CptS 111 – Fall 2024

Project Report
Due: Monday, 12.9.24, before 11:59 pm

Instructions

Fill out this project report and submit it together with your other project files. Compare your project proposal as you complete this report and comment on any changes made to your project and the reasons for them.

1. Names of team members (if a member didn't participate, indicate this)

   Madelynn Fulmer
   Hans Anstey

2. Project title

   Backup directory to .zip

3. What project does

   The program backs up a directory to a zip file.

4. Project tasks; each task represents a single function (minimum of 6 functions plus `main()`); explain any changes to your original proposal and reasons for the changes

   def get_directory():
   - The get_directory function asks the user for the directory they'd like to zip. This was listed as a main function in our project proposal, but during coding was given its own function.

   def list_files(directory):
   - The list_files function lists all files in the directory that was previously chosen. This was also listed in our project proposal as "adds the files in the directory to list".

   def create_zip_filename(directory):
   - The create_zip_filename function uses the directory's name and creates the zip file with that name since the zip file needs a name first in order to be created. This was not in the original project proposal because we didn't know or realize yet that the file needs a name when being created. This was a problem Hans discovered during coding the project, which seemed silly, but was an easy fix.

   def name_zip_file():
   - The name_zip_file function asks the user to give the zip file a name. This was originally in our project proposal which was listed as "create zip filename".

   def zip_files(files, zip_filename):

- The zip_files function zips the files into the named zip file. This was also in our project proposal, which was listed as “zips the directory”.

def confirm_zip_creation(zip_filename):

- The confirm_zip_creation function confirms that the zip file was created. This was not originally in our project proposal, but was needed later on for testing the code.

def print_confirmation(zip_filename):

- The print_confirmation function prints a confirmation statement that the zip file was created. This function was also not originally in our project proposal, but was added for testing purposes.

def main():

- The main function does three main things. It calls on the functions previously listed, it uses an if statement if the zip file has a name and if not, it calls on create_zip_filename, and it has an if-else statement for the confirmation.

5. Explain the closed-box test cases you used to determine whether your code is working correctly. If not all your test cases worked, i.e., your code has some bugs, explain what isn't working and why you think it isn't.

   - The first test case "setUp" creates a test directory and test file inside it with text and attempts to create it.
   - The second test case "tearDown" cleans the test directory made above and removes it, checking to make sure it worked, and the path existed.
   - The third test case "test_directory_creation" checks if the directory contains a specific test file, maintaining that everything was zipped correctly.
   - The fourth test case "test_zip_file_creation" checks to see if a zip file was created even if nothing was input for name.
   - The fifth test case "test_zip_file_contents" checks that the zip file created contains the correct files before and after the zip file creation.
   - The sixth test case "test_custom_zip_filename" checks to see if the correct file name was made on the zip file.
   - The last test case "test_confirmation_message" checks to see if the confirmation message was printed correctly to the user.

Save your Word document as a **pdf** file and zip it together with your other project files which must be submitted before 11:59 pm, Monday, 12.9.24.