



**Brunel**  
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# **MakeFantasy: Video Game Programming**

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**Innovative  
Inclusive  
Diverse**

# **MakeFantasy Workshop: Video Game Programming with MakeCode Arcade**

# The **Make**Fantasy Workshop is a Hands-On Experience

## The objectives:



An opportunity for all of you to gain knowledge of computer science.



An introduction to fundamental concepts and applications of computer science.



# The **MakeFantasy** Workshop is a Hands-On Experience

## The objectives:



Run a range of activities that focus on creating an arcade game.



Having fun with coding while also learning.





# Software

## Microsoft MakeCode

an online learn-to-code platform

<https://arcade.makecode.com/>

Download



Hour of Code



# Sequencing concept



**A sequence simply specifies the order of the tasks.**



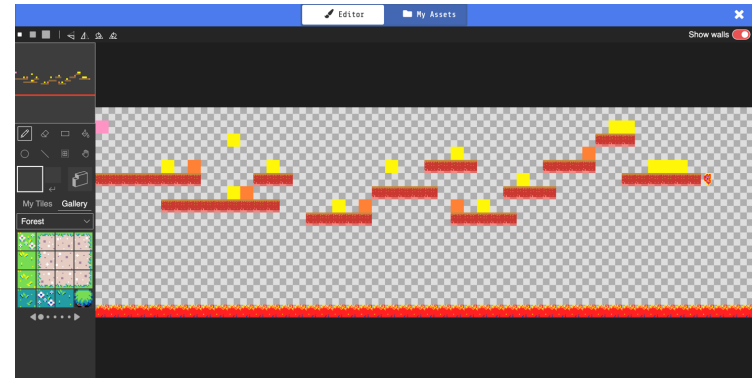
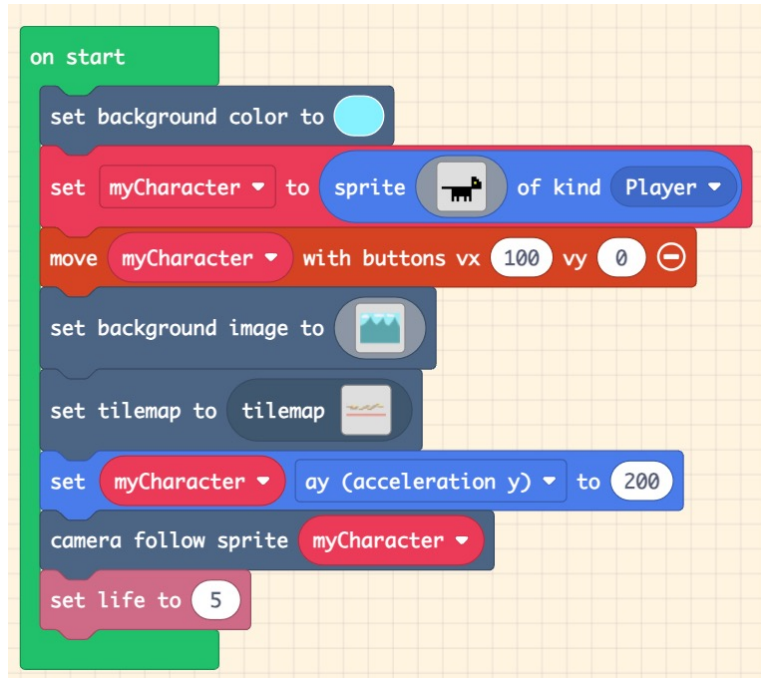
**A programmer tells a computer which tasks to perform first, which to perform second, and so on, so that every requirement falls into place in its proper sequence.**

# Activity 1: Make Your Avatar

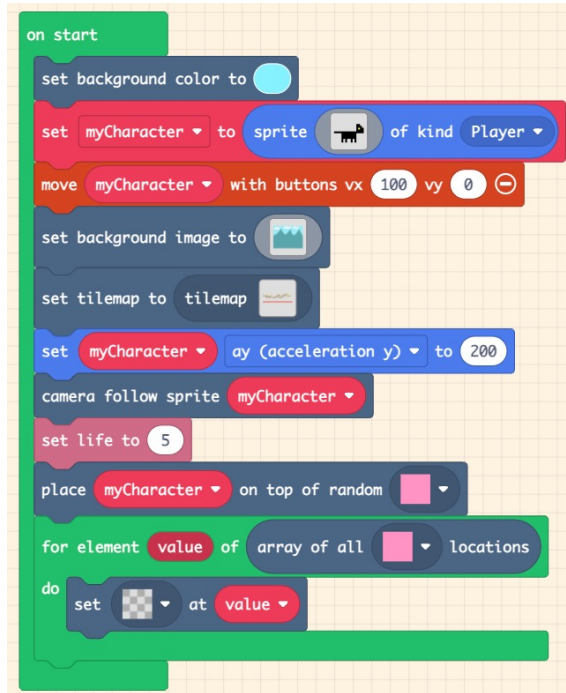




# Activity 2: Make Your Background



# Activity 3: Create Starting Point



# Selection Concept

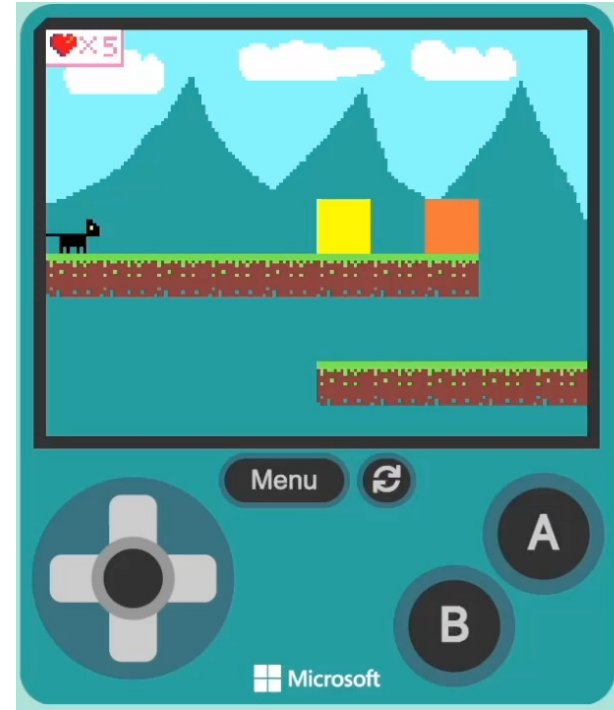


**Selection statements (also known as conditional statements) are pieces of code that are only completed if certain conditions are met.**

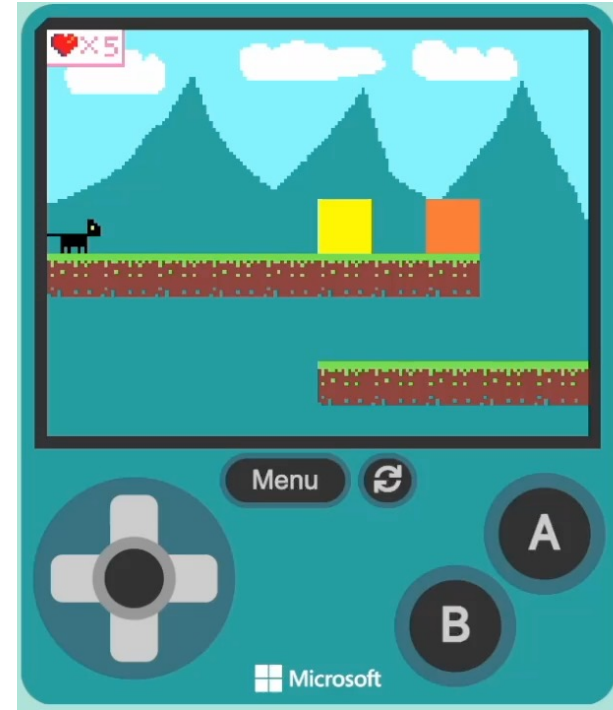


**These are often referred to as “IF-THEN” statements.**

# Activity 4: Make Your Avatar Jump



# Activity 5: Game Over / You Won!



# Looping Concept

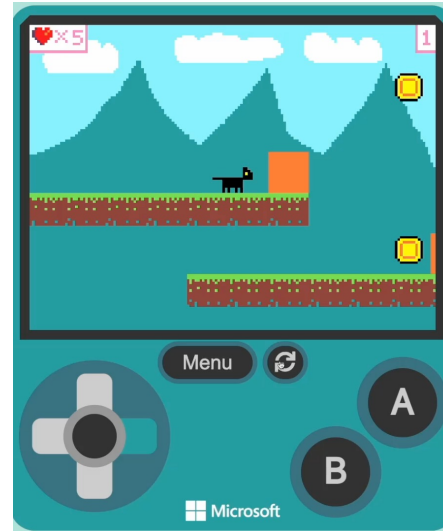
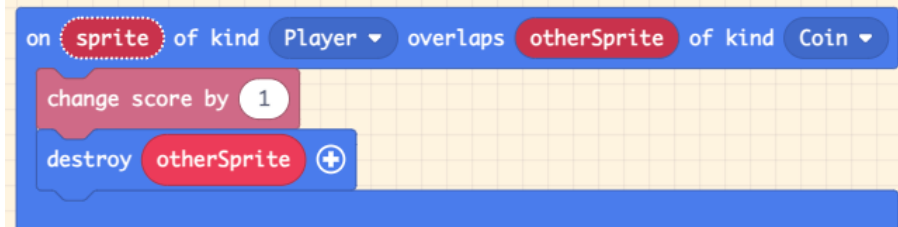


**A loop is something that repeats again and again until it is told to stop.**

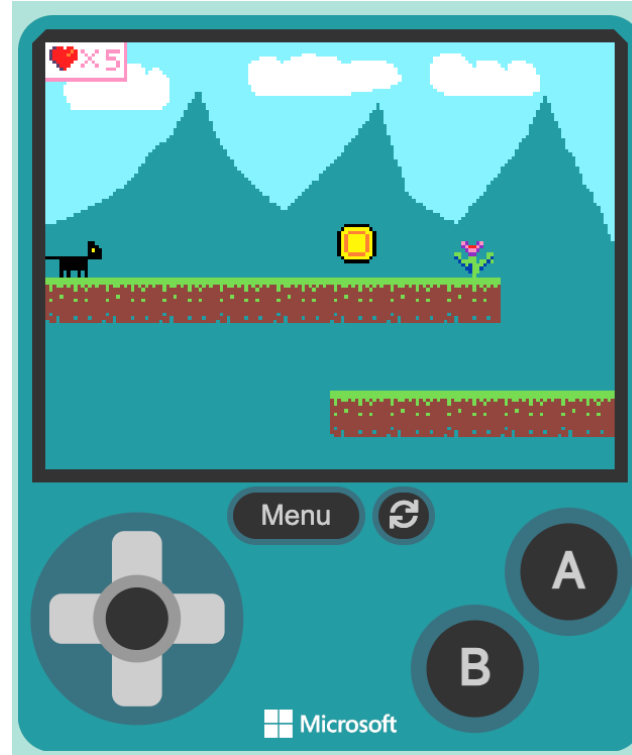
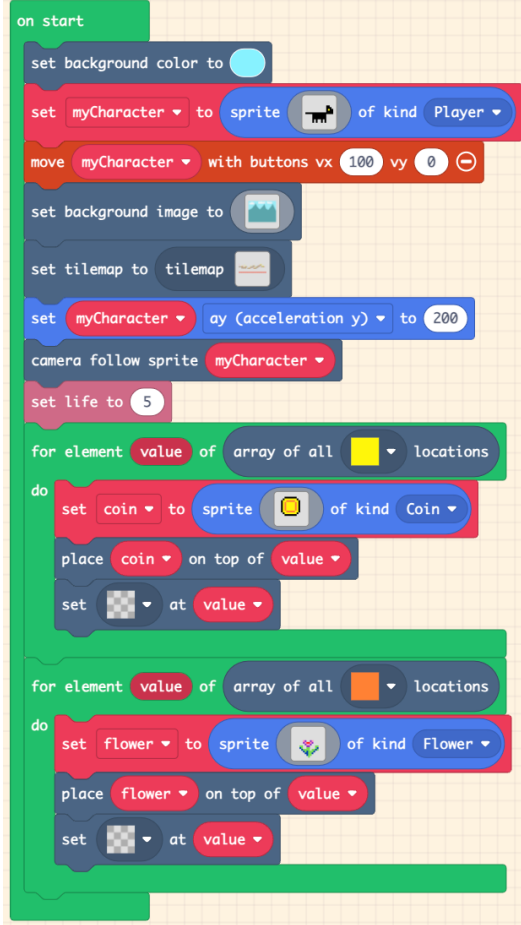


**Programmer specifies several processing steps and instructs the computer to carry out the loop as many times as they need.**

# Activity 6: Create Rewards

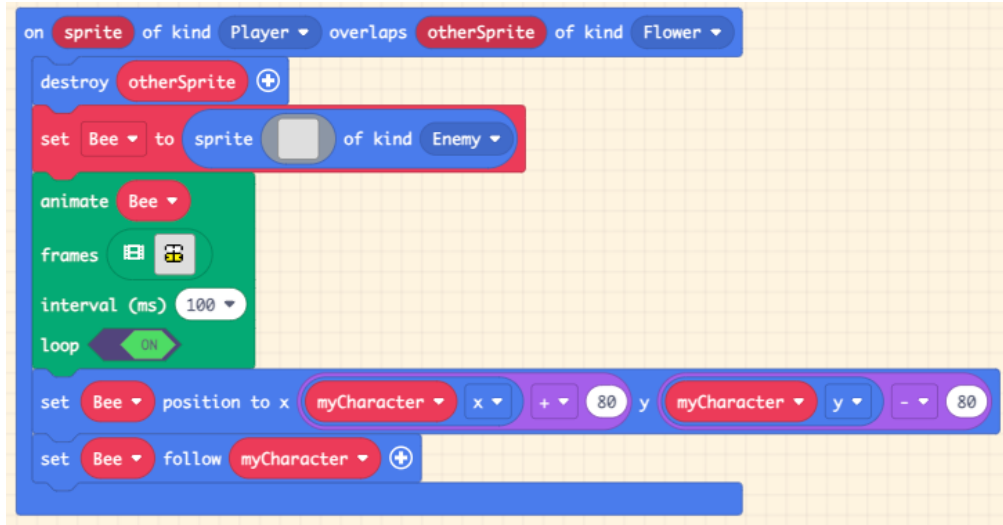


# Activity 7: Create Challenge (Part 1)

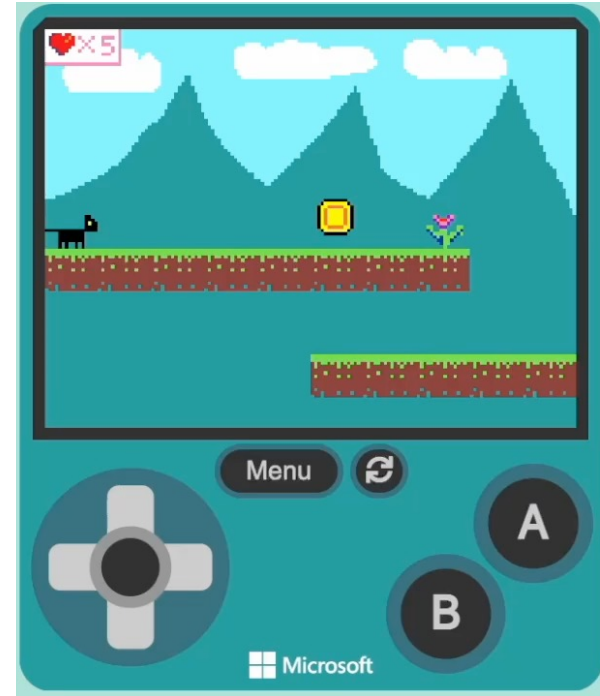
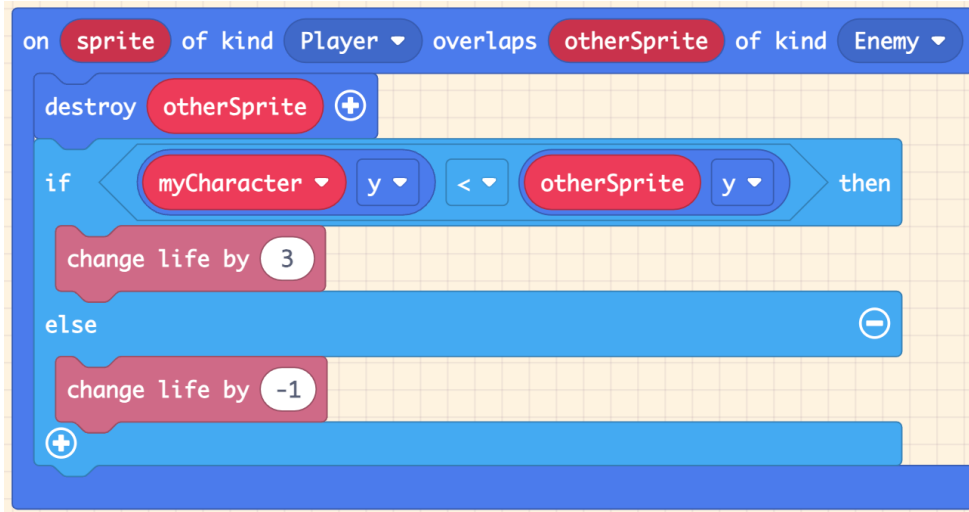




# Activity 8: Create Challenge (Part 2)



# Activity 8: Create Challenge (Part 3)





Menu



A

B



# Any Questions?