

## 2.3 Successful Flying

### Intro

In the previous section, Mike No.1 took Mike to the outer space via auto driving. Now Mike needs to learn to fly the spaceship himself, do you want to know how?

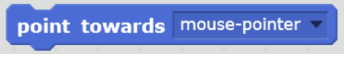

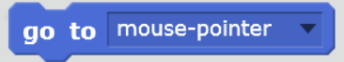
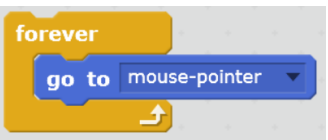
### Task

1. Enable Mike to control the spaceship via keyboard and mouse

### Start Learning




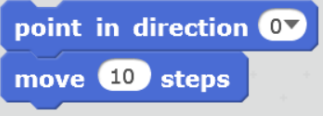
#### 1. Control with Mouse

Make your work fun and interactive controlling the coordinate and movement with mouse. Let's get started now!

Block	Explanation	Example
	You can enable the sprite to face towards the cursor or towards other sprites.	
	Make the sprite to move to where the cursor is.	

#### 2. Control with Keyboard

Mike wants to control the flying of the spaceship with the arrow keys on the keyboard. Use "when..key pressed" from Event Module to achieve this function.

Block	Explanation	Example
	Choose the corresponding keys to control the program.	
	Adjusting the value here will enable the sprite to face different direction.	

#### ★ Practice


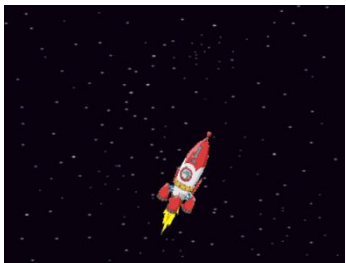
Mike has just learnt some new skills of flying the spaceship. Let's practice: make the spaceship fly 200 meters in the direction of value 90.

#### ☆ Explore





- 1) Use arrow keys to control the spaceship to fly upwards, downwards, leftwards, and rightwards.
- 2) Can you figure out how to control the flying speed?

# Achieve

## 1. Control the Spaceship with Mouse

Sprite	Program	Effect
 <p>Mike in Spaceship</p>	<pre> when green flag clicked   go to x: -1 y: -75   point in direction 90   set rotation style all around   switch costume to Mike in Spaceship 1   say Mike No.1, let's go! for 2 secs   switch costume to Mike in Spaceship 2   forever loop     move 2 steps     point towards mouse-pointer           </pre>	






## 2. Control the Spaceship with Keyboard

Sprite	Program	Effect
 <p>Mike in Spaceship</p>	<pre> when green flag clicked   go to x: -1 y: -75   point in direction 90   set rotation style left-right   switch costume to Mike in Spaceship 1   say Mike No.1, let's go! for 2 secs   say Press space key to enter the outer space and control me with arrow keys. for 2 secs   switch costume to Mike in Spaceship 2  when up arrow key pressed   point in direction 0   move 10 steps  when left arrow key pressed   point in direction -90   move 10 steps  when right arrow key pressed   point in direction 90   move 10 steps  when down arrow key pressed   point in direction 180   move 10 steps           </pre>	
 <p>Stage</p>	<pre> when green flag clicked   switch backdrop to Take-off  when space key pressed   switch backdrop to stars           </pre>	

## Additional Training

Let's play the game of "Catch Me If You Can"!

Sprite	Program	Effect

 Cat	<pre> when clicked   go to x: -168 y: -106   forever     point towards Mouse     move 5 steps         </pre>	  
 Mouse	<pre> when clicked   forever     go to mouse-pointer         </pre>	

### What You've Learnt?

Adventure Diary (Self-Assessment)

Gas Station (Other's Assessment)