#### ANALYSIS OF PROJECT 1 AND PROJECT 2

The project 1 starts on 9/7/2018 and the project 2 starts on 10/15/2018. The resources present in the project 1 is shared by the project 2 with the project 1 precedence.

Apart from the original resources, the project 2 has been allocated few other resources. Since the number of resources for project 2 seems to be more then, the project duration can be minimized.

## Tasks executed simultaneously.

In project 1 the tasks of analysis/design, write test plan and documentation are executed parallel right after the requirement phase. Whereas in the project 2 apart from the above 3 tasks, lab and environment set up task also executes simultaneously after requirement phase. Since there are more number of parallel tasks then the project is tend to be taking less time than others.

## Feasibility of finishing project in required date.

Is it Feasible to finish the project 2 after two week of finish date of project 1? The answer lies in the resource allocation. By resource levelling method and due to the abundance availability of resources it is possible to finish the project sooner than expected date.

The finish date for the project 1 is 11/25/2019 and for project 2 is 8/12/2019. Here the project 2 is finished earlier than the project 1 due to maximum utility of resources.

# Reallocation or change in resource utilization.

There were so many cases where the tasks get clashed when the same resource is allocated to two or more tasks at the same time. So to avoid this clash either you have to assign the resource to each task at different time or you have to reduce the load (like 50% in project 1 and 50% in project 2).

## Change in project duration.

The original number of days for project 1 is 189 days with the resource utilization of 100%. But due to resource sharing with project 2 there comes a clash and it led to reducing the utility of certain resources to 50% to accommodate them well. This incase led to the increase in the project duration to 316 days. The same goes for project 2 also. The original duration of 160 days increased to 215 days after this change of 100% to 50%.

## Preference of system engineers.

Comparing to the project 1, the system engineers are of more demand in project 2 due to the lab and environment set up, and data model creations. This led to the demand of system engineers more since they are comparatively less than the resources like program engineer and requirement engineers.