⊙ ≫ EXPLORER

The Explorer package is perfect for students who wish to delve into coding and computer courses, aiming to create basic applications. No prerequisites are required to enrol in any of these programs.

GAMING WITH BLOCKCODE
9-12 Yrs| 24 Classes| 3 Months| 50 Minutes| Certificate of Achievement

Learn the basics of game development and build a foundation to becoming a master game developer with our intensive online game development course.	• Computational Thinking • Sequentially Thinking • Logical Thinking & Problem Solving

LESSON PLAN

S.No	Topic	Class	Project
1	Introduction to Game Lab	Getting started with code.org Game Lab. Animation Library, Sound library, Frames and Draw function	Ball Animation
2	Game Design	Learning rotation through degrees and angles, Debugging the sprites. If control statements and giving conditions & logic.	Ball Animation
3	Introduction to variables	Introduction to variables and its applications	Fidget spinner
4	Animation	Learn to move, add rotate sprites	Fidget spinner
5	Introduction to velocity	Creating animated ball, understanding the concept of velocity function, creating colliders and adding variables.	Ball Bounce Animation
6	Multiplayer Game	Creating animated ball, understanding the concept of velocity function, creating colliders and adding variables.	Real Pong Game
7	Introduction to operators	Understanding && and || operator.	Real Pong Game
8	Introduction to functions	Understanding and creating functions	Real Pong Game
9	Control statements	Using advanced control statements and logics	Garbage sorter
10	Control and logic statements	Using advanced control statements and logics	Garbage sorter
11	Multi-screen	Create multiple screens on game lab, Creating timer	Car Racing Game
12	Introduction to Random Numbers	Learn how to use and apply random numbers in game development	Car Racing Game
13	Introduction to MakeCode Arcade	How to create, choose and use a sprite. How to draw a sprite, backgrounds	MakeCode Arcade
14	Game designing in MakeCode Arcade	Introduction to enemies, using projectiles and variables, overlapping	MakeCode Arcade
15	Code a timer	Making sprites on arcade, moving sprites with the buttons, using timer, variables	Chasing Pizza
16	Creating Map and tile map	Getting started with tile map. Creating map, creating countdown	Maze Game
17	Movement with arrow keys	Adding sprites, obstacles, arrow key movements	Pacman game
18	Creating functions	Learn to write functions to create obstacles	Pacman game
19	Sprite Interactions	Learn interaction of sprite using control statements	Pacman game
20	Win/Lose scenarios	Learn to code win/lose scenarios using variables	Pacman game
21	Capstone project	Intro, adding sprites and moving sprites, using tilemaps, animations, AI	Platformer
22	Capstone project	spawning, collision, wall jumping, more levels	Platformer
23	Capstone project	Game completion for win/lose scenarios	Platformer

Lesson plan indicates the topics and projects and should not be read as topics covered per class.