Programming Principles Assignment 2 - Admin.py Joke App Pseudocode

Debbie Yung
10417380

InputInt function with parameter *prompt*

Infinite loop

Get user input and store into *UserPrompt*

Try-Except Exception handling

Try

Convert *userprompt* into int if *userprompt* is not equal to string '0' i.e. a minimum of 1

Else print 'Invalid, number not min 1'

Continue to prompt for input again

Except (can't be converted to int)

Print 'Not a valid number'

Continue to prompt for input again

Break loop

Return *UserPrompt* int

inputSomething function with parameter *prompt*

Infinite loop

Get user input and store into *UserPrompt*

Remove any white space from beginning and end of input string

If *UserPrompt* length is equal to 0

Print 'Invalid input. Please re-enter.'

Continue to prompt for input again

Else

Break loop

Return *UserPrompt* string

getList function with parameter *filename*

Try-Except handling to check if file exists

Try to open *filename* in read mode and load into *f*

Load json *f* into variable *data* and close

Except, .txt file does not exist

Make new empty list *data*

Return *data* list

saveChanges function with parameter *dataList*

Open .txt file in write mode as variable *f*

Json dump *dataList* into variable *f* textfile

Close *f*

Admin.py Main

Filename = 'data.txt'

With *getList()* function and parameter *filename*; load into list *dataList*

Print 'Welcome to the Joke Bot Admin Program'

Infinite Loop

Print 'Choose [a]dd, [l]ist, [s]earch, [v]iew, [d]elete, [t]op or [q]uit'

Prompt for user input into variable *choice* and convert to lowercase

If *choice* == 'a'

Create empty dictionary *jokeDict*

Prompt user to 'Write a joke:' and pass through *inputSomething()* function; Store inputted joke into *jokeSetup*

Store *jokeSetup* as dictionary item in *jokeDict* as *'setup'*

Prompt user to enter a punchline, pass through *inputSomething();* Store inputted punchline into *jokePunchline*

Store *jokePunchline* as dictionary item in *jokeDict* as '*punchline*'

Set *jokeDict* dictionary items *numOfRatings* and *sumOfRatings* to 0 as placeholder

Append *jokeDict* to *dataList*

Call function *saveChanges()* on *dataList*

Print 'Joke was added successfully'

Else *choice* == 'l'

If *dataList* is empty

Print 'No jokes saved.'

Else

Loop through items of *dataList*

Print *index* and dictionary *item* '*setup*' of *dataList*

Else *choice* == 's'

Set noJoke variable to True

If *dataList* is empty

Print 'No jokes saved.'

Else

Prompt user for search term and store into *searchItem*

Convert *searchItem* to lowercase

Loop through *dataList* items as *jokeItem* and *index*

If *searchItem* is in *jokeItem*['setup']; convert to lowercase

Print 'Search term found in Setup:' *jokeItem*['*setup*']

Set *noJoke* variable False as search term has been found

Else *searchItem* is in *jokeItem*['*punchline*']; convert to lowercase

Print 'Search term found in Punchline:' *jokeItem*['*punchline*']

Set *noJoke* variable False as search term has been found

If *noJoke* == True i.e. no search term has been found (never set to False)

Print 'No match found.'

Else *choice* == 'v'

If *dataList* is empty

Print 'No jokes saved.'

Else

Prompt user for item number to view and store into *viewItem* – 1; passed through *inputInt* function

Try:

To store the joke in *viewItem* number of *dataList* into *viewDict*

Print *viewDict* '*setup'* and '*punchline*'

If *viewDict* '*numOfRatings'* is 0

Print 'Joke has no ratings'

Else: print *viewDict*'s *'numOfRatings'* and average (*viewDict 'sumOfRatings'* divide by '*numOfRatings')*

Except/Catch IndexError if user enters an invalid index number

Print 'Invalid number'

Else *choice* == 'd'

If *dataList* is empty

Print 'No jokes saved.'

Else

Prompt user for item number to delete into *deleteItem* – 1; passed through *inputInt* function

If *deleteItem* > length of *dataList* (i.e. not in index range)

Print 'Invalid number'

Else

Try:

Delete *dataList*[*deleteItem*]

Print 'Joke Deleted'

saveChanges(*dataList*)

Except/Catch IndexError if user enters an invalid index number

Print 'Invalid number'

Else *choice* == 't'

Set *noRate* to True

If *dataList* is empty

Print 'No jokes saved.'

Else

Loop through index and items *jItem* in *dataList*

If *jItem*'s '*numOfRatings'* > 0 and average >= 4:

Print 'Top jokes with ratings over 4.0: *index* and *jItem's 'setup''*

Set *noRate* to False

If *noRate* == True

Print 'No jokes were rated over 4.0'

Else *choice* == 'q'

Print('Goodbye!')

Break out of main loop

Else:

Print 'Invalid Choice'