Weekly Supervisor Meeting

Complete and submit via the relevant link on the Learning Zone.

1. Project Title: AI Pathfinding Showcase

2. Supervisor: Aboozar Taherkhani

3. Objectives for Period (max 100 words):

* Generate a clickable 2D Grid with obstacle toggling (Currently broke)
* Implement “Start” / “End” modes for tile marking
* Hook up BFS coroutine to visualise wave expansion and final path
* Spawn and move an agent Sprite along the computed path
* Wire UI buttons to grid manager methods (Select Start, Select End, Run BFS, Reset)

4. Summary of Progress for Period (max 200 words):

* **Grid & Tile Interaction:** A 10×10 grid spawns at runtime. Clicking tiles toggles between blocked (red) and open (white). Start/end modes allow marking green/magenta tiles.
* **BFS Visualisation:** The BFS routine now colours each frontier tile yellow with a 0.05s pause, then recolours the final path blue.
* **Agent Movement:** An agent prefab is instantiated at the start tile and moves smoothly (via coroutine and Vector3.Lerp) along the path.
* **UI Integration:** Four UI buttons are hooked up to SelectStartMode(), SelectEndMode(), RunBFSVisualWrapper(), and ResetGrid().
* **Current State:** All core logic is in place, but the scene broke shortly before our meeting—compile errors around DOTween calls and ambiguous Debug references need resolving.

5. Problem Areas and Suggested Solutions (max 100 words):

* **Compile Errors:** Ambiguous Debug between

UnityEngine/System.Diagnostics and inaccessible \_sr field.

**Solution:** Remove using System—diagnostics; prefix Unity logs with UnityEngine.Debug, encapsulate the sprite‐renderer reference.

* **DOTween Missing:** Agent movement uses DOMove and Ease, which aren’t available.

**Solution**: Install DOTween via the Package Manager or revert to manual Lerp coroutine.

6. Objectives, Deliverables & Plan for Next Period (max 100 words):

* **Fix Compilation:** Resolve ambiguous Debug, DOTween dependency, and \_sr access.
* **Restore Scene:** Rebuild the working scene to demo BFS + agent movement.
* **UI Polish:** Add simple on‐screen labels/tooltips for modes and buttons.
* **Prepare Demo:** Ensure next meeting shows a fully running prototype with BFS visualisation and agent traversal.

7. Comments (if any, max. 200 words):

I apologise for not being able to show the live scene today—last-minute errors broke the build. With the above fixes, I expect to have a stable, demonstrable prototype ready for our next session. I’m also drafting my partial GDD/TDD to align with the vertical slice focus and will show that document ahead of time.

8. Date of the Meeting: 01-05-2025

9. Date of next Meeting: 08-05-2025