Sneha Weekly Reports

$^{\circ_{B_{J}}}$ Week 1

	Date	Tasks	Next Week
1	09/16/24	-	
2	09/17/24	Meet With Team and The Advisor	Revision of Linux
3	09/18/24	Presentation in class	
4	09/19/24	I have downloaded the ISO file for Ubuntu 24 and set it up in a virtual machine	
5	09/20/24		
6	09/21/24		
7	09/22/24		

Week 2

	Date	Tasks	Next Week
1	09/23/24	I installed WSL	
2	09/24/24	I have dual-booted the operating system on both Windows and Linux and we had team meeting with the advisor and discussed about the progress on our project	Learning About The Tools and working on those tools
3	09/25/24	Completed a LinkedIn course on Linux Union Line Commons Union Line Commons Line Co	
4	09/26/24	I have learned some new words, such as hypervisor, Docker, and Kubernetes.	

5	09/27/24	I have learned how to use Docker and Kubernetes for our project.	
6	09/28/24	-	
7	09/29/24	-	

Week 3

	Date	Tasks	Next Week
1	09/30/24	-	
2	10/1/24	I worked with NVIDIA CUDA and a GPU simulator to simulate two GPU's.	
3	10/2/24	I worked on Jira and Confluence	
4	10/3/24	-	
5	10/4/24	-	
6	10/5/24	-	
7	10/6/24	-	

Week 4

	Date	Tasks	Next Week
1	10/7/24	-	
2	10/8/24	we have created a FLASK authentication app.	
3	10/9/24	we are working on user interface for further upgrades	
4	10/10/24	Installed Nvidia container toolkit and got some knowledge on it	
5	10/11/24	-	
6	10/12/24	-	

7	10/13/24	Worked on connecting remote and host machines to access	Will work on Jupyter hub
		GPU	

Week 5

	Date	Tasks	Next Week
1	10/14/24	worked on jupyter hub	
2	10/15/24	-	
3	10/16/24	Meetup with Advisor	
4	10/17/24	I have successfully setup Jupyterhub in a container	
5	10/18/24	Then we have tried with different containers using more images but we are getting a issue where the GPU is not getting the access	
6	10/19/24	-	
7	10/20/24	-	

Week 6

	Date	Tasks	Next Week
1	10/21/24	Got access to the GPU in containers	
2	10/22/24	-	
3	10/23/24	Meetup with Advisor	
4	10/24/24	With the help of one of my teammate we have got a container which can operate upon the same network where any number of users can login to the HUB	
5	10/25/24	working with kubernetes for user management, resource	

		allocation.	
6	10/26/24	-	
7	10/27/24	-	Should work on how to do the load-management.

week 7:

	Date	Tasks	Next Week
1	10/28/24	-	
2	10/29/24	-	
3	10/30/24	Meetup with Advisor	
4	10/31/24	working on deployment of jupyter hub on kubernetes	
5	11/01/24	worked with kubectl(for connecting with the cluster)	
6	11/02/24	exploring the compatibility between docker and kubernetes for resource scaling	
7	11/03/24	-	enable access to jupyterhub and user login authentication.

week 8

	Date	Tasks	Next Week
1	11/04/24	-	
2	11/05/24	-	
3	11/06/24	Meetup with Advisor worked on setting up github	
4	11/07/24	working on deployment of jupyter hub on kubernetes	
5	11/08/24	worked with kubectl(for connecting with the cluster)	

6	11/09/24	exploring the compatibility between docker and kubernetes for resource scaling	
7	11/10/24	-	enable access to jupyterhub and user login authentication.

week 9

	Date	Tasks	Next Week
1	11/11/24	Setting up Kubernetes to deploy JupyterHub with a custom Flask-based web UI for login, enabling user authentication and access to isolated environments.	
2	11/12/24	-	
3	11/13/24	Googlemeet up with Advisor and discussed about the updates and advisor posted some references and suggestions.	
4	11/14/24	Integrating and testing Kubernetes to manage multi- tenant simulations using JupyterHub, ensuring resource isolation and efficient workload distribution.	
5	11/15/24	Ensured that Kubernetes was set up correctly and JupyterHub was deployed successfully in the cluster, ready for use.	
6	11/16/24	Addressed issues with API token creation and user management to ensure smooth integration between JupyterHub and Flask-based authentication.	

7	11/17/24	-	Implement the functionality for
			automatically adding users to
			JupyterHub to enable seamless
			token generation for
			authenticated access.

week 10

	Date	Tasks	Next Week
1	11/18/24	-	
2	11/19/24	-	
3	11/20/24	Googlemeet up with Advisor and discussed about the updates and advisor posted some references and suggestions.	
4	11/21/24	working on Report	
5	11/22/24	Working on Report	
6	11/23/24	Working On Report	
7	11/24/24	Working On Report	

week 11

	Date	Tasks	Next Week
1	11/25/24	-	
2	11/26/24	meet up with Advisor and discussed about the updates and advisor posted some references and suggestions.	
3	11/27/24	-	
4	11/28/24	working on Report and presentation	
5	11/29/24	Working on Report and presentation	
6	11/30/24	Working On Report and presentation	
7	12/01/24	Working On Report and presentation	

	Date	Tasks	Next Week
1	12/2/24	-	
2	12/3/24	meet up with Advisor and discussed about the updates and advisor posted some references and suggestions.	
3	12/4/24	-	
4	12/5/24	working on Report and presentation	
5	12/6/24	Working on Report and presentation	
6	12/7/24	Working On Report and presentation	
7	12/8/24	Working On Report and presentation	