# Team-D Lost In Dungeon

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### Background & Business Oppotunity

Nowadays, most people's daily lives become more and more stressful, so entertainment is an irreplaceable and necessary element in our society. And the different types games become the most common and effective solution to release pressure for many young people.

#### Introduction

Our project is about creating a dungeon game with 10-20 minutes play time, so player can enjoy and pass the game during a short break. And the randomness in dungeon can make the game more challenging and interesting, so player can have different experience in every different round.

#### Game Flow

- 1. Start in village and get information from NPCs
- 2. Enter the dungeon at end of village
- 3. Complete the tutorial (optional)
- 4. Defeat monsters and unlock items
- 5. Explore boss room and defeat boss
- 6. END of the game







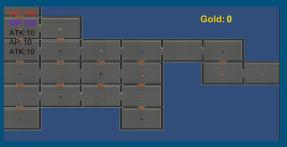
#### Game abstract

- Unity Engine
- 2D game
- Rogue-like dungeon
- Side-scrolling battle system (KoF-like)

#### Main Scenes

- Village scene
- Dungeon scene
- Battle scenes







### Village Scene

- Dialogs of NPCs
- Basic movement function
- Entrance of dungeon



### PlayerController & Triggers

```
void Movement()
{
    float horimove;
    horimove = Input.GetAxis("Horizontal");
    float facedirection;
    facedirection = Input.GetAxisRaw("Horizontal");
    if (horimove != 0)
    {
        rb.velocity = new Vector2(horimove * speed * Time.fixedDeltaTime, rb.velocity.y);
    }
    if (facedirection != 0)
    {
        transform.localScale = new Vector3(facedirection, 1, 1);
    }
}
```

```
public class NPC1UI : MonoBehaviour
{
   public GameObject NPC1;

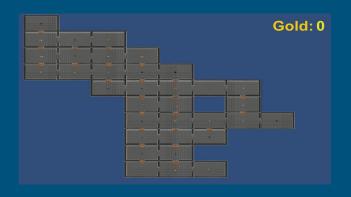
   private void OnTriggerEnter2D(Collider2D collision)
   {
      if (collision tag = "Player")
      {
            NPC1. SetActive(true);
      }
   }

   private void OnTriggerExit2D(Collider2D collision)
   {
      if (collision tag = "Player")
      {
            NPC1. SetActive(false);
      }
   }
}
```

```
public class MapsChange : MonoBehaviour
{
    void Update()
    {
        if (Input. GetKeyDown (KeyCode. E))
        {
            SceneManager. LoadScene (SceneManager. GetActiveScene (). buildIndex + 1);
        }
}
```

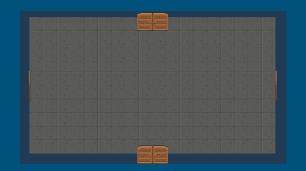
Dungeon Map Scene & Events

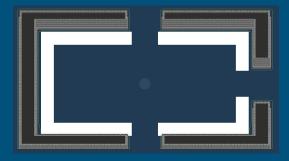
- Over 30 rooms
- Monsters
- Items
- Healer





#### RoomGenerator





```
public void SetupRoom(Room newRoom, Vector3 roomPosition)
   newRoom.roomUp = Physics2D.OverlapCircle(roomPosition + new Vector3(0, yOffset, 0), 0.2f, roomLayer);
   newRoom.roomDown = Physics2D.OverlapCircle(roomPosition + new Vector3(0, -yOffset, 0), 0.2f, roomLayer);
   newRoom.roomLeft = Physics2D.OverlapCircle(roomPosition + new Vector3(-xOffset, 0, 0), 0.2f, roomLayer);
   newRoom.roomRight = Physics2D.OverlapCircle(roomPosition + new Vector3(xOffset, 0, 0), 0.2f, roomLayer);
   newRoom.UpdateRoom(xOffset, yOffset);
   switch (newRoom.doorNumber)
       case 1:
           if (newRoom. roomUp)
               Instantiate(wallType.singleUp, roomPosition, Quaternion.identity);
           if (newRoom. roomDown)
               Instantiate(wallType.singleBottom, roomPosition, Quaternion.identity);
           if (newRoom.roomLeft)
               Instantiate(wallType.singleLeft, roomPosition, Quaternion.identity);
           if (newRoom, roomRight)
               Instantiate(wallType.singleRight, roomPosition, Quaternion.identity);
       case 2:
           if (newRoom, roomLeft && newRoom, roomUp)
                Instantiate (wallType, doubleLU, roomPosition, Quaternion, identity);
           if (newRoom, roomLeft && newRoom, roomRight)
               Instantiate (wallType. doubleLR, roomPosition, Quaternion. identity)
           if (newRoom. roomLeft && newRoom. roomDown)
               Instantiate (wallType, doubleLB, roomPosition, Quaternion, identity)
           if (newRoom.roomUp && newRoom.roomRight)
                Instantiate (wallType, doubleUR, roomPosition, Quaternion, identity);
           if (newRoom, roomUp && newRoom, roomDown)
               Instantiate (wallType.doubleUB, roomPosition, Quaternion.identity);
           if (newRoom, roomRight && newRoom, roomDown)
               Instantiate (wallType. doubleRB, roomPosition, Quaternion. identity)
       case 3:
           if (newRoom. roomLeft && newRoom. roomUp && newRoom. roomRight)
                Instantiate(wallType.tripleLUR, roomPosition, Quaternion.identity);
           if (newRoom, roomLeft && newRoom, roomRight && newRoom, roomDown)
               Instantiate (wallType. tripleLRB, roomPosition, Quaternion. identity);
           if (newRoom.roomUp && newRoom.roomDown && newRoom.roomRight)
                Instantiate (wallType, tripleURB, roomPosition, Quaternion, identity):
           if (newRoom.roomLeft && newRoom.roomUp && newRoom.roomDown)
                Instantiate (wallType. tripleLUB, roomPosition, Quaternion. identity);
           if (newRoom.roomLeft && newRoom.roomUp && newRoom.roomRight && newRoom.roomDown)
               Instantiate (wallType. fourDoors, roomPosition, Quaternion. identity);
```



### Battle Scenes & System

- 3 difficulty levels
- 3 different battle Al





Monster damage = Monster attack - Player DEF

### BattleControl & Enemy AI

#### Asset packages

- Sunny Land Forest Assets
- Sunnyland,
- Gothicvania-Town
- Orc,Custom Character\_Vol3
- Aekashics Librarium Megapack III
- Free\_packs

## Game Demo

Q & A

### Thank You For Watching!