Scratch for Game Developers

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Introduction

Scratch is the best educational programming software for kids available today. With Scratch, you can create games and interactive art projects all while having lots of fun! It is developed by MIT, is the gold standard for learning to code creativity. This software helps to develop computational thinking skills while removing barriers to self expressions through program design. With simple block programming, you can focus on problem solving and project building rather than syntax. Learning through scratch will allow you to build variety of programs including games through block programming as well as fundamental understanding of logic development which enhance your programming abilities. Learners will engage in the design process to take a deep dive into block programming specifically for for the game development. Students will learn the basic concepts of programming & game development with a practical learning approach. This course demonstrates and explain how to write a great variety of programs in scratch programming language to develop their own games

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This Course

- Improve your knowledge regarding block programming as well as game development which will enhance your programming abilities and critical thinking.

- Build your ability to analyse and innovate. You will work on different programs & games and learn how to diagnose and debug their errors. You will develop analytical skills of game development which cannot be solely obtained from books and videos.

- Not only help you to learn the art of block programming but as you perform different tasks it will eventually develop and improve your skillsets as an innovative game designer.

- Project based learning with a fun atmosphere & series of assessments will enhance your programming skills that are useful forage development.

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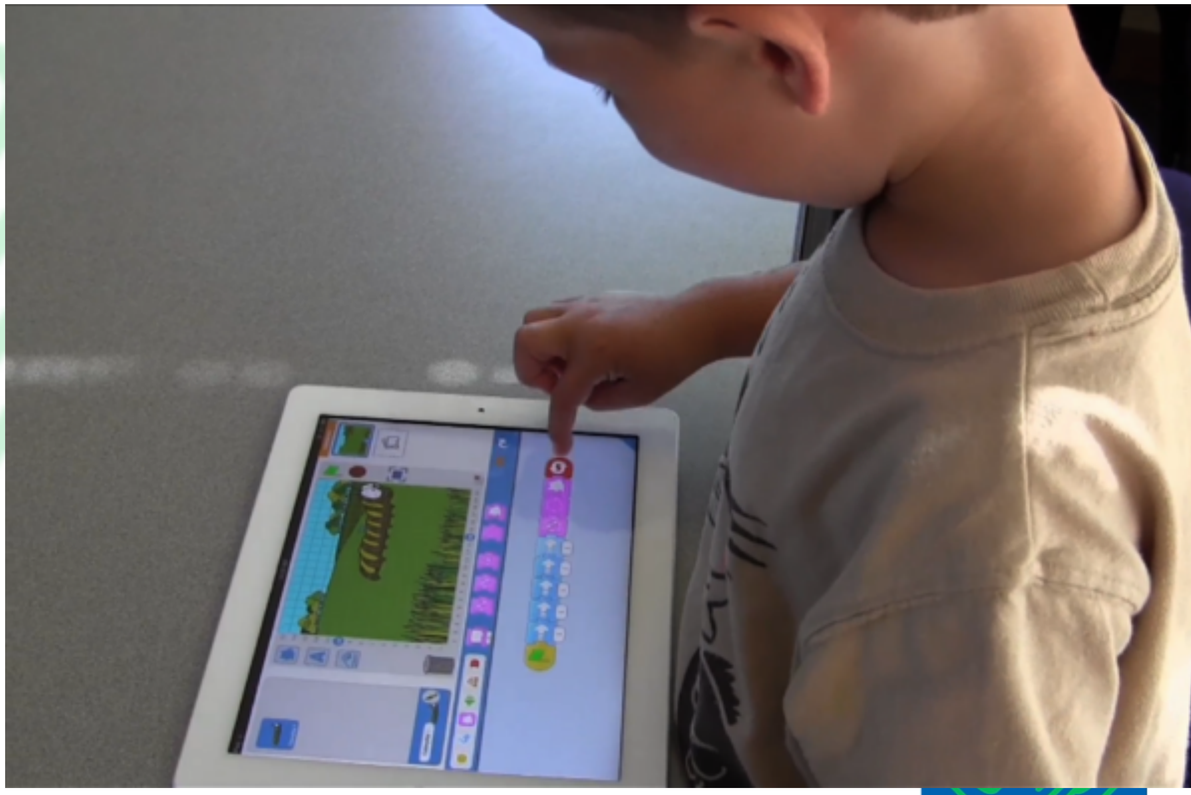
What you'll learn

- Introduction to Scratch & Block Programming
- Familiarity with Scratch offline editor
- Basic understanding of software
- Adding custom sprites & background
- Use and importance of loops
- Use of conditional statements
- Comparing different values
- Use of variable
- Program 6 different video games and interactive art projects



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Our Aims

- Quick learning in a smart way
- “Intelligence, Innovate, Inspire”
- Creating a fun learning atmosphere
- Enhancement of block programming skills
- Performing different tasks with smart approach
- Thinking out of the box
- Transforming conventional educational methodology to a project based learning & creativity

Who You'll Meet

- Highly qualified Engineering faculty with vast knowledge regarding block programming and game development.
- Experts in Scratch & STEAM Educationist.
- Highly skilled academia and game developers.

What You'll Experience

- An in-depth series of online/offline lectures, with high quality graphics & detailed descriptions.
- Hands-on learning through variety of tasks, labs & assessment involving different projects & interactive games.
- Interactive sessions with STEAM experts.

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What You'll Use

- Scratch MIT Software
- Different types of programming blocks
- Variables & Lists
- Conditional Statement
- Use of loops
- Functions
- Game development

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Course Structure

Week 01

Introduction to Scratch
- Familiarity with Scratch website
- Online & Offline Scratch Editor
- Basic use of Programming Block

Week 02

Rainbow Lines Project
- Painting new Sprite
- Debugging & logic development
- Coding & Execution

Week 03

Maze Game Project
- Use of background
- Interactive game development
- Logic complex programming

Week 04

Snake Game Project
- Making snake body
- Hit detection for snake
- Logic development

Course Instructor

Hafiz Mansoor Ahmed
Mechatronics Engineer, SZABIST, Karachi

He is the Instructor for the course “Scratch for Game Developers” in the department of Emerging technologies at THF. His areas of expertise are Game development with Scratch, project based learning, Block Programming, STEM & STEAM education, designing logics & implementation. Before joining THF, he was working in RapidTack as a Design Engineer and Instructor of Robotics/Engineering Team lead and curriculum designer for Robotics & Scratch at RoboticsWorld.

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Join Us:

- To be a smart thinker
- To be a project leader
- To be a quick learner
- To be a team player
- To be a troubleshooter
- To enhance your vision as game developer