AE6102 - Parallel Scientific Computing and Visualization(Spring 2023)

Team : **Sifar***(190050004, 190050062, 190050096)*   Due: *March 20, 2023*

Project: *3D Visualization and Analysis of Seismic Volumes*   Project Update: *01*

Updates

- We have finalized the project and submitted the final project proposal on moodle.

- As we move forward, we will ensure that the project's GitHub repository is continuously updated to reflect our progress and any developments that occur in the coming days.

- We have spent a significant amount of time researching publicly available *3D seismic datasets* as they are an integral part of our project. After thorough consideration, we have finalized the below dataset that we will be utilizing in our work.

S.No	Name	Description
1	3D seismic data NZPM	Seismic data is publicly available and provided by New Zealand Petroleum and Minerals (NZPM)
2	3D seismic data Netherlands F3 Block	Developed by the OLIVES lab at Georgia Tech
3	3D seismic data US	3D seismic data provided by the USGS

- We have added the data transformation part code using `numpy` and `segyio` modules, taking into account the US dataset, i.e `3D seismic data US` for now. Later, we are planning to use `NZPM` dataset for implementation. The code corresponding to this is in `data-process` folder in our repository.

- We have also tested simple `mayavi` installation and basic visualization using it. The code corresponding to it is in the `code\` folder of repository.

- We have acknowledged that the Mayavi is not yet covered in the course. However, we are looking forward to learning and utilizing Mayavi as it will be covered in the upcoming days, which will enhance our project's visualization capabilities.