

Lab Worksheet 3: 2D Game + Publishing

SWE402 Game Development

Overview

Create a 2D game of your own design that includes all required features below. Your game concept is flexible (collector, puzzle, arcade, etc.) as long as it demonstrates the required mechanics. Submit a video showing ALL features plus your deployed builds.

Required Game Features

- **Character Movement** — Playable character with 2D movement (can get movement from online)
- **Collectibles with VFX**
 - At least 3 collectible items
 - Particle effect plays on collection (Instantiate a VFX prefab)
- **Sound Effects**
 - At least 2 different sounds (e.g., background music, random time sounds)
 - Use Audio Source
- **Pushable/Interactable Objects**
 - At least 2 objects the player can physically push
 - Demonstrate varied physics: adjust **Mass**, **Linear Drag**, and/or **Angular Drag**
- **Animated Sprite**
 - At least 1 object with sprite sheet animation (cat, dog, etc.)
 - Use Sprite Editor to slice sprite sheet → create animation
- **Main Menu Scene**
 - Separate scene with game title
 - **Your name displayed** (required)
 - Play button that loads the game scene

Build & Publishing Requirements

- **Player Settings Configured**
 - Custom game icon
 - Product name set
 - Resolution configured
- **WebGL Build → Unity Play**
 - Build to Web platform
 - Upload to play.unity.com
 - Game is publicly accessible via link
- **Windows Build**
 - Build to Windows platform
 - .exe runs correctly with all features working

■ Demonstrate your game with all features working. Show Player Settings configuration and both deployed builds.

Submission

Video Demonstration — Must clearly show:

- Main Menu with your name
- Player movement
- Pushing objects (show different physics behaviors)
- Collecting items with VFX
- Sound effects (audible in video)
- Animated sprite
- Player Settings (icon, name, resolution)
- WebGL game running on Unity Play
- Windows .exe running

Files to Submit:

- Video file or link
 - Unity Play URL
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