SMAI Project Log (Project 7):

S.NO	DATE	TOPIC	ISSUES	SOLUTION	STATUS
1	10th Oct 2023	The first task we thought of while doing this project was to read the paper.	There were not many issues while understanding the first half of the paper, but the second half was very tricky	We just decided to understand the first half and start implementing it, in code.	Completed.
2	13th Oct 2023	Now we implemented the incremental K-means algorithm given in the paper.	It wasnt much difficult as the algorithm was given pretty straight-forward in the paper itself.	We implemented the algorithm given in the paper and tested the algorithm against sklearn.	Completed.
3	18th Oct 2023	The next part we implemented was incremental agglomerative clustering.	This part seemed a bit tricky to us as the algorithm given in the paper wasn't directly implementable.	We studied about agglomerative clustering, then took some time to figure out how the new datapoints would be clustered.	Completed.
4	27rd Oct 2023	This was the time when we thought of starting up with the blog part of the project.	We were directly importing the HTML file from the notion doc, so it wasnt looking that good, the TA also suggested us to find new ways of creating the blog.	We then decided to shift the blog onto a react application, took us some time but we eventually got a lot better looking blog.	Completed.

5	4th Nov 2023	We implemented the third algorithm given in the paper, which was about incremental nearest neighbours.	The algorithm in the paper wasnt so clear initially, it took us time to figure out what exactly the algorithm did.	We used knowledge from various online resources of other universities, and compared our algo with DBSCAN	Completed.
6	8th Nov 2023	Now we get to the second part of the research paper, where we had to understand some Lemma's and a few proofs. These were from the part 3.1-3.6	The part 3.6 was very difficult to understand, mainly due to the language used by the author	We looked out for similar resources from varius universities and finally got a grip on what all was going on.	Completed.
7	16th Nov 2023	We now covered the remaining theorms in the paper, these were very straight forward and not much difficult.	This part had no issuses as such.	We searched for the theorms online as well, so we took a bit more understanding of what was happening.	Completed.
8	25th Nov 2023	We implemented the algorithm 5.2 and 5.9 given in the paper.	The algorithm mentioned in the paper was not so clear, kind of vague, so it took us some time.	We took help of our peers to understand and implemnt the algorithm	completed