**Term Project Task “Secure Student Attendance Tracking System”**

**CMSE-353 “Security of Software Systems”**

**Fall-2022, posted 27.10.2022**

1. The Term Project concerns developing Secure Student Attendance Tracking System (SSATS) having actors: Student, Teacher, Chair, Parent, and System Administrator. Student can view only his/her record. Teacher can enter/modify attendance of students in his/her groups. Chair can view only all Departmental students’ records. Parent can view only records of his/her children-students. System Administrator can create only course-group attendance tables. Data tables are kept on the disk DES-encrypted. Keys for encryption/decryption are created/periodically updated by System Administrator. System Administrator also introduces new user and grants/revokes their privileges.
2. Term project will be made by the teams established for Labs.
3. Implement solution of your problem as a software application using any appropriate tools. You may reuse your Lab codes.
4. Conduct tests with your application to validate its correctness
5. Prepare (in Word) a **report** on your assignment having:

* Cover page
* outline,
* problem definition,
* description of work breakdown and task distribution between team members,
* description of algorithm for solving your problem,
* description of database structure designed
* description of tools you used for implementation of your problem and the details of their installation and preparation for usage
* description of the developed program (parts of the program, ways of interaction, synchronization, etc.)
* user guide (how to use your program – what and where should be installed, launched, how it should be interpreted)
* description of conducted tests and their results with screenshots of the runs
* conclusion
* references on used sources (books, articles, web-sites, etc.)

1. Submit the report with a Winrar archive having all the Term Project-related materials: doc-file with your report, sources and executables of your application, results of your tests, and instructions how to use your program. It shall be possible to install and run your program from the materials provided.
2. Submit the report to the Lab Coordınator and be ready to show your application working, and to give necessary explanations about it. Reports shall be submitted latest by **02.01.2023, Monday, 16.00. Exact place for submission will be specified later by Lab Coordinator Seyed Javad Seyedzadeh Kharazi. Later submission will be penalized (2 points/working day).**
3. Presentation of your working applications will be arranged in the period 03.01-05.01.2023. Presentation time will be specified on the report submission. The report will be assessed out of 8 points, and 12 points – for presentation of the working application and its explanation