

Project Team 10 – Meeting Minutes

Date: Thursday, 20th November 2025

Time: 1:00 PM

Location: Virtual (Microsoft Teams)

Meeting Type: Weekly Project Meeting

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

Meeting Purpose

Review progress made since last meeting, evaluate platform viability, and discuss data extraction and streamlining strategies for the project.

Discussion Summary

1. Progress Review

- Team reviewed progress made on ParaView optimisation and platform evaluation since the previous meeting.

2. Platform Viability Assessment

- Discussed Blender as a potential platform option.
 - Determined that Blender is not viable for the project requirements.
- Explored turbine parameters including pitch, wave, and yaw, and methods for extracting these for visualisation.

3. Unity Platform Evaluation

- Reviewed Unity as an alternative platform for the project.
- Discussed how pre-calculated data in the data files can be utilised.
- Explored the concept of assembling snapshots together for visualisation purposes.
- Team raised questions regarding Unity implementation and requirements.

4. File Format and Data Structure

- Provided overview of the file format generated within ParaView for wind turbine visualisation.
- Explained the data processing workflow: velocity data input → calculations → streamline output.
- **Data structure details:**
 - Each folder contains a few frames representing a snapshot in time.
 - Constants folder stores mesh information.
 - Sequential processing of snapshot folders identified as a viable approach for handling data chunks.

5. Outstanding Items

- Awaiting Unity documentation for further evaluation and implementation planning.

New Items

- Extract and streamline specific data parameters from ParaView (e.g., velocity, pressure).
- Research optimisation techniques and solutions on discourse.paraview.org.
- Continue investigating data extraction methods compatible with Unity.

Items for Next Meeting

- Present progress on extracting and streamlining data from ParaView, focusing on specific parameters.
- Share findings from discourse.paraview.org research.
- Review Unity documentation once available.
- Finalise platform selection and begin detailed implementation planning.

Next Meeting

Date: Thursday, 4th December 2025

Location: Virtual (Microsoft Teams)