



## *Scratch Training (Part II)*

*code::XtremeApps::2010  
Junior Category*

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Information Technology  
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# Outline



- About CXA Junior Category
- Introduction to Scratch & Quick Demo
- Scratch Training (Part I)
- Break
- ➔ • **Scratch Training (Part II)**
- CXA-2010 Tagline and Team tasks



# SCRATCH

Notes modified from workshop by

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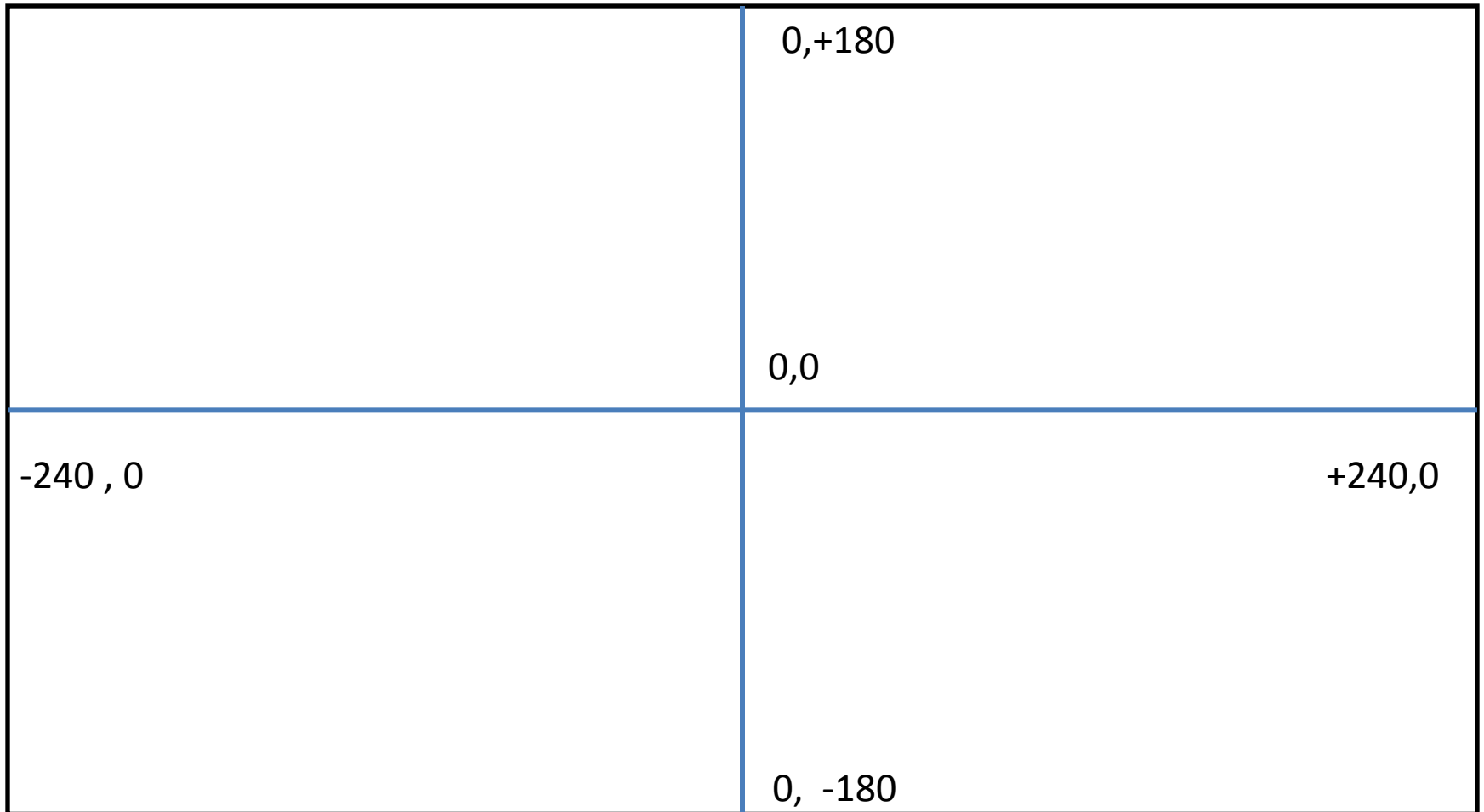
# Part 1

- Tour of the Scratch interface
- Basic Scratch concepts and commands
- Create a sample project
- Inspiration from existing Scratch projects

# PART 2

- Learn about the display area
- Stage vs Sprite
- Explore Paint Editor
- Make a Slideshow
- Make an e-Book
- Create a sample project: Paddle-pong
- DIY: Make an animated greeting card

# Scratch Display



# Stage vs Sprite

The image shows the Scratch 1.4 software interface. The main workspace is a large grey area with a grid. On the right side, there is a white rectangular area representing the Stage, which contains a cartoon cat sprite. Below the Stage, there is a dark grey area representing the Sprite area, which contains a small white square labeled 'Stage' and a red rectangular box labeled 'Sprite'. The 'Sprite' box is positioned above the 'Stage' box, indicating that the Sprite is positioned on the Stage. The interface includes a menu bar (File, Edit, Share, Help), a toolbar with various icons, and a left sidebar with categories like Motion, Control, Looks, Sensing, Sound, Operators, Pen, and Variables. The bottom of the screen shows the Windows taskbar with the Start button and several open applications.

# DIY: Animated Greeting





# Plan for Animated Greeting

# Slideshow



# Plan for Slideshow...

- Have a title for the slide show
- Slides are displayed on stage
  - Stage has different background
  - Can use import function to import photos (one at a time)
- Use right-arrow key to navigate slideshow
- Have a starting photo (background)

# e-Book



# Plan for e-Book

- A book has a TOC (Table of Contents)
  - Represented by a Text-Sprite
- In TOC, there are many chapters
  - Use buttons (sprite) to represent chapters
- Also need Instruction sprite...
  - To tell user how to proceed from TOC screen
- When chapter is “chosen”,
  - send appropriate message for chosen chapter

# Paddle-Pong

SCRATCH-CARD 18-21



# Plan for Paddle-Pong

- Paddle that moves horizontally
  - Control by left/right arrows
- Balls fall from top to bottom
- To detect when paddle “touches” ball
  - Use sensor “touching \_\_\_\_\_?” block
- Use variable to remember points collected
  - Must reset it at the beginning of each game

# What did we do today ?

- Which palettes did we use ?
- Control
  - broadcast, when I receive (communication)
  - wait (hold on)
  - repeat , forever (loop)
- Looks
  - Hide/ show
  - Costume/ background
  - Size , x & y coordinates
  - Speech bubble, say block
- Sound
  - Record, import
  - Play
- Motion
  - Move, turn, x,y





## Reference :

<http://scratch.mit.edu>

<http://scratch.mit.edu/forums>

Scratch 1.4: Beginner's Guide : Michael Badger

