

UNITY 2D

- Create new project 2D
- Explains differences between 3D and 2D
- Explains Sorting layer + Order in layer
- Create background -> Space + 4 Box Collider 2D
 - Sorting layer -> Background
 - Scale (10, 10)
 - Box Collider 2D :
 - Size (0.1, 2.5) et (3, 0.1)
 - Offset (+/-1.5, 0) et (0, +/-1.2)
- Main camera //INSIDE PACKAGE
 - Size = 10
 - Background color = black
- Create player -> Spaceship
 - Set Tag to Player
 - Position (2, -3)
 - Sorting layer -> Game
 - Add Rigidbody2D
 - Gravity Scale = 0
 - Add Polygon Collider 2D
- Create PlayerController.cs //INSIDE PACKAGE
 - Variables de vitesse
 - Speed = 0.2
 - R_speed = 4
 - FixedUpdate
 - `Deplacement () ;`
- Create black hole -> Black hole
 - Set Tag to Hole
 - Position (-5, 5), Scale (2, 2)
 - Sorting layer -> Game, Order in Layer -> 2
 - Circle Collider 2D
 - Scale = 1
 - IsTrigger = true
- Modify PlayerController.cs
 - Variables de mort
 - Dead = false
 - Time_dead = 2

- Variables de reset
 - Base_x = 2
 - Base_y = -3
 - Base_rot = 0
- Start -> resetPlayer ()
- Update -> playerLive ()
- FixedUpdate -> if(!dead)
- OnTriggerEnter2D ()
- resetPlayer () -> not fireTime=... + not Text change
- Create ennemy -> Ennemy
 - Set Tag to Ennemy
 - Position (8, 6), Scale (2, 2)
 - Sorting layer -> Game, Order in Layer -> 1
 - Polygon Collider 2D
 - IsTrigger = true
- Create EnemyController.cs
 - Variables
 - Speed = 3
 - Attach to Ennemy
- PlayerController.cs
 - Add Ennemy part in OnTriggerEnter2D () -> not EnemyGenerator part
- Create ray -> Ray Prefab
 - Scale (0.1, 0.1)
 - Sorting layer -> Game
 - Box Collider 2D
 - IsTrigger = true
 - Size (1,10)
 - Rigidbody 2D
 - Gravity Scale = 0
- Create RayController.cs
 - Variables
 - Time Ray Live = 3
 - Not part with EnemyGenerator
 - First no time to live then explain why
- PlayerController.cs
 - Variables de tir
 - Ray speed = 20

- Fire rate = 0.25
 - Add Ray Prefab
 - Add interactions ()
 - Add shoot ()
 - Add fireTime in resetPlayer ()
- Create empty -> EnemyGenerator
- Put Enemy in Prefab
- Create EnemyGenerator.cs
 - Variables
 - Max Enemy = 3
 - Num Enemy = 0
 - Enemy Rate = 2
 - Add EnemyPrefab
- Add parts with EnemyGenerator
 - In PlayerController.cs
 - In RayController.cs
- Create Scene MainMenu
- Add Canvas to MainMenu, Font Size : 32
 - Button Play
 - posX : 0, posY : 50
 - Width : 300, Height : 50
 - Text = Play game
 - Button Quit
 - posX : 0, posY : -50
 - Width : 300, Height : 50
 - Text = Quit game
 - Text
 - posX : 0, posY : 200
 - Width : 300, Height : 50
 - Text = Spaceship battle
- Create MainMenu.cs
 - Explain LoadScene -> Scene must be in Build Settings
- Add PauseMenu to Scene1
 - PauseMenu.cs
 - Text
 - Text = Game paused, Font Size : 32
 - Width : 300, Height : 50
 - Panel -> color : (0,0,0,100)

- Add Canvas to Scene1
 - Add health Text and score Text
 - Anchors top left
 - posX : 10, posY : -10 (-70)
 - Width : 300, Height : 50
 - FontSize : 32
- Modify PlayerController.cs
 - changeText()
 - Add parts with changeText()

Create new project -> 2D project

Z aucune influence sur position

Edit -> Project Settings -> Editor -> Default Behavior Mode

Camera -> Projection = Orthographic + View 2D activated

Create sprite = GameObject->2D Object->Sprite

SpriteRenderer: change Sprite = click and select Space.png

Rename sprite into Space

Easier -> drag and drop sprite Space.png into the scene

Sorting Layer + Order in layout -> Layer ont un ordre d'affichage => affichage d'éléments les uns au-dessus des autres