

**Lab 1**

Terrence Jackson

SDEV 300: Building Secure Python Applications

Professor Howard

Mar 19, 2024

### Test Cases

	Input	Expected	Actual	Pass?
Test Case 1: Name Validation	Enter, Terrence, *, 4%, Jackson, q	Invalid, Prompt last name, Invalid, Invalid, Prompt age, quit	Invalid, Prompt last name, Invalid, Invalid, Prompt age, quit	Yes
Test Case 2: Age Validation	T, J, 150, 9	Too old, too young, quit	Too old, too young, quit	Yes
Test Case 3: Citizen Validation	T, J, 18, no	Not a citizen, quit	Not a citizen, quit	Yes
Test Case 4: State Validation	T, J, 25, y, ALABAMA, nw, md, Q	Invalid, Invalid, Prompt zip code, quit	Invalid, Invalid, Prompt zip code, quit	Yes
Test Case 5: Zip Code Validation	T, J, 48, yes, RI, apple, 123456789, 1234q, q	Invalid, Invalid, Invalid, quit	Invalid, Invalid, Invalid, quit	Yes
Test Case 6: Success	Terrence, Jackson, 68, y, HI, 12345	Success, print voter registration summary	Success, print voter registration summary	Yes

Note: No explicit testing for getting input and quit behavior. This functionality was displayed throughout several of the test cases.

### Test Case 1: Name Validation

```
PS C:\Users\trjac\OneDrive\Documents\UMGC\SDEV_300> poetry run python .\sdev_300\lab_1\ voter_registration.py
* * * * * - - - - -
* * * * * - - - - -
* * * * * - - - - -
* * * * * - - - - -
- - - - -
- - - - -
- - - - -

Welcome to the Voter Registration Application!

Enter 'q' at any time to quit.

First name:
Invalid, please only input alphabetic characters
First name: Terrence
Last name: *
Invalid, please only input alphabetic characters
Last name: J@cks0n
Invalid, please only input alphabetic characters
Last name: Jackson
Age: q
User chose to quit.
Goodbye!
```

### Test Case 2: Age Validation

```
PS C:\Users\trjac\OneDrive\Documents\UMGC\SDEV_300> poetry run py
* * * * * - - - - -
* * * * * - - - - -
* * * * * - - - - -
* * * * * - - - - -
- - - - -
- - - - -
- - - - -

Welcome to the Voter Registration Application!

Enter 'q' at any time to quit.

First name: T
Last name: J
Age: 150
Invalid, please input a number between 1 and 120.
Age: 9
Sorry, you must be at least 18 years old to register to vote.
Goodbye!
```

## Test Case 3: Citizen validation

```

PS C:\Users\trjac\OneDrive\Documents\UMGC\SDEV_300> poetry run
* * * * *
* * * * *
* * * * *
* * * * *
- - - - -
- - - - -
- - - - -
Welcome to the Voter Registration Application!

Enter 'q' at any time to quit.

First name: T
Last name: J
Age: 18
Are you a U.S. citizen? (yes/no): no
Sorry, only U.S. citizens are eligible to register to vote.
Goodbye!

```

## Test Case 4: State Validation

```

PS C:\Users\trjac\OneDrive\Documents\UMGC\SDEV_300> poetry run
* * * * *
* * * * *
* * * * *
* * * * *
- - - - -
- - - - -
- - - - -
Welcome to the Voter Registration Application!

Enter 'q' at any time to quit.

First name: T
Last name: J
Age: 25
Are you a U.S. citizen? (yes/no): YES
State: ALABAMA
Invalid, please input a two letter state code.
State: nw
Invalid, please input a two letter state code.
State: md
Zip code: Q
User chose to quit.
Goodbye!

```

## Test Case 5: Zip Code Validation

```
PS C:\Users\trjac\OneDrive\Documents\UMGC\SDEV_300>
* * * * * - - - - -
* * * * * - - - - -
* * * * * - - - - -
* * * * * - - - - -
- - - - -
- - - - -
- - - - -
Welcome to the Voter Registration Application!

Enter 'q' at any time to quit.

First name: T
Last name: J
Age: 48
Are you a U.S. citizen? (yes/no): yes
State: RI
Zip code: apple
Invalid, please enter a 5-digit numeric zipcode.
Zip code: 123456789
Invalid, please enter a 5-digit numeric zipcode.
Zip code: 1234q
Invalid, please enter a 5-digit numeric zipcode.
Zip code: q
User chose to quit.
Goodbye!
```

## Test Case 6: Success

```

PS C:\Users\trjac\OneDrive\Documents\UMGC\SDEV_300>
* * * * *
* * * * *
* * * * *
* * * * *
- - - - -
- - - - -
- - - - -
Welcome to the Voter Registration Application!

Enter 'q' at any time to quit.

First name: Terrence
Last name: Jackson
Age: 68
Are you a U.S. citizen? (yes/no): y
State: HI
Zip code: 12345

Congratulations! You are eligible to vote.
* * * * *
* * * * *
* * * * *
* * * * *
- - - - -
- - - - -
- - - - -
Voter Registration Summary:
Name: Terrence Jackson
Age: 68
Country of Citizenship: U.S.
State of Residence: HI
Zipcode: 12345

```

**PyLint Results:** Your code has been rated at 10.00/10 (previous run: 10.00/10, +0.00)

As I was working, I had a few PyLint errors to address. The one that was most surprising to me was “Unnecessary “else” after “return”, remove the “else” and de-indent the code inside it”. This arose in my validation functions. My initial thought was to do an if/else block, where if the data was valid it would return True, else return False. However, as Pylint pointed out, the else block was entirely redundant. Other than that, I had a few minor corrections such as lines being too long in my header. Only a few small changes brought me to the 10/10 score I was looking for.