

To: Stephen Osiru  
From: Daniel Nzambuli  
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Title: Daily Work Report

## Summary of Activities

- Installed the recommended IDE. This is the IDE of choice for developing programs and systems at Swift Mobile. I downloaded and set up Pycharm following suggestions from my team lead and the CTO.
- Created a Repository. [DSA](#) is a Github repository I created to track my learning progress for data structures and algorithms.
- Introduced myself to my collaboration team. I was assigned to Stephen Osiru as my supervisor and Daisy as my peer collaborator. After the introduction, Stephen provided resources to catch up on data structures and algorithms. He also provided a rubric for documenting the completed tasks.
- Created a Jira account. Jira is the co-creating space used to track progress on tasks within Swift Mobile. I set up my first space and added my subtasks for the data structure and algorithm task. The CTO also issued a time line for the data structure and algorithm. The date of completing the training and implementing competent data structures and algorithms is 27 January 2026.
- Finished the [Big O](#) short-course. I started and completed the first section on Data Structures and Algorithms. This involved assignment and coding examples of different time complexities.
- Completed the Classes and Pointer short-course. I learned the use of classes for developing data structures and pointers for updating and connecting data structure components.
- Started on Linked Lists short-course. The initial lesson involved comparing linked lists and arrays based on: data

structure, memory allocation, update/deletion efficiency and data access.

- Completed first upload to [Github](#)

### Challenges Faced

- Running a virtual environment in Pycharm. I tried to activate my virtual environment but ran into a folder not found error. Upon searching the internet for solutions I learned that in order to run virtual environments in Linux systems, the system requires a separate install of python-venv.
- Time to learn Pycharm. Learning to use a new IDE (I initially used Vs code) was slightly challenging. I tried to get to a usable state and used it to learn DSA.

### Key Outcomes

1. Install the recommended IDE
2. Learned Big-O notation and completed the practice exercise
3. Learned how to use Pycharm and Jupyter for Pycharm for note taking
4. Collaborated with my peer teammate and our supervisor.
5. Learned the use of classes and pointers in data structures and algorithms.
6. Understood the comparison and distinction between Arrays and Linked Lists
7. First upload to Github