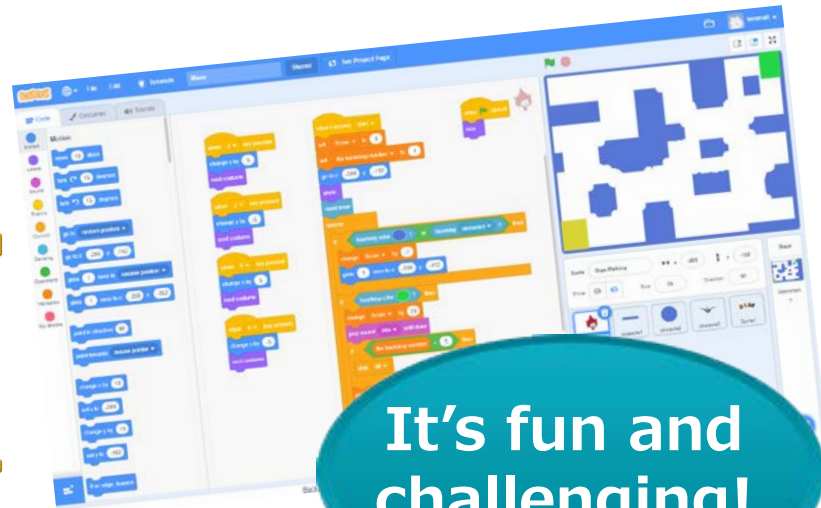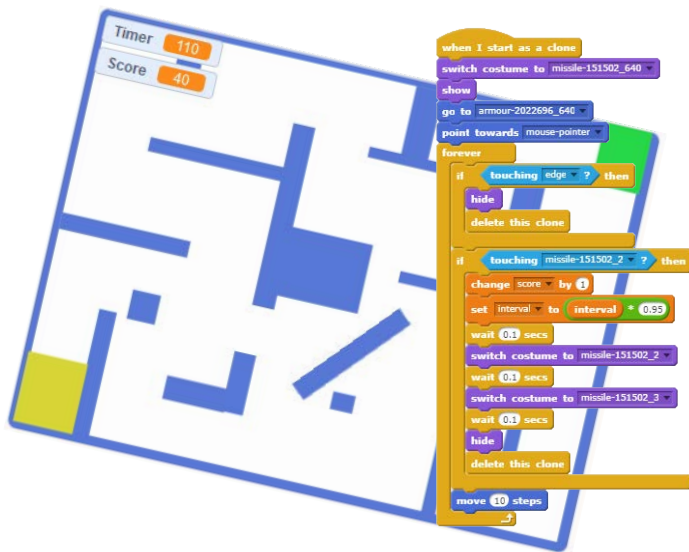# SCRATCH Game Coding

It's fun and challenging!

Let's improve coding skills with games!

Developing games is the best way to improve coding skills. It requires many coding skills, user experience design, game story design, and a lot of logical thinking. Games motivate your child to code them with their taste. These customizations nurture the autonomy of your child. It is also fun! This course is designed to take the beginners to intermediate level.

✓ Advance coding skills

Your child will develop interactive games that require advanced coding skills, event handling, user experience design, and logical thinking.

✓ Build confidence in coding

Your child will build great confidence in coding after developing multiple fun games that he/she can play with his/her friends.

✓ Expand the boundary

Developing multi-stage games with some complexity takes your child's skills to the next level.

Prerequisite: your child needs to know Scratch and have some programming experience with Scratch.

After this program

Your child will be able to design and modify games and enhance them with their taste. Your child becomes familiar with Scratch and its basic control with loops and if-then blocks. Your child understands the core functions of Scratch and some limitations.

Syllabus (10 weeks/session sample up to full school year)

1) Day 1
- Understand the x-y coordinate of the screen
- Understand how to control a sprite

2) Day 2
- Understand how to control the multi-stage game
- Understand how to detect collision with color

3) Day 3
- Goal recognition and multi-stage control
- Understand the roles of the initial process

4) Day 4
- A rotating obstacle implementation
- Understand stage-specific implementation

5) Day 5
- An obstacle that changes size implementation

6) Day 6
- Flying obstacle implementation
- Understand how to use a random value

7) Day 7
- Scoring and timer implementation
- Game over-screen implementation

8) Day 8
- Add the start screen and modify the existing code
- Initial process modification

9) Day 9
- Jump game development with learned techniques

10) Day 10
- Jump game development continues