



PROFESSIONAL CURRICULUM (GRADES 7-9)

Tech Entrepreneur

Build full Entrepreneur-ready Games, Apps, Websites and AI/ML Models



Class 1-48

Game Design and Basic App Development

Class 49-96

Mobile App Development & User Experience (Design)

Class 97-144

Data Science and Interpreting User Behavior

1

Single Player Game

Students learn basic programming constructs while designing simple games.

- ✓ Loops
- ✓ If conditionals
- ✓ Variables ;
- ✓ Pre-defined functions



Ping Pong Game

Build an AI based single player game against Computer.

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Web App Development

Students will dive into the world of HTML and CSS to build static and dynamic websites.

- ✓ HTML
- ✓ CSS
- ✓ DOM Handling



Wireless Buzzer App

Build a range of interactive and mobile-friendly websites.

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Python Programming

Students will learn basics of python and different data structures used in python.

- ✓ Loops
- ✓ Functions
- ✓ Lists/Tuples
- ✓ Dictionaries



Automation Script

Build a range of interactive and mobile-friendly websites.

2

Infinite Screen Games

Students are introduced to complex game designs and environment.

- ✓ Functions
- ✓ Flags
- ✓ If-else conditionals
- ✓ Switch Statements



Trex Runner Game

Build infinite running screen games and multiplayer games for the web.

7

Mobile App Development

Students will build single and multi screen apps compatible on multiple devices.

- ✓ React Native
- ✓ JSX
- ✓ Design & Architecture
- ✓ App Deployment



Monkey-Chunky App

Build interactive apps with audio visual components

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Data Visualization

Students will learn data plotting and visualization by working on real life complex problems

- ✓ Graphs
- ✓ Plots
- ✓ Variability
- ✓ Probability



Interactive Data Plots

Collect, process and identify patterns in data by visualizing it

3

Gaming Apps

Students learn to simulate physical systems like rigid body dynamics, soft body and fluid dynamics in the game.

- ✓ Oops
- ✓ JavaScripts
- ✓ Physics Engines
- ✓ App publishing



Angry Birds

Create professional games with real-world dynamics and systems.

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Forms Handling

Students will learn how to input and access local data through forms.

- ✓ UI/UX
- ✓ Event Handling
- ✓ Input Validations



Library Management App

Build integrated firebase applications.

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SpaceTech Data Analysis

Students will learn how to analyse data using coding and algorithms

- ✓ Clustering
- ✓ Estimation
- ✓ Descriptive Statistics
- ✓ Inferential Statistics



Data Reports

Build data reports to study the impact of inventions in real-life scenarios.

4

Multi-Player Games

Students will learn to integrate database into their game to create multiplayer browser based games.

- ✓ Events
- ✓ OOPS
- ✓ Asynchronous Calls
- ✓ Classes/Objects



Car Racing Game

Design a multiplayer car racing game

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Firestore integrated Apps

Students will learn to integrate firestore for passing data in apps.

- ✓ API Integration
- ✓ App Deployment
- ✓ Data Handling
- ✓ Queries and Databases



Book Santa

Social networking apps

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AI & Machine Learning

Students will take a plunge into the world of data science and master the art of modelling data for machine learning.

- ✓ Prediction
- ✓ Importing Data
- ✓ Statistical Modelling
- ✓ Training Models



AI Chatbot

Replicating real life AI machines like Alexa.

5

Game Design Process

Students brainstorm an idea for their own game and then code the prototype from scratch.

- ✓ Debugging
- ✓ Call Back
- ✓ Nested Loops
- ✓ Logical Operators



Self Design Game

Design your own game right from characters, costumes to obstructions and rubrics.

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Application Design Process

Students will explore the concept of design thinking process while making Apps for Social Good

- ✓ App Dataflow
- ✓ App UI
- ✓ Design Thinking
- ✓ App Gamification



Self Designed App

Build applications for social good.

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API Development

Students will create their own API endpoint to create a data service application

- ✓ Flask
- ✓ API
- ✓ Architecture



Self designed data service app

Build applications for social good.

