

# Lab Worksheet 3: 2D Game + Publishing

SWE402 Game Development

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## 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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