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COP 3538 Data Structures using OOP

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Project 5 Pseudocode UserInterface class

**UserInterface class**

**public void readMainFile () throws IOException**

theFile calling readMainFile method

end readMainFile method

**public void displayMainFile ()**

theFile calling displayHashMain method

end displayMainFile method

**public void readUpdateFile () throws IOException**

theFile calling readUpdateFile method

end readUpdateFile method

**pubic void displayUpdateFile ()**

theFile calling displayHashUpdate method

end displayUpdateFile method

**public void readHashTableFile ()**

theFile calling readHashTableFile method

end readHashTableFile method

**public void displayHashTableFile ()**

theFile calling displayHashTable method

end displayHashTableFile method

**public void buildHashTableArrays ()**

for loop to count through the length returned from theFile calling getHashTableSize method

declare input of type String and assign theFile calling getHashTableElements passing count to input

myHashTable object for HashTable class calling buildLetterAndValueArrays passing input

end for loop

end buildHashTableArrays method

**public void displayHashTableArrays ()**

myHashTable calling displayLetterAndValueArrays method

end displayHashTableArrays method

**public void buildHashTable1 ()**

for loop to count through the length returned from theFile calling getHashMainSize method

declare new thePresident object passing theFile calling getHashMainElements passing count to the method

myHashTable calling buildHashTable1 passing thePresident

end for loop

end buildHashTable1 method

**public void buildHashTable2 ()**

for loop to count through the length returned from theFile calling getHashMainSize method

declare new thePresident object passing theFile calling getHashMainElements passing count to the method

myHashTable calling buildHashTable2 passing thePresident

end for loop

end buildHashTable2 method

**public void displayHashTable1 ()**

myHashTable calling displayHashTable1 method

myHashTable calling alternativeDisplayHashTable1 method (not for grading)

end displayHashTable1 method

**public void displayHashTable2 ()**

myHashTable calling displayHashTable2 method

myHashTable calling alternativeDisplayHashTable2 method (not for grading)

end displayHashTable2 method

**public void updateHashTables1And2 ()**

for loop to count through the length returned by theFile calling getHashUpdateSize method

make new thePresident object passing theFile calling getHashUpdateElements passing count to the method and a number to the constructor

switch based on thePresident calling getPresidentUpdateCode method

case String A

myHashTable calling updateInsertTable1 method passing thePresident

myHashTable calling updateInsertTable2 method passing thePresident

break

case String D

myHashTable calling deleteFromHashTable1 method passing thePresident

myHashTable calling deleteFromHashTable2 method passing thePresident

break

end switch

end for loop

end updateHashTables1And2 method

**public void displayStatistics ()**

display blank line to the user

display hash table performance statistics header to the user

display headings to the user

myHashTable calling displayStatistics method

end displayStatistics method

**public void buildHashTable3 ()**

for loop to count through the length returned from theFile calling getHashMainSize method

declare new thePresident object passing theFile calling getHashMainElements passing count to the object constructor

myHashTable calling buildHashTable3 method passing thePresident

end for loop

end buildHashTable3 method

**public void displayHashTable3 ()**

myHashTable calling displayHashTable3 method

end displayHashTable3 method

**public void updateHashTable3 ()**

for loop to count through the length returned by theFile calling getHashUpdateSize method

make new thePresident object passing theFile calling getHashUpdateElements passing count to the method and a number to the constructor

switch based on thePresident calling getPresidentUpdateCode method

case String A

myHashTable calling updateInsertTable3 method passing thePresident

break

case String D

myHashTable calling deleteHashTable3 method passing thePresident

break

end switch

end for loop

end updateHashTable3 method

end UserInterface calss