## B. K. BIRLA COLLEGE OF ARTS, SCIENCE AND COMMERCE (AUTONOMOUS), KALYAN

# **CERTIFICATE COURSE**



## B. K. Birla College of Arts, Science and Commerce (Autonomous), Kalyan

## **Department Of Computer Science**

## **Certificate Course In Scratch Programming**

We wish to start certificate course in Scratch Programming .Interested students can register on below link.

# Tentative Schedule is as follows:

Scratch



#### Scratch Programming

- Create and explore your own ideas and convert them into games.
- You can make your own games once you are familiar with scratch programming
- With scratch you can program your own interactive stories, games and animations-and share your creation with others

## **Course Details**

Introduction to Scratch Programming along with hands-on training session Tentative Fees: 1000/-(Participation Certificate Inclusive) Course Duration:30 hrs. (Theory:12hrs, Practical:18hrs) Credits:02 Open for all candidates

## Scratch Registration Link

https://forms.gle/Y7BfSmiCFeDb7ASW9

#### For any queries contact

Mrs Pritam Kamble 9769449049 Mrs Drishti Gangaramani 9975496917 B.K. Birla College of Arts, Science and Commerce (Autonomous)

Certificate Course- "Scratch Programming"

#### **Course Outcome:**

- 1.To learn in a meaningful context
- 2.To study the process design
- 3.To learn experiments
- 4.To build perseverance

#### 5. To learn problem solving technique

|      | Part 1:Scratch Basics  |  |  |  |  |  |  |  |  |  |
|------|--|--|--|--|--|--|--|--|--|--|
| I.   | Introducing Scratch  |  |  |  |  |  |  |  |  |  |
|      | Getting to Know Scratch                                      |  |  |  |  |  |  |  |  |  |
| II.  | Creating Your First Scratch Application                      |  |  |  |  |  |  |  |  |  |
|      | Creating a New Scratch Project                               |  |  |  |  |  |  |  |  |  |
|      | Changing Sprite Attributes                                   |  |  |  |  |  |  |  |  |  |
|      | Adding Code Blocks   |  |  |  |  |  |  |  |  |  |
|      | Saving Your Work   |  |  |  |  |  |  |  |  |  |
| III. | Getting Comfortable with the Scratch Development Environment |  |  |  |  |  |  |  |  |  |
|      | Getting Comfortable with the Scratch IDE                     |  |  |  |  |  |  |  |  |  |
|      | Getting Familiar with Menu Bar Commands                      |  |  |  |  |  |  |  |  |  |
|      | Running Scratch Applications on the Stage                    |  |  |  |  |  |  |  |  |  |
|      | Running Applications in Presentation Mode                    |  |  |  |  |  |  |  |  |  |
|      | Controlling Application Execution                            |  |  |  |  |  |  |  |  |  |
|      | Working with the Sprite List                                 |  |  |  |  |  |  |  |  |  |
|      | Generating New Sprites                                       |  |  |  |  |  |  |  |  |  |
|      | Tracking Mouse Pointer Location                              |  |  |  |  |  |  |  |  |  |
|      | Working with the Scratch Toolbar                             |  |  |  |  |  |  |  |  |  |
| IV.  | Mr. Wiggly's Dance—A Quick Scratch Project                   |  |  |  |  |  |  |  |  |  |
|      | Programming with Scratch                                     |  |  |  |  |  |  |  |  |  |
|      | Creating the Mr. Wiggly's Dance Application                  |  |  |  |  |  |  |  |  |  |
|      | Part2: Learn How to write Scratch Programs                   |  |  |  |  |  |  |  |  |  |
| I.   | Moving Things Around   |  |  |  |  |  |  |  |  |  |
|      | Working with Motion Code Blocks                              |  |  |  |  |  |  |  |  |  |
|      | Moving and Rotating Sprites                                  |  |  |  |  |  |  |  |  |  |
|      | Setting Sprite Direction                                     |  |  |  |  |  |  |  |  |  |
|      | Repositioning a Sprite                                       |  |  |  |  |  |  |  |  |  |
|      | Changing Sprite Coordinates                                  |  |  |  |  |  |  |  |  |  |
|      | Bouncing Sprites Around the Stage                            |  |  |  |  |  |  |  |  |  |
|      | Keeping Track of Sprite Coordinates and Direction            |  |  |  |  |  |  |  |  |  |
|      | Creating the Virtual Scratch Fish Tank                       |  |  |  |  |  |  |  |  |  |
|      |  |  |  |  |  |  |  |  |  |  |

| II.  | Sensing Sprite Position and Controlling             |  |  |  |  |  |  |  |  |  |  |
|------|---|--|--|--|--|--|--|--|--|--|--|
|      | Environmental Settings                              |  |  |  |  |  |  |  |  |  |  |
|      | Working with Sensing Code Blocks                    |  |  |  |  |  |  |  |  |  |  |
|      | Retrieving Mouse Button and Coordinate Status       |  |  |  |  |  |  |  |  |  |  |
|      | Determining when Keys Are Pressed                   |  |  |  |  |  |  |  |  |  |  |
|      | Determining when Sprites Collide with Other Objects |  |  |  |  |  |  |  |  |  |  |
|      | Determining Distance                                |  |  |  |  |  |  |  |  |  |  |
|      | Working with a Timer                                |  |  |  |  |  |  |  |  |  |  |
|      | Retrieving Stage and Sprite Data                    |  |  |  |  |  |  |  |  |  |  |
|      | Creating the Family Scrapbook Application           |  |  |  |  |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |  |  |  |
| III. | Drawing Lines and Shapes                            |  |  |  |  |  |  |  |  |  |  |
|      | Clearing the Stage Area                             |  |  |  |  |  |  |  |  |  |  |
|      | Drawing with the Pen Setting Pen Color              |  |  |  |  |  |  |  |  |  |  |
|      | Changing Pen Shade                                  |  |  |  |  |  |  |  |  |  |  |
|      | Working with Different Size Pens                    |  |  |  |  |  |  |  |  |  |  |
| IV.  | Conditional and Repetitive Logic                    |  |  |  |  |  |  |  |  |  |  |
|      | Introducing Scratch Control Blocks                  |  |  |  |  |  |  |  |  |  |  |
|      | Event Programming                                   |  |  |  |  |  |  |  |  |  |  |
|      | Pausing Script Execution                            |  |  |  |  |  |  |  |  |  |  |
|      | Executing Loops                                     |  |  |  |  |  |  |  |  |  |  |
|      | Developing the Ball Chase Game                      |  |  |  |  |  |  |  |  |  |  |
|      |   |  |  |  |  |  |  |  |  |  |  |

| B. K. Birla College (Autonomous), Kalyan |                                 |  |  |  |  |  |  |  |  |  |
|--|---------------------------------|--|--|--|--|--|--|--|--|--|
| Department of Computer Science           |                                 |  |  |  |  |  |  |  |  |  |
| Certificate Course in Sratch Programming |                                 |  |  |  |  |  |  |  |  |  |
| Academic Year- 2019-20                   |                                 |  |  |  |  |  |  |  |  |  |
| Sr. No                                   | Name                            |  |  |  |  |  |  |  |  |  |
| 1  | Mohammed hanif                  |  |  |  |  |  |  |  |  |  |
| 2  | Mrinmayi Naresh Walanj          |  |  |  |  |  |  |  |  |  |
| 3  | Bakul Soni                      |  |  |  |  |  |  |  |  |  |
| 4  | Hani Santosh Gupta              |  |  |  |  |  |  |  |  |  |
| 5  | Khan Aabid Abdal Mashkoor Ahmad |  |  |  |  |  |  |  |  |  |
| 6  | Vishakh L Iyer                  |  |  |  |  |  |  |  |  |  |
| 7  | Ninad D Chaudhari               |  |  |  |  |  |  |  |  |  |
| 8  | Alpesh Meshram                  |  |  |  |  |  |  |  |  |  |
| 9  | Anushka Khaire                  |  |  |  |  |  |  |  |  |  |
| 10                                       | Apurva Sunil pawar              |  |  |  |  |  |  |  |  |  |
| 11                                       | Niraj Devidas Dutonde           |  |  |  |  |  |  |  |  |  |
| 12                                       | Ketaki Desale                   |  |  |  |  |  |  |  |  |  |
| 13                                       | Kanika Pareek                   |  |  |  |  |  |  |  |  |  |
| 14                                       | Aachal Krishna Parate           |  |  |  |  |  |  |  |  |  |
| 15                                       | Shailesh Tagadghar              |  |  |  |  |  |  |  |  |  |
| 16                                       | Ketaki Vinod Buritkar           |  |  |  |  |  |  |  |  |  |
| 17                                       | Aaditi Chavan                   |  |  |  |  |  |  |  |  |  |
| 18                                       | Ruchita UshaKola                |  |  |  |  |  |  |  |  |  |
| 19                                       | Vidula Suryawanshi              |  |  |  |  |  |  |  |  |  |
| 20                                       | Nidhi gangurde                  |  |  |  |  |  |  |  |  |  |

|       |                        | DATES  |        |        |       |        |         |         |         |         | ]       |       |        |        |
|-------|------------------------|--------|--------|--------|-------|--------|---------|---------|---------|---------|---------|-------|--------|--------|
| SR NO | NAME                   | 28/4/2 | 30/4/2 | 5/5/20 | 7/5/2 | 12/5/2 | 14/5/20 | 21/5/20 | 24/5/20 | 26/5/20 | 28/05/2 | 6/4/2 | 6/5/20 | 6/6/20 |
| 1     | Mohammed hanif         | Р      | Р      | А      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 2     | Mrinmayi Naresh Walanj | Р      | Р      | А      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | А      | А      |
| 3     | Bakul Soni             | Р      | Р      | Α      | Р     | Р      | Р       | А       | Р       | Р       | Р       | Р     | Р      | Р      |
| 4     | Hani Santosh Gupta     | Р      | Р      | Α      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
|       | Khan Aabid Abdal       |        |        |        |       |        |         |         |         |         |         |       |        |        |
| 5     | Mashkoor Ahmad         | Р      | Р      | A      | Р     | Р      | A       | Р       | Р       | A       | Р       | A     | Р      | Р      |
| 6     | Vishakh L Iyer         | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 7     | Ninad D Chaudhari      | А      | Р      | Α      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 8     | Alpesh Meshram         | Р      | Р      | Р      | Α     | Р      | Р       | Р       | Α       | Р       | Р       | Р     | Α      | Р      |
| 9     | Anushka Khaire         | Р      | Р      | Р      | Р     | А      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 10    | Apurva Sunil pawar     | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 11    | Niraj Devidas Dutonde  | Р      | Р      | Р      | Р     | Р      | Р       | Α       | Р       | Р       | Α       | Р     | Р      | Р      |
| 12    | Ketaki Desale          | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 13    | Kanika Pareek          | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 14    | Aachal Krishna Parate  | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 15    | Shailesh Tagadghar     | Р      | Р      | А      | Р     | Р      | Р       | Р       | Р       | Α       | Р       | Р     | Α      | Р      |
| 16    | Ketaki Vinod Buritkar  | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 17    | Aaditi Chavan          | Α      | Р      | Р      | Р     | А      | Р       | Р       | Р       | Α       | Р       | Р     | Р      | Α      |
| 18    | Ruchita UshaKola       | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 19    | Vidula Suryawanshi     | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |
| 20    | Nidhi gangurde         | Р      | Р      | Р      | Р     | Р      | Р       | Р       | Р       | Р       | Р       | Р     | Р      | Р      |

Scratch Programming Attendance







































