# Unity D3

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|---|---|
| Day | Thursday |
| Theme | Skills |
| Type | Daily |
| Core Projects | </> Solo Farm Game Udemy |
| Progress | 0 |
| Checkbox | ☐ |
| Checkbox 1 | ☐ |
| Date | @June 12, 2025 9:30 AM → 11:30 AM |
| Sub Goal | |
| Status | Not started |

## Lesson Progress

→ end of square pond generation

▼ pond generator

```
public TileBase tileCenter;
public TileBase tileTop;
public TileBase tileBottom;
public TileBase tileLeft;
public TileBase tileRight;
public TileBase tileOuterTopLeft;
public TileBase tileOuterTopRight;
public TileBase tileOuterBottomLeft;
public TileBase tileOuterBottomRight;
public TileBase tileInnerTopLeft;
public TileBase tileInnerTopRight;
public TileBase tileInnerBottomLeft;
public TileBase tileInnerBottomRight;

public void GeneratePond(int pondWidth, int pondHeight, int xOffset, int yOff
{
    Debug.Log("Generating Pond...");

    if (tilemap == null)
    {
        Debug.LogWarning("Tilemap is not assigned!");
        return;
    }

    for (int x = 0; x < pondWidth; x++)
    {
        for (int y = 0; y < pondHeight; y++)
        {
            TileBase tileToPlace = tileCenter;
            // Corners
                if (x == 0 && y == pondHeight - 1)
                    tileToPlace = tileOuterTopLeft;
                else if (x == pondWidth - 1 && y == pondHeight - 1)
                    tileToPlace = tileOuterTopRight;
                else if (x == 0 && y == 0)
                    tileToPlace = tileOuterBottomLeft;
                else if (x == pondWidth - 1 && y == 0)
                    tileToPlace = tileOuterBottomRight;

                // Borders
                else if (y == pondHeight - 1)
                    tileToPlace = tileTop;
                else if (y == 0)
                    tileToPlace = tileBottom;
                else if (x == 0)
                    tileToPlace = tileLeft;
                else if (x == pondWidth - 1)
                    tileToPlace = tileRight;

            // Center (default is tileCenter, so nothing to do)

            tilemap.SetTile(new Vector3Int(x + xOffset, y + yOffset, 0), tileToPlace
        }
    }
}
```

▼ editor window

```
private int          pondWidth;
private int          pondHeight;
private int          pondx;
private int          pondy;

private void OnEnable()
{
    pondGenerator = FindFirstObjectByType<PondGenerator>();
}

void OnGUI()
    pondWidth = EditorGUILayout.IntField("Pond Width", pondWidth);
    EditorGUILayout.Space();
    if (GUILayout.Button("Generate Pond"))
            pondGenerator.GeneratePond(pondWidth, pondHeight, pondx, pondy
```

→ Adding collisions to the tilemap

- add tilemap collider
- add composite collider
    - tilemap composite op → merge

    - rigidbody type → kinematic

→ new tilemap objects