

Project 3 – Username Generator with Dup Checker and User Input - 50 points possible

Project Requirements

Name of program file:	username_generator_dup_checker.py
Description of program:	<p>This program will test your new decision and iterate logic both in the input section and processing section. This program will take your username generator project and improve on it. This program will ask the end user 3 questions, what is your first name, what is your last name, what year were you born. This input will need to be validated and while loops used to force the end user to enter the correct data. This input will replace the lists we used in week 2. You will populate those lists with the user input.</p> <p>The second major change will be the use of if else logic to correct the duplicate username problem. Last week we used a set function to simple remove any duplicates from the username list. This week you will test for duplicate usernames and if found, alter the username to avoid duplicates.</p>
Program Requirements:	<p>The program MUST follow the input, process, output model described in the syllabus video and the introduction to programming pdf. You MUST follow the structure outlined or you will lose points.</p> <p>This program will need the import statements for username and today's date.</p> <p>This program must have a flower box comment section with your name, date created, and description of the program (FYI: Not My Description from Above)</p> <p>This project will modify and enhance project 2.</p>
	<p>Input section:</p> <p>Instead of using static list and the zip() method, you will receive input from the end user (again this is you, LOL). You will take that information and apply it to a list with the elements being tuples.</p> <p>You will ask for user input with the following question:</p> <ul style="list-style-type: none">• What is your first name?• What is your last name?• What year were you born? <p>Your program should ask the end user for at least 5 employees and include at least 2 employees that will cause a duplicate username that your new logic will correct.</p>

You will need to validate the data as to length.
First and Last Name should be at least a length of 2.
Year of birth should be a length of 4 but can remain a string.

After each employee has entered their first name, last name and year of birth, you should display that information back out to the employee and ask them to confirm the information. If the employee answers Yes then update the employee data list with the information. If the employee answers No then clear the input variables and ask the questions again.

After your program receives information on 5 employees, you will terminate the input process.

Process section:

With in a for in loop do the following:

1. Use that information to create employee usernames in the following format: first initial last name year of birth i.e. Dale Fontenot 1963 = dfontenot63
2. Use if else logic to test the new username to make sure it does not exist in the current username list. If it is a duplicate, do not append the username list but build a new username using the employee's first name (all lower case) and the first initial of the last name and then the year of birth, ie dalef63. After building the new username, append the username list with it. If no duplicate is found, append the username to the username list.
3. Store the usernames in a list
4. Store the combined employee information in a dictionary with the username as the key and a tuple with first name, last name, year of birth.

Make a copy of the username list without a copy loop and then sort that copy.

Output section:

You must then output the following information in this order:

Username

Today's Date

Employee Data list that you used to gather user input

Username list with all usernames

Employee data dictionary

	Username list that has been sorted
What to turn in:	Take a screen shot of your RUNNING program Upload the screen shot and the py file to blackboard as TWO separate files.

Assignment Template

assignment_template.py

```

1  #Import Section
2
3  from datetime import date    #import this for Date
4  import getpass              #import this for User
5
6  #Flower Box Section
7
8  #####
9  #
10 #   Name:  Dale Fontenot
11 #   Date:  01/23/2022
12 #   Program Description:
13 #
14 #   Describe as completely as possible
15 #   what the program does including what inputs, processes
16 #   and outputs
17 #
18 #####
19
20 #Variables section
21 |
22 |     #All variables needed for will be declared here
23 |
24 #Functions section
25 |
26 |     #Starting on project 4 all functions created will be in this section
27 |
28 #Input section
29 |
30 |     #All input logic will be in this section
31 |     #Make sure to use line comments to fully explain the inputs
32 |
33 |
34 #Process section
35 |
36 |     #All processing of user input and calculations will be in this section
37 |     #Make sure to use line comments to fully explain how the data is being processed
38 |
39 |
40 #Output section
41 |
42 |     #Your Username and Today's Date will be in this section and ALWAYS First
43 |     #All output in the form of print functions will be in this section
44 |     #Make sure to use line comments to fully explain what is being displayed and how it is formatted
45 |
46 |

```