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**PROJECT REPORT**

1. **Ideas:**

A small 2D Mario-style game with two levels, after the player pass all two levels the Complete screen will appear

1. **Features:**

* Item which enable skill for character
* In-game inventory tracking (projectile number)
* Keys for unlocking the level
* Multiple lives for player, which will be reduced every time the character is dead
* Score item
* Working with Windows and WebGL
* (For Windows) Works with various screen resolutions

1. **Techniques**

Using C# and Unity

* Using Collision and Rigidbody2D.IsTouchingLayer to implement different approaches of collision between two different objects
* Instantiating Prefabs when throwing weapons
* SceneManager.LoadScene to change the scene displaying Levels / Main Menu / End Screen

For Cross Platform Implementation: Using CrossPlatformInputManager

1. **Reference**
2. Sprites
   1. Background: <https://www.gameart2d.com/free-platformer-game-tileset.html>
   2. Character/ Enemy: <https://www.gameart2d.com/ninja-adventure---free-sprites.html>
   3. Exploding Button: <https://opengameart.org/content/ui-elements>
   4. Spikes: <https://opengameart.org/content/2d-platform-accessories>
   5. Scroll / Book / Kunai: <https://www.deviantart.com/verdy-k/art/Scrolls-194436113>
   6. Explosion: <https://opengameart.org/content/bomb-explosion-animation>
3. Audio
   1. Background for stage: <https://opengameart.org/content/adventure-begins>
   2. Item get: Complete C# Unity Developer 2D: Learn to Code Making Games – Unity
   3. Explosion: <https://opengameart.org/content/bone-fall-ledge-climbing-impact-yo-frankie>
4. CrossPlatformInputManager: <https://assetstore.unity.com/packages/essentials/asset-packs/standard-assets-32351>