

KARACHI EDU • COACHING NOTES

Introduction to Scratch & Visual Coding

Computer Science Class X • Sindh Textbook Board

Unit 7 Core Focus

21st

Century Skill: Algorithmic Thinking & Visual Programming

What is Scratch?



Visual Language

Blocks snap together easily.



Creative Media

Build interactive games and stories.



Beginner Friendly

Eliminates complex syntax errors.

Scratch Environment Layout

Stage Area

Displays animations, games, and sprite actions.

Sprite Pane

Manages characters and objects in the project.

Block Palette

Contains categorized command blocks for coding.

Script Area

Workspace where blocks are dragged and snapped.

Major Scratch Block Categories



Motion

Controls sprite movement & turns.



Events

Triggers scripts (e.g. green flag).



Control

Loops and conditional checks.



Operators

Math operations & comparisons.

Comparison: Scratch vs C++ Programming

Feature	Scratch	C++ Language
Coding Style	Visual drag-and-drop blocks	Text-based source code
Syntax Rules	No syntax errors possible	Strict semicolon & braces required
Primary Target	Beginners & young learners	General purpose & system apps

Karachi Edu Coaching Center

Mastering Computer Science Fundamentals



Questions & Discussion