Developers Journal

June 1st – June 7th

- **Project topic selection:** The topic has been confirmed “Group Normalization”.
  - Discussed with the team members regarding the topic
  - A dedicated repository has been created

June 8th – June 14th

- **Understanding the Objectives and tasks**
  - Literature review was carried on to understand project, by reading the related journals

June 15th – June 21st

- **Challenges**
  - Initially it was difficult to understand the difference between the normalization techniques.
    - But it was overcome by discussing it with the group.
  - Struggled in choosing the CNN model.
    - It was resolved by discussing with the team mates and concluded to use custom simple CNN model to evaluate the Normalization techniques.
  - Setting up virtual environment and installing the required packages.

June 22nd – June 28th

- **Created CNN model**
  - Simple CNN model was created after many trials.
- **Challenges faced while downloading the TinyImageNet Dataset**
  - Initially was planned to go with the ImageNet dataset, as it might consume more time and computational power to train the thorugh the model.
  - Difficult to push to the clusters.
- **Solution:**
  - Planned to use TinyImageNet dataset, which has similar dataset like vast number of classes and limited training, validation and test images.

July 6th – July 28h

- Got access from the ImageNet website, mentioning the research purposes
- Referring from the internet and understanding to create a simple CNN model
- Trained the model and tried to achieve the same result as per given in the project
  - Failed because of use of improper CNN model
- Gained insight about the usefulness of the clusters
- **Setup of Clusters**:
  - Had to get access from the university
  - Took time to get used to clusters
    - Difficulties with understanding the use of clusters but later which came in handy and efficient tool to handle training large datasets
  - Uploaded the data and other relevant code to the clusters example “execution.sh”.

August 2nd – August 15th

- Setup with another set of code with simple CNN model
- Running successfully without any error

September 1st – September 15th

- Extensively used clusters to train and analyze the training loss and time taken
- created the rough draft of the report
- Discussed with the teammates for the update
- Worked together for the report uploading the individual outcomes based on their respective datasets.