1. student scans his finger in the system arduino fitted at each lab
2. arduino fetches current time and date
3. if not found - to scan again
4. if found - successful
5. beeps green light if found, beeps red if not found. alternatively message can be displayed on a screen
6. if successful, server application meanwhile checks time and date and enters the attendance into database
7. duplicate entries in the same lab time period should also be handled properly by displaying appropriate message
8. when requested upon, it can display individual attendance percentage
9. if database is uploaded onto some server like phpmyadmin, students can view their attendance for each subject by entering their prn
10. python application specifications:
11. application also has option to specify a holiday in case lab is cancelled
12. application should be able to take input of all class' timetable and store into database
13. should be able to edit the timetable in case of timetable revision
14. application should be able to provide real-time administration for teachers from their respective labs by logining into the intranet site.
15. application should be able to create student entry, edit student entry, delete student entry
16. arduino specifications
17. arduino needs to run on battery to avoid application failure during electricity cut.
18. should write the fingerprints scanned to a sd card so it can send it to the server when it is turned on again
19. battery may also be needed to keep track of time.
20. arduino creates log files (text file) for one day in one file
21. application automatically deletes files older than four or five months( one semester )

**points to ponder upon**

1. what should happen if there is a change in the time of the lab for one day
2. how will data be transfered from sd card of arduino to the server
3. how can students bypass this process to increase their attendance, how to tackle them
4. time track needs research
5. //button needs research
6. //message display screen needs research