**My Microsoft Enagage'21 Journey of three weeks:**

**First week:** My journey began on 8th November, 2021 with the Engage Launch Kickoff session. Truth be told, I was very nervous as it was my first time participating in such a program. I had no idea about how the session would be and what all things I'll need to do but all my doubts were cleared on the first session itself. We were given the problem statement of the challenge and it was informed that the challenge will be individual and our mentor would contact us in a day or two.

Minutes after the kickoff session was over, I received a mail from my mentor, Naveen Luhach sir regarding our first meet.

The meeting started with a basic introductory session. I was provided with a warm and welcoming environment. Sir asked us the ideas on which we wished to work upon. He patiently listened to them but at the same time also challenged us to analyze the thoughts we had initially begun with. It was a light session so we were only told to ponder on our ideas and think about the design.

Naveen Sir assured us that he would help us throughout the three weeks and we only need to focus on completing the project.

I decided to do a web project and chose to make a submission tool using HTML,CSS, Bootstrap for frontend and Nodejs, MongoDb for backend. My first confusion while creating the design was if I should create separate models for teacher and stuent or should I go with a single model for both. I talked about it with Naveen sir and he advised me to go with separate models (as he pointed out that having one model might create some issues). After that I decided to start with the frontend first as I was more familiar with it. So for the rest of the week I mainly designed and coded the frontend pages and decided the color scheme for the website.

**Second week:** I showed some of the frontend pages that I had made. Sir gave a few suggestions and then I moved on to start the backend of the website.

Firstly, I coded the backend of login and signup pages for both teacher and student. Then I started the code for creating and deleting a class (as teacher) and enrolling into thoe classes (as students). As I reached the section of creating an assignment, I had to look into how to store files in the server. As I had never worked on such a feature, it took me 2-3 days to study about it and finally implement it using multer(which is a node. js middleware for handling multipart/form-data primarily used for uploading files). I implemented this function but made a mistake. My files were getting stored both in the server and the database! As I realised my mistake, I started working to correct it.

Finally I implemented the file upload/download function successfully (and correctly) for my teacher user.

**Third week:** I coded the file upload/download section for the student as well and coded the frontend of some more pages. Finally the only section left was of assigning the grade to the student assignment which in turn should also be visible to the students after they have submitted their assignments. As I completed coding this feature, finally my project was complete.

Having coded the entire backend for the first time, I was elated, proud and very relieved. I showed the project to Naveen sir who in turn was also happy that it got completed in time. Then I hosted my site on heroku and started working on adding it to github and making a video for the submission.

**These three weeks were a great learning experience for me. I learnt and experienced a lot of new things. Lastly I would like to thank Microsoft for such an amazing opportunity and especially Naveen sir for his guidance,support and for being such an inspiring mentor.**