

A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with subtle diagonal lines.

Greedy Snake 2.0

By Bosco Chan

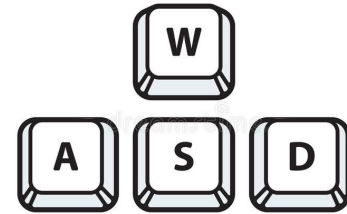


The Game

- Two-player time-boxed game
- Snake and The Thwarter (the opponent)
- Snake
 - Goal: survive for two minutes and get points by eating food
 - Win condition: scored more points than the thwarter at the end of the game
- Thwarter
 - Goal: gain points by nullifying the food that the snake ate
 - Win condition: scored more points than the snake at the end of the game

The Thwarter

Press the direction that's contrary to the movement of the snake when it eats the food



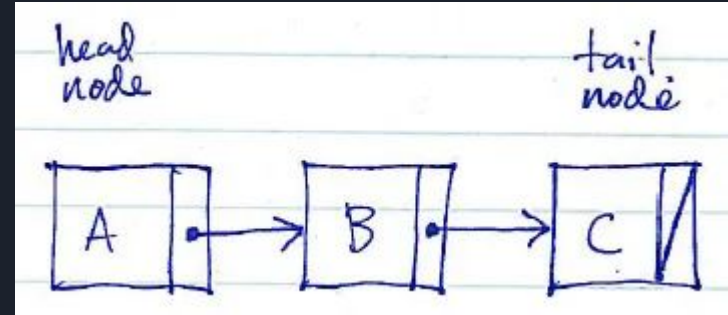
Demo

Any volunteer?



Snake

- Implemented with a linked list
- Easy insertion
- Makes implementing movement and growth very easy



```
# Node class
class Node:

    # Function to initialize the node object
    def __init__(self, data):
        self.data = data # Assign data
        self.next = None # Initialize next as null

# Linked List class
class LinkedList:

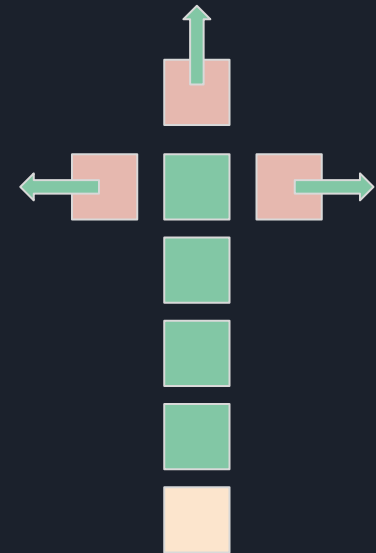
    # Function to initialize the Linked List object
    def __init__(self):
        self.head = None
```

```
# This function is in LinkedList class
# Function to insert a new node at the beginning
def push(self, new_data):

    # 1 & 2: Allocate the Node &
    #        Put in the data
    new_node = Node(new_data)

    # 3. Make next of new Node as head
    new_node.next = self.head

    # 4. Move the head to point to new Node
    self.head = new_node
```



Code



Thank you!

Game available on GitHub

<https://github.com/BoscoCHW/greedy-snake-2.0>

