sequence events (coming soon)
- checking the current status of a key (is it currently up or down?)

Setup

Before you can use the KeyboardManager, you must first import it:

```
import com.natejc.input.KeyboardManager;  
import com.natejc.input.KeyCode;
```

Then, you have to do a one time initialization and pass a reference to the Flash Stage, as follows:

```
KeyboardManager.init(stage);
```

KeyCode

KeyCode is just a helper class that allows you to work with specific keys on your keyboard using English instead of hard to remember numbers that correspond to specific keys. Here are a few examples:

```
KeyCode.RIGHT  
KeyCode.N  
KeyCode.NUMPAD_6  
KeyCode.ENTER  
// etc...
```

Key Down Listener

To add or remove a keyDown listener for the [RIGHT] arrow key, do this:

```
KeyboardManager.instance.addKeyDownListener(KeyCode.RIGHT, myFunction);  
KeyboardManager.instance.removeKeyDownListener(KeyCode.RIGHT, myFunction);
```

Key Up Listener

To add or remove a keyUp listener for the [A] key, do this:

```
KeyboardManager.instance.addKeyUpListener(KeyCode.A, myFunction);  
KeyboardManager.instance.removeKeyUpListener(KeyCode.A, myFunction);
```

Key Combo Listener

A "key combo" is when a series of keys must be pressed simultaneously for the event to occur. To add or remove a keyCombo listener for the combo [DOWN]+[A]+[S], do this:

```
KeyboardManager.instance.addKeyComboListener([KeyCode.DOWN, KeyCode.A, KeyCode.S], myFunction);  
  
KeyboardManager.instance.removeKeyComboListener([KeyCode.DOWN, KeyCode.A, KeyCode.S], myFunction);
```

Key Sequence Listener

Note that this feature isn't finished yet, but if you want it bad enough just bug me and I'll finish the functionality for it =D.

A "key combo" is when a series of keys must be pressed simultaneously for the event to occur. To add or remove a keyCombo listener for the combo [DOWN]+[A]+[S], do this:

```
KeyboardManager.instance.addKeyComboListener([KeyCode.DOWN, KeyCode.A, KeyCode.S], myFunction);  
  
KeyboardManager.instance.removeKeyComboListener([KeyCode.DOWN, KeyCode.A, KeyCode.S], myFunction);
```

Key Status

If you wanted to know if the [UP] arrow key was currently pressed down or not, do this:

```
var isUpPressed:Boolean = KeyboardManager.instance.isKeyDown(KeyCode.UP)
```

Real World Example

Let's say you wanted to make a character named mcHero move up as long as the [UP] arrow key was pressed, or have them move down as long as the [DOWN] arrow key was pressed, you would do the following:

```
import flash.events.Event;
import com.natejc.input.KeyboardManager;
import com.natejc.input.KeyCode;

KeyboardManager.init(stage);

addEventListener(Event.ENTER_FRAME, enterFrameHandler);

function enterFrameHandler(event:Event):void
{
    if (KeyboardManager.instance.isKeyDown(KeyCode.UP))
    {
        mcHero.y -= 10;
    }
    else if (KeyboardManager.instance.isKeyDown(KeyCode.DOWN))
    {
        mcHero.y += 10;
    }
}
```

Now let's say you wanted the hero to attack every time they pressed the [SPACE] key, you would do the following:

```
KeyboardManager.instance.addKeyDownListener(KeyCode.SPACEBAR, heroAttacked);

function heroAttacked():void
{
    trace("Ninjitsu!!");
}
```