



GAME DEVELOPMENT

GRADE 6-8



COURSE HIGHLIGHTS !

- BUILD 10 REAL WORLD GAMES
- Live 48 Hours of Sessions
- 48 hours Self Learning Session
- Fundamental of Block Based Programming
- Create smart & fun games
- Create animations & Cool visual effects
- Understand complex computer science concepts by intuitively applying them in games
- Build Real World Application like Super Mario, Ping-pong, Bike racing, Soccer game and Minecraft
- Certificate of course completion
- LMS Access - Pre-recorded videos, Documents, Assignments, Codes

Book your
FREE Demo now!



COURSE REQUIREMENTS

- Basic understanding of block based coding
- Laptop, Computer or a tablet
- Access to the internet



WHAT YOU'LL LEARN IN THE COURSE



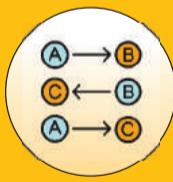
Inherent characteristics of computer programming



Build interactive games that respond to user input



Managing Images, Sound, Collisions, Broadcast Message, Sprites, etc.



Concept of Mathematical & Logic Operator



Importing & handling of Extension



Text & Speech Recognition

Birthday Card design

- How to paint sprite
- Use of visibility block
- Costume changing

START



TINKER CODERS
BEYOND CODING

Beginner

Grade 6-8

Jungle Party

- Concept of timer
- Use of conditional block

Blink the Name

- Color changing
- Rotational working



Draw line & polygons

- Extension and Its working
- Change of pen size and Color
- Concept of polygon shapes

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Flower patterns

- Pen blocks
- Concept of looping



Lion and mouse

- Use of broadcast & receive message
- Conversation building



How to grow plant

- Resizing & reshaping Sprite
- Use of keyboard keys



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How to make piano

- How to add music
- Use variable as slider



Hide and Seek Game

- Concept of visibility
- Use of touching sprite block
- How to add score



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Treasure Hunt

- Keyboard key control over sprite
- Color sensing



Shooting Game

- Gliding of sprite
- How to add highest score



Basketball Game

- How to make ball jump
- XY coordinates system



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Intermediate

Grade 6-8



Hygienic or Unhygienic

- Use of touching Sprite
- Speak out information



My Paint box

- Sprite color changing
- Changing thickness of pen
- Use of Erase all



Save the Gobo Sprite-Video sensing

- Use of video sensing
- Concept of If-else block



Auto Spiral

- Taking user input
- Use of pen block
- Idea of spiral making

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Cricket Game

- Use of gliding
- Touch sensing



Bike Racing Game

- Speed controlling
- How to create sprite



Count the Apples

- Variable use
- Idea behind Gravity



Maze Game

- How to paint backdrop
- Color sensing

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Food Chain Animation

- Concept of looping
- How voice pitching work



PingPong Game

- Direction setting
- Mouse controlling
- How to pick random values



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Advance
Grade 6-8


Jump the Chick

- Creating background
- Changing score with timer



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Gun and Ghost

- Stop all sprite
- How to make clone of sprite
- Go to front and back layer



Catch the Colorful Ball

- How to set lives of sprite
- Concept of random position
- Color sensing concept



MineCraft game

- Creating list
- How to Create Own Block
- Joining of two list



Defend your castle

- Comparison operator
- Use of broadcasting
- Logical operator & Its Use



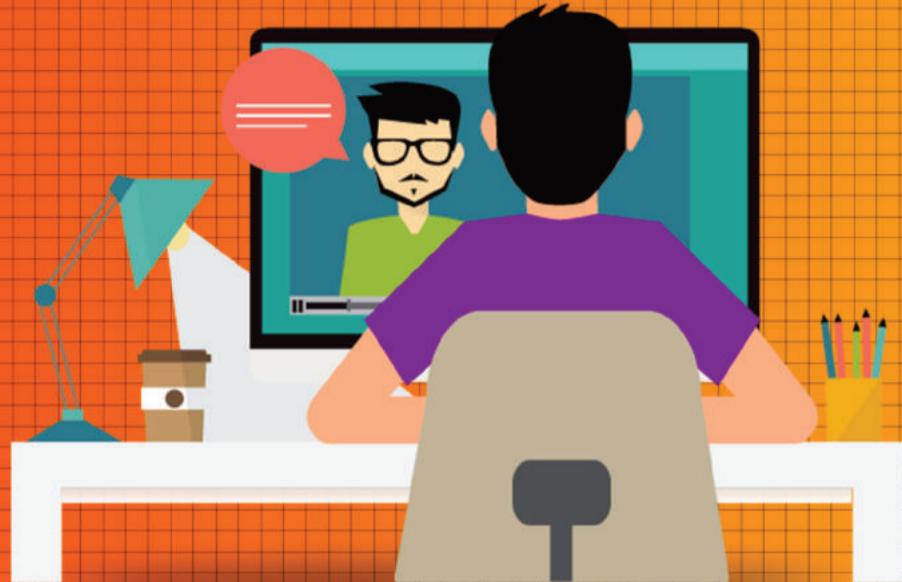
Super Mario Lite

- AND OR Operator Concept
- Go to random position
- Create & delete clones of sprite

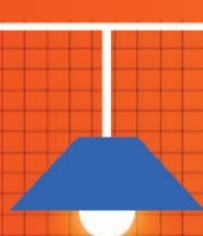


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END



HOW THIS COURSE WILL HELP YOUR CHILD



- **CIC approach**

Consumer to innovator to the creator

This course aims to turn the student from a consumer of technology to the creator of technology.

- **Activity-Based learning**

Learn the required programming concepts by performing activities

- **Project - Based Learning**

Learn the required programming concepts by performing activities

Instead of a theoretical and traditional way of learning, students will build projects during the course.

- **Our PBL approach will help student in**

Allows students to acquire key knowledge & skills through the development of projects that respond to real-life problems

Develop critical thinking

Retain the concept

Integration of different concepts

COURSE OUTLINE

Beginner

| Session Number | Activity name | Learning Outcome |
|----------------|----------------------|--|
| 1. | Birthday card design | How to Paint Sprite, Use of Visibility block, Costume Changing |
| 2. | Jungle Party | Concept of timer, Use of conditional block |
| 3. | Blink the Name | Color changing, Rotational working |
| 4. | Draw line & polygons | Extension & Its working, Change of pen size & Color, Concept of polygon shapes |
| 5. | Flower Patterns | Pen blocks, Concept of looping |
| 6. | Lion and Mouse | Use of broadcast & receive message, Conversation building |
| 7. | How to grow plant | Resizing & Reshaping Sprite, Use of keyboard keys |
| 8. | How to make piano | How to add music, Use variable as slider |
| 9. | Hide and Seek Game | Concept of visibility, Use of touching sprite block, How to add score |
| 10. | | |
| 11. | Treasure Hunt | Keyboard key control over sprite, Color sensing |
| 12. | | |
| 13. | Shooting Game | Gliding of sprite, How to add highest score |
| 14. | | |
| 15. | Basketball Game | How to make ball jump, XY coordinates system |
| 16. | | |

COURSE OUTLINE

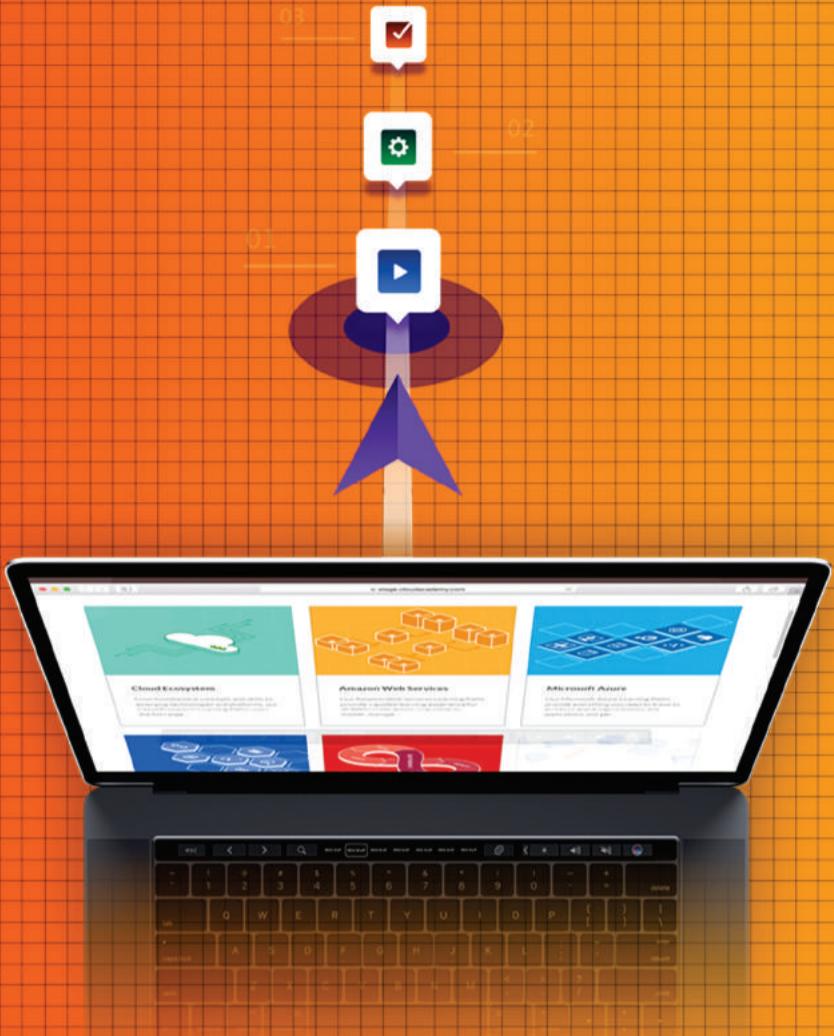
Intermediate

| Session Number | Activity name | Learning Outcome |
|----------------|--|--|
| 1. | Hygienic OR Unhygienic | Use of touching Sprite, Speak out Information |
| 2. | My Paint box | Sprite color changing, Changing thickness of pen, Use of Erase all |
| 3. | Save the Gobo sprite- Video sensing | Use of video sensing, Concept of If-else block |
| 4. | | |
| 5. | Auto Spiral | Taking user Input, Use of pen Block, Idea of Spiral making |
| 6. | | |
| 7. | Cricket Game | Use of Gliding, Touch Sensing |
| 8. | | |
| 9. | Bike Racing Game | Speed controlling, How to create sprite |
| 10. | Count the Apples | Variable use, Idea behind gravity |
| 11. | | |
| 12. | Maze Game | How to paint backdrop, Color sensing |
| 13. | | |
| 14. | Food Chain Animation | Concept of Looping, How Voice Pitching work |
| 15. | | |
| 16. | PingPong Game | Direction setting, mouse controlling, How to pick random values |

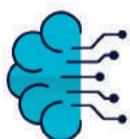
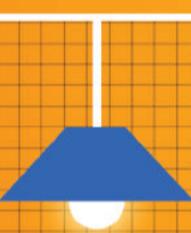
COURSE OUTLINE

Advance

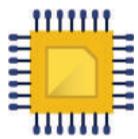
| Session Number | Activity name | Learning Outcome |
|----------------|-------------------------|--|
| 1. | Jump the chick | Creating background, Changing score with timer |
| 2. | | |
| 3. | Gun and Ghost | Stop all sprite, How to make clone of sprite, Go to front and back layer |
| 4. | | |
| 5. | Catch the colorful ball | How to set lives of sprite, Concept of random position, Color sensing concept |
| 6. | | |
| 7. | | |
| 8. | Minecraft game | Creating list, How to create own block, Joining of two list |
| 9. | | |
| 10. | | |
| 11. | Defend your castle | Comparison Operator, Use of broadcasting, Logical operator and its use |
| 12. | | |
| 13. | | |
| 14. | Super Mario Lite | AND OR operator concept, Go to random position, Create and delete clones of sprite |
| 15. | | |
| 16. | | |



OTHER COURSES



Artificial
Intelligence



Fun with
electronics



Arduino
Programming



Mobile App
Development



3D designing

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📞 India + 91-99-7119 2244, + 91-74-2836 6266
📞 USA + 1-914-354-2382