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 EnnemyController.cs
  + Variables
    - Speed = 3
  + Attach to Ennemy
* PlayerController.cs
  + Add Ennemy part in OnTriggerEnter2D () -> not EnnemyGenerator 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 EnnemyGenerator
  + 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 -> EnnemyGenerator
* Put Ennemy in Prefab
* Create EnnemyGenerator.cs
  + Variables
    - Max Ennemy = 3
    - Num Ennemy = 0
    - Ennemy Rate = 2
  + Add EnnemyPrefab
* Add parts with EnnemyGenerator
  + 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 -> drap 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