

Learningscalator Scratch for Beginners Course

July 17-21, 2023

Course Objectives and Rationale:

Welcome! This course is designed for students who have little or no experience with computer programming but are interested in picking it up. This course will be very interactive and hands-on, and it can also prepare for the newly added computer programming course in the Ontario education curriculum.

Learning Points:

- Sprites/backdrop/costume designs
- Motion
- Loops
- Sounds
- Events
- If/else
- Logical operations
- Variables

Class Format:

In this course, we will mainly be learning through creating projects, such as designing an interactive game using Scratch. Each day, we will be creating a mini-project together.

Here are some potential projects that we can create as a class:

| Project | Learning Points |
|------------------|--|
| Chicken in Space | Sprites/backdrops, motion, loops, events, sounds |
| Maze Game | Sprites/backdrops, motion, loops, events, if/else |
| Snake Game | Sprites/backdrops, motion, loops, events, if/else, variables, operations |
| Fruit catch game | Sprites/backdrops, motion, loops, events, if/else, variables, operations |
| Ball bounce game | Sprites/backdrops, motion, loops, events, if/else, variables, operations |

Optional homework will be assigned every day based on what we learned in class, and it is recommended for students to try it out. The homework will leave a lot of room for students to be creative and implement their own ideas into the projects. At the beginning of each class, we will spend around 10 minutes going through the homework from the previous day, so students are welcome to share and present their solutions at this time.