CS 100 Project Two – Spring 2016

Project Overview: Now that you are in college, you have to manage more things on your own. For example, you have to figure out what to wear every day. Since you also do your own laundry, you are constantly asking yourself

Can I wear this or do I need to wash it?

If you look at the diagram on the next page, we've developed a flowchart that allows a person to determine whether he/she should wear or wash the article of clothing under consideration. The flowchart asks a series of questions and expects specific answers to each question. For example, the first question you will ask the user is **What are you considering?** and the user will always give you one of three possible answers – **shirt**, **pants**, or **other**.

For this project, you can assume that the user:

- Will always enter lower-case answers (or legal, non-negative numbers) to the questions
- Will always enter a single-word answer to the questions
- The complete set of possible inputs that you could see with this program is shown below

shirt, pants, other, t-shirt, nice, sweatshirt, jeans, socks, fine, marginal, bad, none, small, lots
<any non-negative integer>

As an example of the execution of this program, consider the two instances shown below. Program prompts are shown in blue and the user's input is shown in red.

What are you considering? shirt
What kind? t-shirt
How does it smell? fine
Are there any stains on it? none
You can wear this

What are you considering? pants
What kind? jeans
How many times have you worn them? 7
How does it smell? bad
You need to wash this

We recommend writing functions for the basic questions that get asked on a regular basis. These four functions are: **What Kind?** and **Smell Test** and **Stains Test** and **Times Worn**. Each of these functions would ask the user a question, read the user's input, and the return a value to the calling routine. The exact wording of the question is not important; you can phrase it as you want as long as the user knows what the expected answer should be.

What You Need To Do

- Create a directory called **`project2`** on your machine. In that directory, create a file named **`wash.c`**
- In **`wash.c`**, write the code needed to solve the problem stated above. Make sure that your program
  - Has a header block of comments that includes your name and a brief overview of the program
  - Follows the rules specified in the flowchart
  - Use at least four functions (and has a brief comment describing the purpose of each function).
  - Clearly prints either **Wash it** or **Wear it** at the end of the program
- You may assume that the user will always enter valid input.
- We strongly recommend that you use **`scanner.h`** and **`scanner.c`** for all your input.
- Make sure your program runs properly on **`cs-intro.ua.edu`**. That is where it will be graded.
- You can check your program by following all paths in the flowchart, your recommendations should match.
- Bundle your **`project2`** directory into a single (compressed) zip file. To do this:
  - PC: Using Windows Explorer, right click on the **project2** directory and select "Send To" and then "Compressed (zipped) folder"
  - Mac: Using Finder, use a secondary click on the **project2** directory and select "Compress *foldername*"
- Once you have a compressed zip file that contains your **`project2`** code, submit that file to Blackboard.

Project1 is due at 5:00pm on Wednesday, March 2. Late projects are not accepted.

CS 100
Wash It or Wear It Guide