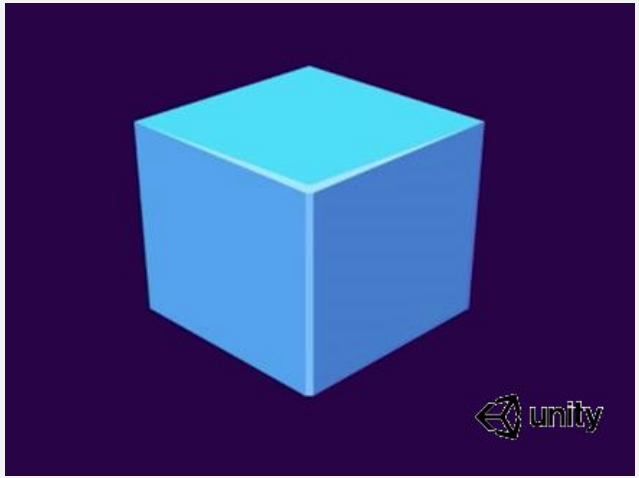
Introduction to Algorithmic Problem Solving

Game Development

Lesson 2 - Prefabs & Input

Prefabs

A prefab is a **pre-fabricated** GameObject that can be reused as often as you want.



- Stored in your project
- Each prefab in a scene is an **instance** of the original prefab**.**
- Each instance can have a **unique configuration**
- Changes in the prefab are **immediately reflected** in each instance

Prefabs

Why use prefabs?

- Imagine your game has 50 of the same enemy, and then you decide you want to change their movement speed.

- Without prefabs, you've now got to go and update **50 individual values** (potentially across multiple scenes)…

Pure suffering

Prefabs

PREFABS = GOOD!

- **Previous Example:** Update movement speed once in prefab. Immediately updates in every instance in your project.

- Use prefabs **anywhere** you might want to reuse a GameObject.

- You can’t go wrong with prefabs. They are the game designer’s best friend.

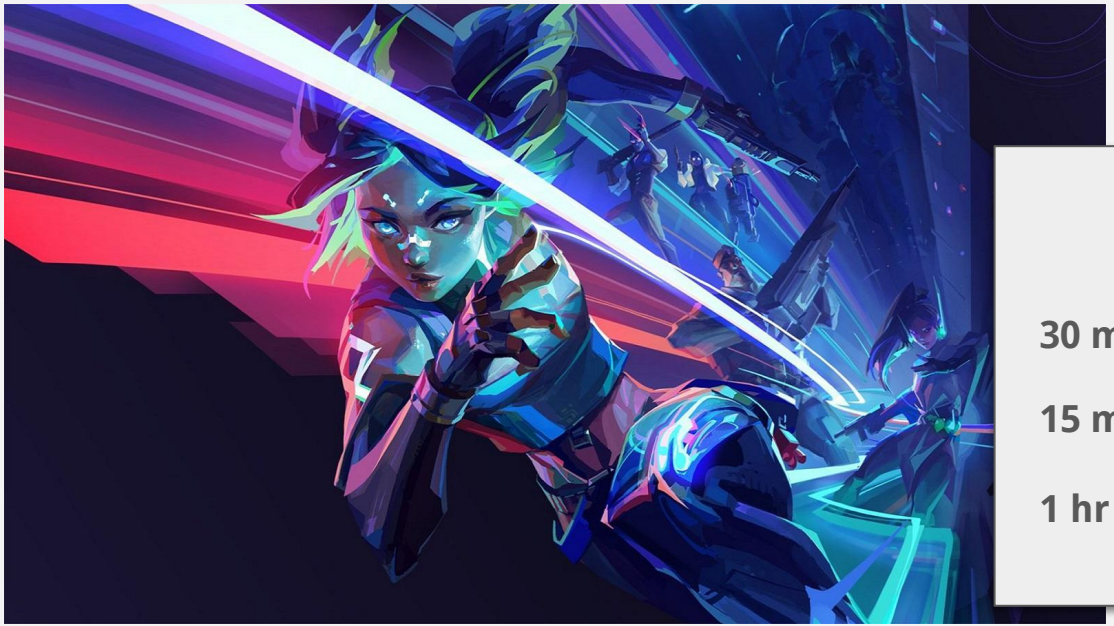
Player Input

Games are not games if they don’t **respond** to the player!

- Unity can **listen** for **input events** from the player
  - Pressing a key on the keyboard
  - Moving the mouse
- When an input event happens, Unity can run some code to handle it

Adding interactivity

By the end of today, you will be able to use prefabs and make your games respond to player inputs.



Today's Plan:

30 min - Demonstration

15 min - Collaborative problem solving

1 hr - Writing code