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CPT187 – C02

Chapter 7 - Program 5

# **REQUIREMENTS DOCUMENT**

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| **Date Submitted:** | 1/29/2023 |
| **Application Title:** | Charge Account Validator |
| **Purpose:** | The program will take in an account number from the user and compare it to an existing list of accounts to determine if it is valid. |
| **Program Procedures:** | To use the program, first call the program. When prompted, enter a 7-digit account number. |
| **Algorithms, Processing, and Conditions:** | 1. Program calls account\_nums() function 2. Function reads contents of charge\_accounts.txt file to a list 3. Function returns list to main() 4. Main() function calls validate\_account() function. 5. Function prompts user to enter an account number 6. Function validates input using len() and .isnumeric() functions.   6a. If not usable data, user is prompted to enter new number.  6b. If input is usable, it is saved to variable   1. Function compares user input to charge accounts list 2. Function displays whether account is in list or not |
| **Notes and Restrictions:** | Charge\_accounts.txt file must be stored in same directory as 7-5.py file. |
| **Comments:** | This program uses an infinite loop to validate the input and determine if it is an improper length. |

# **USE CASE**

1. User starts program
2. Program reads charge accounts from charge\_accounts.txt into list
3. Program casts charge\_accounts values to string and sanitizes.
4. User enters an account number
5. Program validates input.
6. Program determines if account exists or not and displays results.