




# SCRATCH

# Game Coding



## Let's improve coding skill with games!

Games motivate your child to develop codes and improve related skills such as user experience, user interface, and game story design. Also, the coding trains logical thinking capability.

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**Advance coding skills**  
 Developing games is the best way to advance coding skills
- 
**Improve Logical Thinking**  
 Game development improves logical thinking.
- 
**Expand the boundary**  
 Designing and customizing games teach UI/UX, stimulate creativity and storytelling.

### Bay Area Gurukul

1611 S Main St, Milpitas, CA  
 95035  
 (408) 599 7987

### Spring Session

10 classes, \$250

Friday from 4:30 pm to 5:30 pm

Mar. 6, 13, 20, 27, Apr. 3, 10, 24,

May 1, 8, 15

(No class on 4/17)

Register Now

Go: <http://bit.ly/2IFFj0l>

Or go to [www.myrisu.com/us/](http://www.myrisu.com/us/) and follow a link at top of the page

## After this program

Your child will be able to design, develop, and enhance his/her games. Understand the importance of game story and user experience. Understand advanced programming skill such as clone, costume control, and script synchronization with messaging.

## Syllabus

### Session 1 for Beginners

- 1) Class 1
  - Introduction of Scratch environment
  - Add & delete a sprite and a backdrop
  - Simple sprite movement
- 2) Class 2
  - Develop a maze program
  - Design backdrop
  - Control a sprite with keys
- 3) Class 3
  - If condition & touching color detection
  - X-Y coordinates
  - Loop
- 4) Class 4
  - Goal detection
  - Add sounds
- 5) Class 5
  - Multi stages
  - Backdrop control
- 6) Class 6
  - Variables
  - Stage detection
- 7) Class 7
  - Rotating obstacle
  - Resizing obstacle
- 8) Class 8
  - Gliding obstacle
  - Timer
- 9) Class 9
  - Start and game over screen
  - Process control with messages

### Session 2 for Intermediate

- 1) Class 1
  - Review of Scratch environment
  - Chasing mouse game
- 2) Class 2
  - Chasing mouse game
  - Distance detection
- 3) Class 3
  - Dodgeball game
  - Falling balls
- 4) Class 4
  - Detection of touching sprite
  - Variables
- 5) Class 5
  - Game over condition
  - Enhancement
- 6) Class 6
  - Flappy Bug game
  - Game start screen
- 7) Class 7
  - Obstacle design
  - Physical model
- 8) Class 8
  - Clone
  - Messaging
- 9) Class 9
  - Design own game
  - Game story
- 10) Class 10
  - Game over condition
  - User experience

(Syllabus is subject to change based on attendee's skill level)