Students must create teams with a maximum number of three students per team. **Plagiarism is a serious offence.**

1. Create a mobile application that track zupco buses. The users of the application should be able to track the position of the bus on a digital map and get the average minimum time that the bus need to get to a designated bus stop.
2. Make an application like Google Maps - You can use **Dijkstra's algorithm to find the shortest paths, A* Search for more efficient & real time use.**
3. Use a file compression algorithm, like Run Length Encoding or Huffman Coding, devise your own algorithm to make a project on data compression.
4. Create an application that can be used by the industrial attachment co-ordinator in the ICT and Electronics department to create routes for academic supervisors. The application should receive names of places and their locations and a number of academic supervisors. The application then create routes for each academic supervisor.
5. Create an application that uses dynamic programming approaches like the knapsack algorithm and other genetic algorithms to create a learning timetable for students. The application should be able to receive module_names, class sizes, levels, venues, venue size, maximum taught hours per_week, time lines. The application then create a time table that can be exported as a pdf file.
6. Create an application that create routes for zupco buses. The application should receive routes, available buses, estimated number of passengers, time lines, available drivers. The application then create a daily time table for bus drivers and passengers, these time tables can be exported as pdf files.
7. Create a file explorer application.
8. Create any game with graphical objects. The game should demonstrate originality, any form of plagiarism will result in nullification of the project.

9. Implement a simulation of the linux kernel that demonstrate process synchronization.
10. **If students have good ideas worthy a project consult the instructor.**