

Software Engineering Screening Exam

Attempt at least one question from I and II, question III is a design exercise, you may use the programming language of your choice for solving the questions. Submit your solution executable along with the source code and version control system repo. Feel free to contact us for any queries.

- I. Make a message scheduling program which takes in a number of messages sent by users and schedules them in uniform distribution. For example take a list of users with messages

- A. 3
- B. 2
- C. 1

For the users A, B, and C, with message count 3, 2 and 1 respectively; The messages can get scheduled in sequence 'ABCABA', note that there may be more than one possible sequence or in some cases no perfect sequence..

The program should be able to parse a CSV of input messages and generate the sequence of message schedule as uniformly distributed as possible.

- II. Given two CSV files with data containing timestamps for each row, merge the two files using their timestamps as the common key. If the timestamps do not match for a row in a file then use the last available data. Create an application (command line or GUI based) to visualize the combined data from the two CSV in real-time playback.
- III. Design a system to facilitate updating an installed application on 25 computers connected via intranet (no access to internet). You may use any medium to illustrate your system design including text based, sketching / charting software or drawn on paper.