# **CODING FOR KIDS**





# **Course Details**

INSTRUCTOR: YASMINE DIEF
COURSE DURATION: 10 HOURS
NO PRIOR EXPERIENCE REQUIRED
E-CERTIFICATE UPON COMPLETION

# About The Instructors: YASMINE DIEF

A Telecommunications and Electronics Engineer. She received a scholarship from the Ministry of Communications in Mobile App Development.

She has over three years of experience teaching children programming and artificial intelligence, during which she trained hundreds of students in various educational institutions and learning centers.

She taught them how to create games and mobile applications using tools such as Scratch, App Inventor, and PictoBlox, helping them learn the fundamentals of programming, creative thinking, and logical problem-solving. Her goal is to introduce children to the world of technology and help them build their skills from a young age so they can become innovative programmers in the future.

# Course overview: Scratch Coding for Kids (10 Hours)

This fun and interactive course introduces kids to the world of programming through Scratch, a visual coding platform designed specifically for young learners.

In just 10 hours, students will learn the core foundations of coding while creating animations, mini-games, stories, characters, and a full final game—all using drag-and-drop blocks.

The program encourages creativity, logic, problem-solving, and digital confidence. Each session builds toward real projects, ensuring kids understand not just how to code, but how to think like creators and game designers.

Scratch is the perfect starting point for kids who want to explore coding in a simple, enjoyable, and highly visual way—making learning both educational and exciting.

# What you'll learn:

# By the end of the course, students will be able to:

- **Q** Understand Programming Basics
- What programming means
- How Scratch works
- How to control characters (sprites) and environments
- M Build Interactive Games
- Moving characters in all directions
- Keyboard and mouse controls
- Collision detection
- Scoring systems
- Levels and progression
- Creating their very own Flappy Bird game
- Create Animations & Stories
- Change costumes and animate sprites
- Build stories with scenes and transitions
- Add dialogues and interactions
- Use Events, Sounds, and Sensor Blocks
- Trigger actions using events
- Add sound effects and interactive responses
- Use sensors and keyboard inputs
- Apply Coding Logic
- Loops (Repeat / Forever)
- Conditions (If / If-Else)
- Variables and counters
- Problem-solving and debugging

KNOWLEDGE EMPOWERS YOU.

# Why Kids Should Attend This Course

\* Fun, Creative, and Easy to Learn

Scratch makes coding visual and enjoyable—kids learn by playing, building, and creating.

Builds Future-Ready Skills

Students develop skills essential for school and modern careers:

- Logical thinking
- Creativity
- Planning & sequencing
- Digital literacy
- Game design fundamentals
- Make Real Projects

Every child will create:

- Multiple mini-games
- Animations and interactive scenes
- A full final game: Flappy Bird made from scratch
- Their own project to share with family and friends

👦 👧 Perfect for Kids Aged 7–14

No prior experience needed.

Kids learn step by step with guided activities.

📚 Project-Based Learning

Every session includes hands-on practice, fun challenges, and mini-projects.

# **Course Content**

#### Session 1: Introduction to Scratch

- What is Scratch?
- Interface overview
- Add sprite & backdrop

#### **Session 2: Movement & Directions**

- Move sprite in 4 directions
- Keyboard control
- Keep sprite inside screen

#### **Session 3: Events & Sounds**

- Event blocks
- Sound effects
- Trigger actions with events.

#### **Session 4: First Mini Game**

- Make a Catch Game
- Falling object
- Collision detection.

### **Session 5: Loops**

- Repeat vs Forever
- Continuous actions
- Mini loop-based game.

## Session 6: Conditions (If / If Else)

- If & If-Else
- Condition-based behavior
- Obstacle Game



# **Course Content**

### Session 7: Score & Levels (Variables)

- Create score variable
- Increase/decrease score
- Level progression. Session

# 8: Animation & Storytelling

- Costumes & animation
- Story scenes
- Dialogs & transitions.

#### **Session 9: Interactions & Sensors**

- Mouse events
- Advanced keyboard input
- Make a Maze game

#### **Session 10: Final Game**

• Make your own Flappy Bird Game

