Project Team 10 – Meeting Minutes

Date: Thursday, 6th November 2025
Time: 12:30 PM
Location: Virtual (Microsoft Teams)
Meeting Type: Weekly Project Meeting

Present: Yeaw Chu Lee, Tianyang Zhao, Ethan Adegbeyeni, David Bello, Jenson McEwan

Meeting Purpose

Follow-up meeting to review ParaView workflow, assess performance issues, and discuss possible optimisation and migration strategies.

Discussion Summary

1. **Client Introduction and Demonstration**

   o Tianyang introduced and demonstrated the ParaView setup.

   o Shared previous work and outlined how to configure and visualise simulation data within ParaView.

   o Demonstrated key differences between ParaView and Unity environments.

2. **Identified Issues**

   o ParaView currently loads data extremely slowly and requires significant data portability improvements.

   o Even minor performance improvements (e.g., 1–5 FPS gain) would be valuable.

   o The client encouraged exploration of all potential optimisations, leaving the framework flexible for experimentation.

3. **Performance and Benchmarking**

   o Agreed to benchmark current system performance to establish a baseline.

   o Subsequent improvements will be compared against this benchmark to measure progress.

4. **Future Migration Considerations**

- o Discussed possible transition to Blender for better performance and interactivity.

- o File format compatibility identified as a key factor in evaluating such a switch.

5. **Planned Technical Tasks**

- o Plan to test optimisations within ParaView.

- o Investigate areas of performance improvement (rendering, data handling, pipeline efficiency).

- o Begin outlining project tasks and goals for upcoming sprints.

- o Explore simplifying turbine geometry by removing blades and reconstructing motion using speed, pitch, and yaw parameters.

New Items

- Research file format requirements for potential migration to Blender/Unity.

- Identify and document performance bottlenecks in current ParaView setup.

- Define clear optimisation metrics for benchmarking improvements.

Items for Next Meeting

- Present findings from ParaView performance testing.

- Review possible optimisation techniques.

- Determine feasibility and requirements for switching to Blender.

- Draft project plan and sprint breakdown.

Next Meeting

Date: Thursday, 20th November 2025, 1 PM

Location: Virtual (Microsoft Teams)