

3D, VR & AR Game Dev Block Coding Curriculum

AR/VR/3D Concepts 3D Geometry

Light Placement Object Cloning

Coding Concepts

Variables Conditionals Objects Loops Functions List

Dynamic Physics

Cursor Events



3D Game Development (12 Hours)



Superhero Power Up

Design & play a Superhero power discovery game.

Session 1-3 [View Project]

Coding Concepts

Events, Text to Speech

3D/AR/VR Concepts

3D Player Avatars, Particle System



Football Game

Build a popular Football game in 3D

Session 4-6 [View Project]

Coding Concepts

Functions, Conditional Statements, Keyboard Events, Variables

3D/AR/VR Concepts

3D Environment, 3D Objects



Archery Target Shoot

Design the perfect Archery Master game in 3D

Session 7-9 [View Project]

Coding Concepts

Functions, Conditional Statements, Keyboard Events, Loops, Dynamic Physics, Variables

3D/AR/VR Concepts

3D Environment, 3D Objects, Animations



3D T-Rex Game

Build a popular Chrome Dinosaur game in 3D

Session 10-12 [View Project]

Coding Concepts

Functions, Conditional Statements, Keyboard Events, Collision Detection, Clones, List, Variables

3D/AR/VR Concepts

3D Environment, Animations, List, Clones



Virtual Reality (8 Hours)



VR Pixel Art

Design a Pixel Art app in VR

Session 13-16 [View Project]

Coding Concepts

Mouse Events

3D/AR/VR Concepts

Doodle, Colors, Rotation



Multiplayer 3D Tic

Tac Toe

Code a classic Tic-Tac-Toe game in VR

Session 17-20 [View Project]

Coding Concepts

Events, Conditionals, Variables

3D/AR/VR Concepts

Texts, Animations, Colors, Sounds



Augmented Reality (4 Hours)



Mole Mash

Build a Mole Mash game & Whack a Mole!

Session 21-24 [View Project]

Coding Concepts

Timers, Random Numbers, Conditionals, Functions

3D/AR/VR Concepts

Cursor Events, Positions

