Spring 2020 CPSC 535-01 14111

ADVANCED ALGORITHMS

PROGRAMMING ASSIGNMENT 2

GROUP MEMBERS

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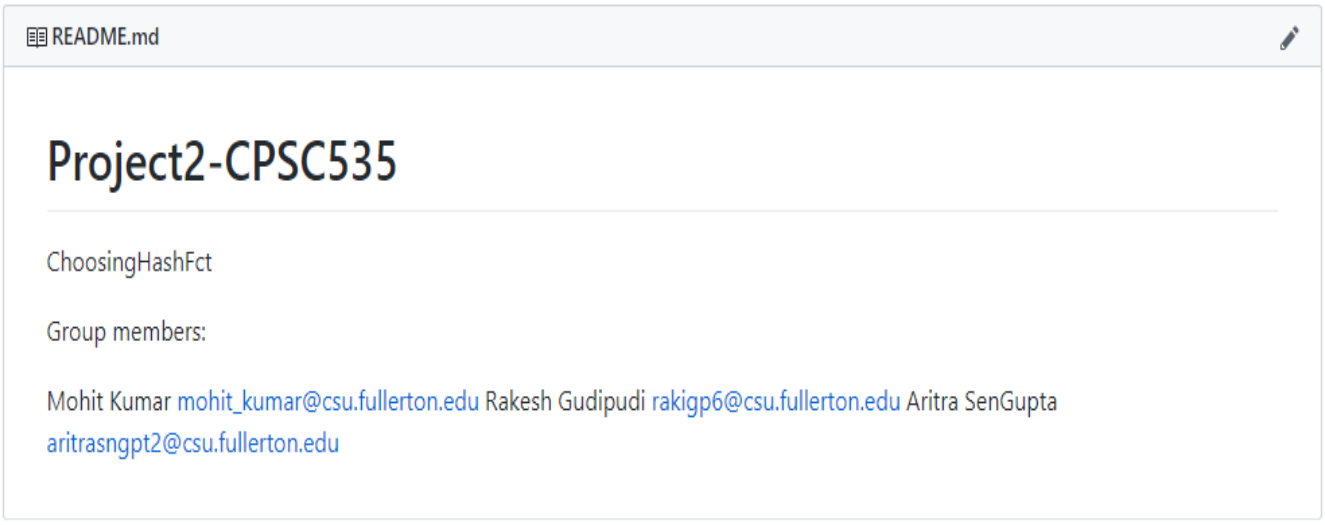

README.md

Project2-CPSC535

ChoosingHashFct

Group members:

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Pseudocodes for the project :

1)Pseudocode for the hashing code:

1) Create 7 hash functions based on first digit to last digit of barcode.
2) Create a function add item to assign data (item colour, item shape, item brand, barcode).Add all the data from incoming text file to 7 hash tables HT1 tohT7.
3) Create a function to remove an item on the basis of barcode from hash tables hT1 to hT7.
4) Create a function best hashing which will return the index of best hashing based on below logic.
    A) Iterate 10 buckets (bucket 0 to bucket 9) .and assign hash table bucket size for each index.
    B) Calculate the minimum and maximum and assign into balance array.
    C) Repeat a and b 7 times so that balance [0] ->balance[7] updated with difference between maxloc and minloc.
    d) Calculate the index of least balance and return it .
5) Step 4 will provide the best hashing functionality at the end of the program.

Steps to run the file

1)Download the project from Github.
2)Run the main.cpp file using any IDE or command prompt. This will give the desired result as mentioned below in the below screenshot.
3)Please reach out to us in case of any issues.

Snapshots of the results