



CIS1201 P3

Background

You have been asked to complete a program to automate Santa's naughty/nice tracking. You can use examples from this year, your textbook, and lookup syntax if needed. No collaboration. Standard naming and commenting expected. The program is setup to add some test data in the lists when the program starts.

Code Provided

There is starting code which is provided to be used. It has the needed attributes and has a method to show the kids on the lists. Note the listNice and listNaughty strings are the attributes which will hold the appropriate kid names. Remember to add the following to Javadocs of methods you change.

@modified initials date description

Requirement #1 – Making a list

The program currently has function to add a new kid. In option 1 after the new kid object is created – add the logic to add the kid to the correct list. Note that the attributes in the code provided should be used to hold the names.

- If the kid is at least 10 years old and their behaviourRating is below 6, they

should be added to the naughty list string.

- If they are under 10 years old and their behaviourRating is below 5 they should be on the naughty list.
- Otherwise they should be on the nice list.

When adding to the correct list String only a comma then their name should be added. Before their name is added, a comma should be added to separate the new name from the names already on the list.

Requirement #2 – Checking it to find out who's naughty or nice

Implement option #2 which will allow Santa to lookup a kid on the list strings provided to see if they've been naughty or nice. The user should be able to enter a name and then the program will tell if the kid is naughty or nice.

Requirement #3 – Take a kid off the nice list

Once and a while a kid acts up close to the holiday and needs to be removed from the nice list. Have the program ask for the name and remove the kid (along preceding comma) from the nice list.

Requirement #4 – User entry validation

Add validation to the user input when the information about a kid is being obtained from the user. Have the user continually prompted based on the following criteria:

- Ensure that the name string has a length of at least 2.
- Ensure that the age is below 16.
- Ensure that the behaviourRating is between 1 and 10 (inclusive).

Requirement #5 – Keep Rudolph off the list

Rudolph keeps trying to get on the list. In the existing code where the user is prompted for the kid's name keep asking for the name as long as the user enters "Rudolph" as the name.

Kid should not be added to a list if they are already on a list.

I/O from the starting code

```
--- Main Menu ---
1) Add a kid to Santa's lists
2) Lookup a kid
3) Move a kid to the naughty list
4) Show the list
0) Exit
--> 4
```

```
--- Nice List ---
```

```
Aaron
Adline
Alberto
Amy
Andres
Azam
Bailee
Ben
Blaise
Brandon
Chad
Christian
Colin
Courtney
Dakota
David
Dmitrii
```

```
--- Naughty List ---
```

```
Nick
Michael
Steve
```

```
--- Main Menu ---
```

```
1) Add a kid to Santa's lists
2) Lookup a kid
3) Move a kid to the naughty list
4) Show the list
0) Exit
--> 1
```

```
--- Add a kid ---
```

```
Name (Must be at least length of two) --> joe
```

```
Age (must be below 16) --> 3
```

```
How nice was the kid this year? (1-10 where
1==very naughty 10==very nice) --> 2
```

```
--- Kid Details ---
```

```
- Name: joe
```

```
- Age: 3
```

```
- Behaviour Rating: 2
```

```
-----
```

```
--- Main Menu ---
```

```
1) Add a kid to Santa's lists
2) Lookup a kid
3) Move a kid to the naughty list
4) Show the list
0) Exit
--> 2
```

```
--- Lookup a kid's status ---
```

```
--- Main Menu ---
```

```
1) Add a kid to Santa's lists
2) Lookup a kid
3) Move a kid to the naughty list
4) Show the list
0) Exit
--> 3
```

```
--- Move a kid to the naughty list ---
```

```
--- Main Menu ---
```

```
1) Add a kid to Santa's lists
2) Lookup a kid
3) Move a kid to the naughty list
4) Show the list
0) Exit
--> 0
Goodbye
```