

# CODING JOURNEY

Python
INTRO TO PYTHON

Python

Python

INTRO TO PTINO

6 LESSONS, 1.5 HR

15 LESSONS, 1.5 HR

15 LESSONS, 1.5 HR



DinoCodr

**BEGINNER** 

DinoCodr

ADVANCED

6 LESSONS, 1 HR

6 LESSONS, 1 HR



ScratchJr

**BEGINNER** 

5 LESSONS, 1 HR

ScratchJr

ADVANCED

5 LESSONS, 1 HR



AGES





AGES 9+

# CODING WORKSHOP

INTRODUCTION TO PYTHON



CONTACT US TO





## **MYHOMETUTOR CAMPUS a BUKIT BATOK**

Blk 213, Bukit Batok Street 21, #01-219, S650213









### Introduction to Python



Ages 9+

An introduction to Python for kids. No prior coding experience is required. Students are required to have a laptop. Laptop rentals are subjected to availability.

#### Lesson 1

Welcome to Python Wonderland

- Introduce Python as a friendly and versatile programming language.
- Set up the development environment.
- Learn to print basic messages using print().

#### Lesson 2



**Exploring the Python Zoo** 

- Understand the concept of variables and how they store information.
- Explore different data types: integers, floats, and strings.
- Engage in fun activities using variables.

#### Lesson 3



The Decision Forest

- Discover the magic of decisionmaking in Python using if statements.
- Learn how to make choices in programs with if, else, and elif.
- Engage in interactive games using decision-making skills.

#### Lesson 4



Looping

- Introduce the concept of loops for repeating tasks.
- Explore both for and while loops.
- Engage in fun, repetitive activities using loops.

#### Lesson 5



**Magic Functions** 

- Discover the magic of functions in Python.
- Learn how to define and use functions.
- Engage in spellbinding activities with **Python functions**.

#### Lesson 6



Show and Tell: Python Carnival

- Showcase what your child has learned in a fun and interactive Python Carnival Activities
- Provide a glimpse of the exciting journey ahead in Python programming.

## DINOCODR ROAR & CODE

Join our Exclusive Session! Suitable for ages 7-12

**ENROLL NOW!** 



EMBARK ON A CODING ADVENTURE WITH DINOSAURS - LIMITED SPOTS AVAILABLE!



### WORKSHOP DETAILS

**VENUE:** 

MYHOMETUTOR CAMPUS @ BUKIT BATOK BLK 213, BUKIT BATOK STREET 21, #01-219, S650213

**CONTACT US AT:** 9099 4235 / 6567 9648

**ENROLL NOW!** 



#### **LEARNING OBJECTIVES**

- INTRO TO BASIC CODING CONCEPTS
- COMPUTATIONAL THINKING
- CREATIVE EXPLORATION
- CRITICAL THINKING
- COMMUNICATION SKILLS
- CONFIDENCE AND SELF-ESTEEM

### **ACTIVITIES:**

- DINO SEQUENCING
- CONDITIONAL EXPLORATION
- EXPLORING LOOPS
- AND MANY MORE!

**VIEW DETAILED CURRICULUM** 







## **DINOCODR - ROAR & CODE**



#### **SEQUENCES & MOVING WITH DASH**

Students will be introduced to sequence and commands while making a fun mathematical game.

Basic Sequencing

Basic Math



#### **VARIABLES & MOVING WITH DASH PART II**

Understand how to use variables to control speed, direction, and position of objects on the screen

Basic Variables

☐ Basic Math

Data literacy



#### **CONDITIONAL EXPLORATION**

Students will learn how to programme a robot to avoid obstacles using basic conditional concepts.

- Conditions (if-else)
- Obstacle Detection
- Data literacy





#### **EXPLORING LOOPS**

Students will learn more about loops as well as how to implement it into their

- Algorithmic thinking Logical reasoning
- Data manipulation
- Problem solving





#### TINKERING FUNCTIONS

FUNCTION() Students will discover the power of programming as they teach Dash the

- Robot to talk and guide it through a series of enjoyable challenges. ☐ Multimedia integration ☐ Signal processing
- Programming Functions



#### **DINO SHOW AND TELL**

Students will get an opportunity to showcase the game that they

- ☐ Confidence building ☐ Active listening
- Critical thinking
- ☐ Time management



## **DINOCODR - ROAR & CODE**

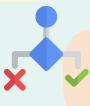




#### **ADVANCED LOOPS**

Students will be exposed to nested loops and learn how to break out of repeat forever loops while programming a robot to learn the concepts!

- Nested Loops
- ☐ Breaking out of loops
- Debugging
- Problem Solving



#### **CONDITIONAL VARIABLES**

Students will understand more about variables and how we can incorporate conditions to them to perform tasks using a robot!

- Logical Operators
- Conditional Statements
- Boolean
- Basic Math (Comparison Operators)





#### WHILE LOOPS AND VARIABLES

Students will be exposed to more advanced programming concepts such as variables and while loops.

- Loops with Variables
  - Algorithmic thinking
- Data manipulation
- Debuggin







#### WHILE LOOPS AND VARIABLES II

Continuation from lesson 9. Students will deepen understanding of while loops and engage in creative problem-solving activities.

- ☐ Loops with Variables ☐ Algorithmic thinking
- Data manipulation
- Debugging





#### **EVENT HANDLING**

Students will learn more about event handling and how we can incorporate conditions to them to perform tasks using a robot!

- Event handling
- Logical Reasoning
- Obstacle Detection
- Debugging





#### **DINO DISCOVERY**

Students will embark on an exciting journey and showcase what they have learnt through a game.

- Game Integration
- ☐ Visual Communication
- Memory and Recall
- Computational Thinking





# "CODING IS LIKE SOLVING A PUZZLE WITH YOUR IMAGINATION AND CREATIVITY"













**AGES 5-9** 



# GAME BUILDER

#### **Activities**

- Interactive Stories
- Game Implementation
- Scratch Junior Coding
- And many more!

**ENROLL NOW!** 

### Takeaways:

**DSA Preparation** 

Create Your First Game

Stem Learning

**Block-Based Programming** 



#### Lesson 1

#### "Hello Scratch Junior"

- Introduction to the Scratch Junior interface
- Navigating the programming environment
- Creating a simple character animation
- Sequencing.

#### Lesson 2

#### "Interlink Sprites"

- Using motion blocks to create animations.
- Creating character animations.
- Interlink messaging between sprites
- Coding character dialogues and interactions.

#### Lesson 3

#### "Scoring Goals"

- Creating a basic score system for a basketball game.
- Using prompting for scoring system.
- Incorporating dialogue and character movement.

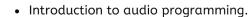
#### Lesson 4

#### "Looping Cars"

- Implementing loops into Codes
- Adding choices and consequences to the story.
- Understanding conditional statements.

#### Lesson 5

#### "Audio Exploration"



- Implementing audio programming and start-scripts.
- Develop a simple in-game live traffic.







"CODING IS NOT MAGIC: IT'S A SKILL ANYONE CAN LEARN. THE REAL MAGIC IS WHAT YOU CREATE WITH IT."



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BUSINESS Innovations Generator

## **GET IN TOUCH**









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