Software Development

Year 2

Group Assignment 20%

Based on https://www.youtube.com/watch?v=gCsQM0KNXhU

You are required to write a **C#** desktop application to help Mrs. McCave to manage her children. The desktop application should have a GUI front-end and help Mrs. McCave with the following family organizational matters.

Note: All Mrs. McCaves family details can be found in the mccaveFamily.txt file. The file contains the child's nicknames, date of birth and some comments about each child.

- 1. Upload data upload data from file.
- 2. Birthdays This option will display the children's names whom have a birthday falling in the next seven days it should display what age they will be on their next birthday and child's comments.
- 3. List children by age This should print a list of the children's nicknames ordered by age oldest first.
- 4. List children in alphabetical order This should print a list of the children's nicknames in alphabetical order.
- List any/all multiple births: nicknames of children who are part of a multiple birth. The program should state if they are twins, triplets quads etc.
- Add new child nickname, date of birth and comment should be saved for the new child. The new details should be save in the file and program data refreshed.

7. Name the next baby - An exciting algorithm that you come up with for Mrs. McCave's next baby name.

8. Calculate Mrs. McCave's children's allowance for the current month.

As per the rules set down by the Irish state see

http://www.citizensinformation.ie/en/social_welfare/social_welfare_p

ayments/social_welfare_payments_to_families_and_children/child_

benefit.html

9. Calculate Mrs. McCave's children's allowance for the year.

10. Planning school times: This will enable Mrs. McCave to do some

essential financial plaining. Mrs. McCave should be able to enter a

year and the program should produce the projected major

educational mile stones for her children.

These include

Preschool -. Primary school -Secondary School -Third Level -

Finished -

Note: Assume that all kids go to primary school if they are 5 in that

current September, any kids under 5 in that current year are deemed

to be preschoolers. Assume all children spend 8 years in primary

school and 6 years in secondary school and enter third level directly

after finishing secondary school and complete a four years in third

level.

11. Produce a dynamic info graphic of the McCave family. The info

graphic should convey as must information as possible about the

McCave family.

Due: the week of the 9th of April:

Documentation:

1. GUI designs

2. Test Plans.

3. Code.

4. Test Results.