SPRINT 1 PRESENTATION

Exam Centre Assignment Application

Developed by: Group 2

Link: https://github.com/sushanth-singh/CapG-Sprint-1-Project

Day 1

- Received the project document and spent time understanding the functional and non functional requirement of our project
- Discussed over the working of the program by deciding which data structure to use and the functions we will need to make
- Divided tasks among team members and started working on them
- Created the RTM document and updated progress in it
- Started working on the SRS document file for the project
- Created input files for our application viz. examcentres.txt, candidate1.txt, candidate2.txt

Day 2

- Discussed about the current progress of the application and jotted down changes
- Started working on the DFD level 0 and level 1 diagram
- Spent time analyzing the working of our program and updating the flow
- Next, created the final flow diagram document
- Finally, created the pseudocode file which has the basic working of the application in layman terms for easy understanding

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Day 3

- Started the coding part for the application
- Finally decided to use the data structure linked list to implement the program
- Created structures for the exam centers data and the candidates data
- Finalized the functions and started creating them
- Made functions that conform to the standard coding guidelines
- Adhered to use dynamic memory allocation and multithreading concepts

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Day 4

- Started unit testing and Integration testing
- Used valgrind tool to detect memory leaks
- Finalizing the RTM, SRS doc, IT_UT file and uploading their PDF format on GitHub
- Uploading the final version of the code on GitHub and ensuring all files are present

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insertExamData()

- This function is the first function to be called when the application is called.
- It parses the exam center data from the text file for details like exam centre number, examID, college and address
- It stores this data in a linked list "struct exam center" ready for further processing.

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insertCandidateData()

- This function is used to insert candidate data while parsing it for the different fields.
- It checks each entry for a valid condition and then stores this data in a linked list "struct candidate"
- We have used a mutex lock to lock the matched exam center until it is assigned to candidates giving that particular exam
- We have used file handling to store the invalid entries in a file called "invalidcandidates.txt"

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writeToFile()

- This function is used to assign the candidates their exam hall and save the file
- It checks the values of the linked lists, which store only valid entries and then allocates the students their exam hall.
- We create a file for each exam hall that saves the candidate details of that exam center in the particular file
- This will help the exam admin controller and the exam candidates to search for their required information easily

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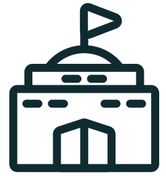
printHallTicket()



- This function prints the hall ticket when the user enters the candidate ID.
- If the candidate has entered the correct credentials then they will get their hall ticket which has all the details about their exam and exam center.
- If not, then their details will be stored in the "invalid candidates.txt" file

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Thank you!

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