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LBYCPEI

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I. Introduction

MoneyM8 is an application that manages and lists down the salaries and expenses of your employees in an efficient and clean way. It contains an understandable and easy-to-use interface that makes the workflow smooth and fast, a log-in and registration system for protection, an automatic and accurate government deductions on payrolls, a fully customizable settings and employee profiles, and an exportable payroll ledger. Regardless of whether the business is big or small, new or old, it is safe to assume that a business would hire employees to work for them. Managing your employees can be a daunting and time consuming task, that's why using an application like MoneyM8 to manage your employees' payroll would not only make it easy, but also make it efficient and quick. The goal of MoneyM8 is to make managers and business owners spend less of their time and energy on calculating and finalizing payrolls which could be used to improve and expand their businesses. Finding and fixing errors on calculations is fixed by MoneyM8's built in auto-calculate system for payrolls which also include an up-to-date government deduction.

II. Methodology

Major Milestones

Milestone 1: Saving Employee Data to CSV

In the context of our project, it is essential to establish an efficient mechanism for the retention and management of employee data. To achieve this objective, a dedicated CSV text file will be employed as a repository to store the comprehensive details pertaining to the employees. This approach ensures the systematic organization of pertinent information, including employee names, identification numbers, and employment specifics. By adhering to this structured and

standardized format, facilitated by the CSV file, the retrieval and manipulation of employee data can be performed seamlessly and effectively, fostering enhanced efficiency in our project's operations.

Milestone 2: Implement User Registration

The subsequent significant phase of our project entails the development of a user registration system, which facilitates the registration and establishment of new user accounts. The newly created accounts will be stored and consolidated within a text file, utilizing a comma-separated value (CSV) format. The implementation of the user registration system will be accomplished through the utilization of Java Graphics, ensuring harmonization with the overall program's design aesthetics.

Milestone 3: Create Login Page

Transitioning to the login page, the user will be prompted to enter both a username and a password. Subsequently, the program will undertake a verification process by referencing the CSV text file containing comprehensive account details, as previously elucidated in the second milestone. Initially, the program will compare the entered username with each line of the text file, aiming to identify a corresponding match. Upon a successful username match, the program will proceed to validate the inputted password against the password associated with the matched username. Accurate authentication will grant the user access to the application, while any discrepancies will result in denial of access.

Milestone 4: Employee Management

The implementation of robust functionality for the addition, update, and deletion of employee records is of paramount importance in the development of a comprehensive payroll system. It is imperative to meticulously capture indispensable details pertaining to each employee, such as their unique identification number, full name, residential address, and pertinent payment information. These critical pieces of information must be securely stored in either a database or a file system, ensuring the utmost confidentiality and integrity of employee data. By adhering to rigorous security measures, the system can effectively safeguard sensitive employee information, mitigating the risks associated with unauthorized access or data breaches.

Milestone 5: Design the Menu Interface

The design of the menu interface would be kept modern and professional in style while maintaining its functionality and cleanliness. We will be using Canva to design a lot of the assets for the menu such as the images and more.

Milestone 6: Testing and Quality Assurance

To ensure the reliability, accuracy, and adherence to quality standards in our Java-based payroll calculator project, we will incorporate comprehensive Testing and Quality Assurance (QA) processes. The testing phase will encompass various aspects, including functional testing, performance testing, and error handling evaluation. Functional testing will involve rigorous examination of the calculator's functionalities to verify accurate calculation of wages, deductions, and taxes. Performance testing will assess the system's response time and resource

utilization under different workloads, ensuring optimal performance. Additionally, error handling evaluation will focus on validating the calculator's ability to appropriately handle and report errors encountered during usage. Quality Assurance measures will be implemented throughout the project lifecycle, encompassing code reviews, adherence to coding standards, and the application of best practices. These efforts will ensure the robustness and reliability of the calculator, enabling us to deliver a high-quality product that meets the requirements and expectations of its intended users.

III. Project Description

INPUT

- User registration/Log in
- Number of Employees
- Employee Information
- Deductibles Chosen

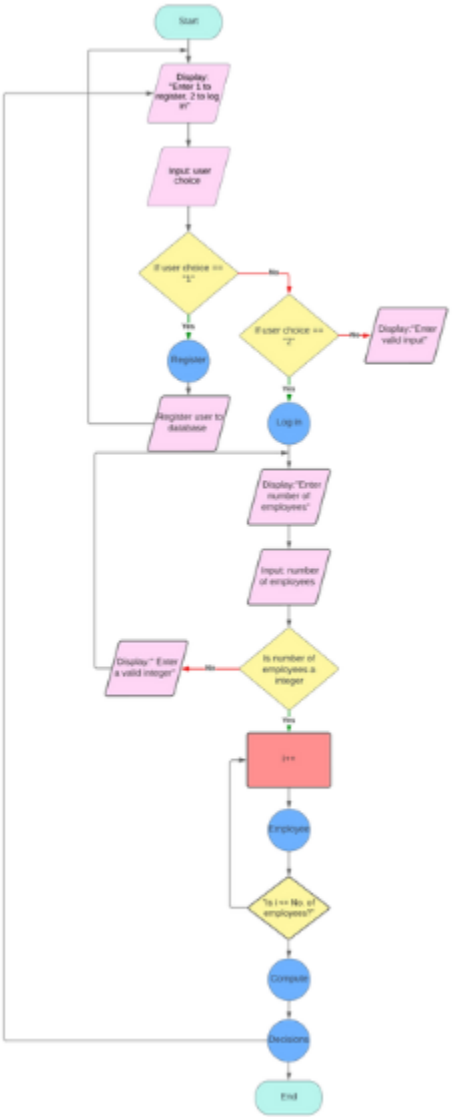
PROCESS

- The system will first ask the user if they have an existing account if not, they will create a new one.
- Next is the user will enter the employee information such as salary and dependencies and select which deductibles to include.
- The program will then compute the remaining salary of the employees and display them.
- Additionally, the program will ask if the user wants to save the data to an excel file.

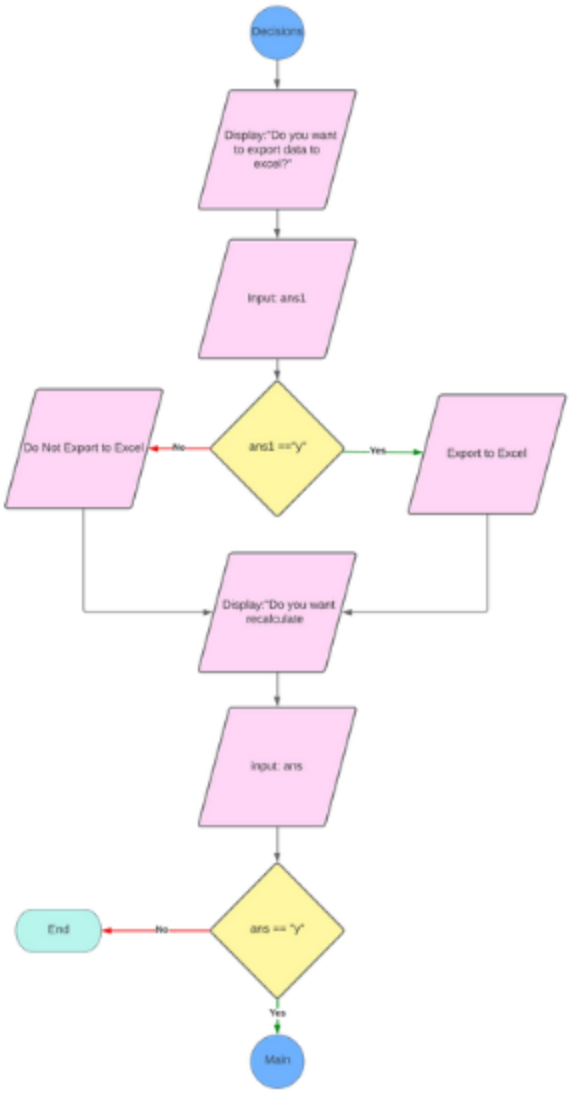
OUTPUT

- Salary of Employees
- CSV file used to load the employee salary with the deductibles.

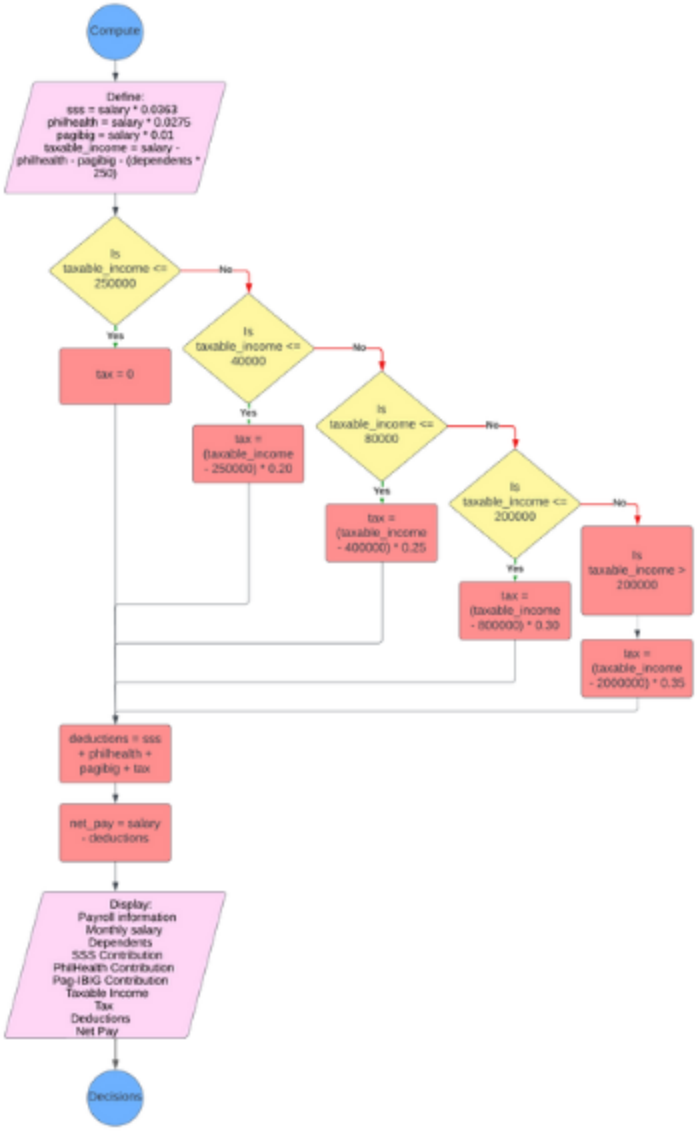
FLOWCHART

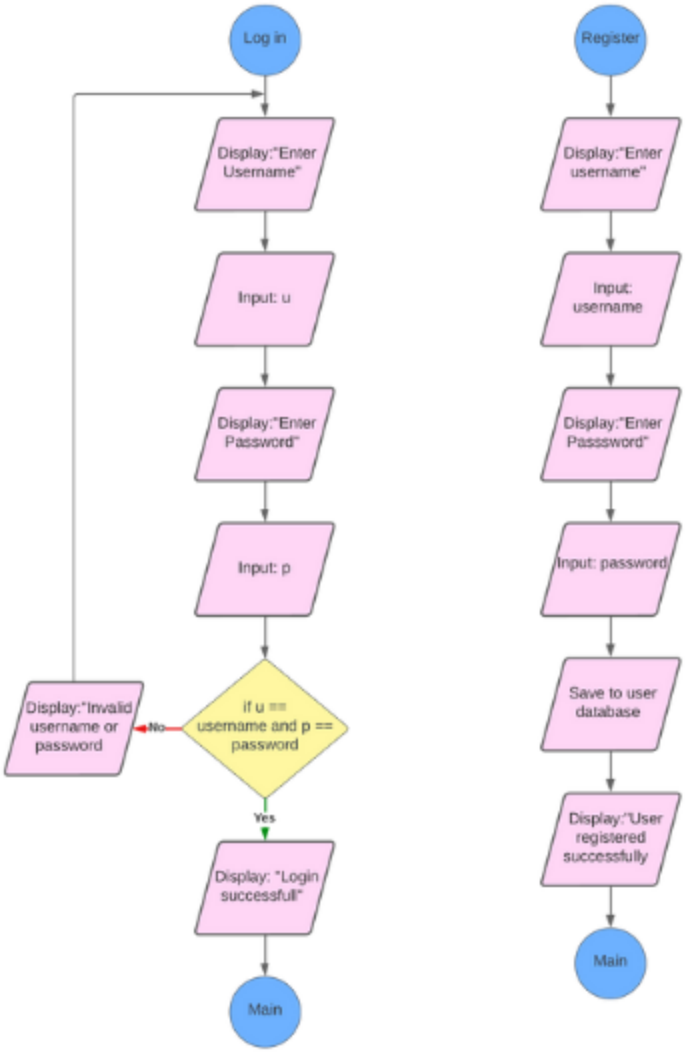



Employee
Display:"Enter employee name"
Input:name
check if name is similar to other names
If name is similar to other name
Yes
"Display: "Name already exist in database"
No
Generate user ID
Display:"Enter employee salary"
Input:salary
Is salary a float
No
Display:"Enter valid float
Yes
Display:"Number of dependents"
Input: dependents
Is dependents a integer
No
Display:"Enter valid integer"
Yes
Choose deductibles
login

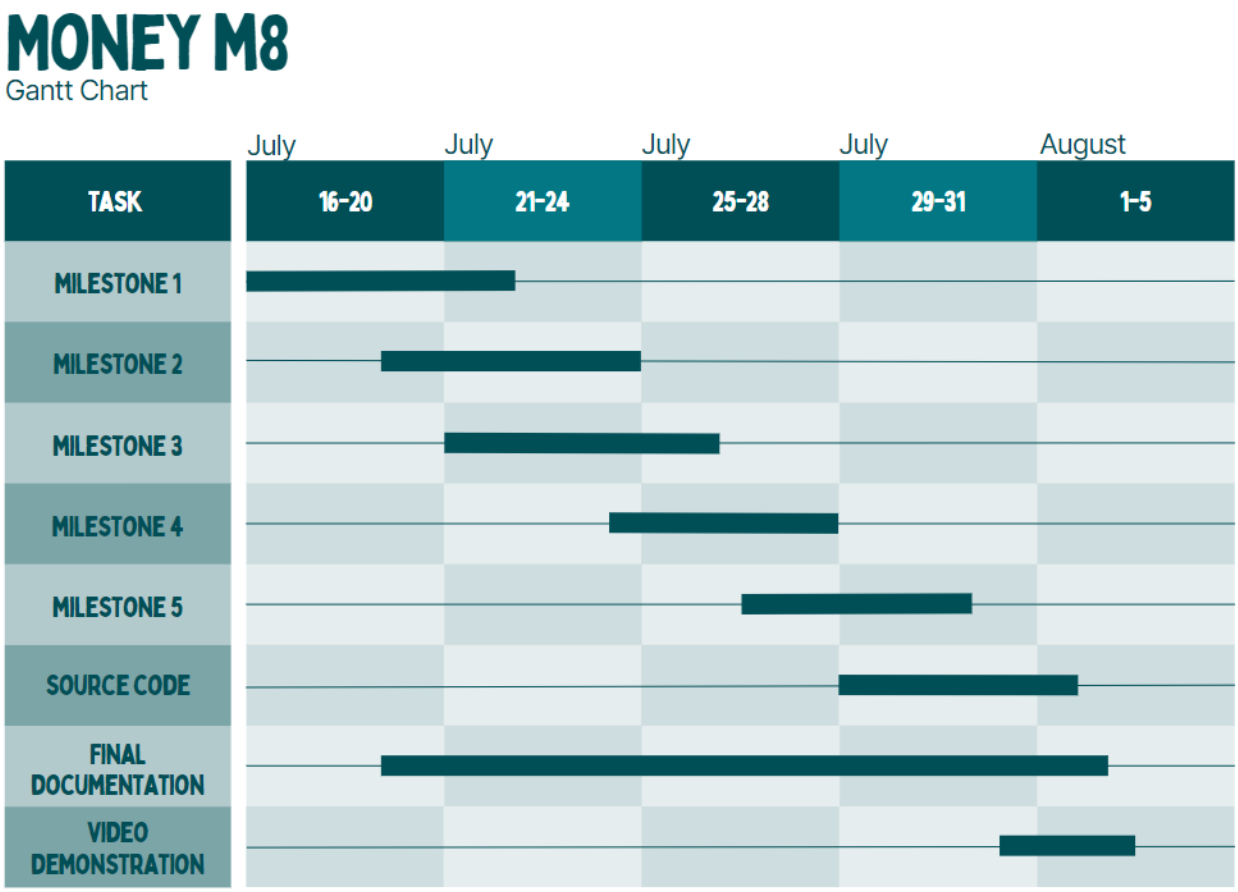

Decisions
Display:"Do you want to export data to excel?"
Input: ans1
ans1 =="y"
No
Do Not Export to Excel
Yes
Export to Excel
Display:"Do you want recalculate
Input: ans
ans == "y"
No
End
Yes
Main


Edit
Display:"Which user employee do you want to edit?"
Input: employee
Edit employee data
Mian


Compute
Define:
sss = salary * 0.0363
philhealth = salary * 0.0275
pagibig = salary * 0.01
taxable_income = salary - philhealth - pagibig - (dependents * 250)
Is taxable_income <= 250000
No
Yes
tax = 0
Is taxable_income <= 40000
No
Yes
tax = (taxable_income - 250000) * 0.20
Is taxable_income <= 80000
No
Yes
tax = (taxable_income - 400000) * 0.25
Is taxable_income <= 200000
No
Yes
tax = (taxable_income - 800000) * 0.30
Is taxable_income > 200000
tax = (taxable_income - 2000000) * 0.35
deductions = sss + philhealth + pagibig + tax
net_pay = salary - deductions
Display:
Payroll information
Monthly salary
Dependents
SSS Contribution
PhilHealth Contribution
Pag-IBIG Contribution
Taxable Income
Tax
Deductions
Net Pay
Decisions


Log in
Display:"Enter Username"
Input: u
Display:"Enter Password"
Input: p
if u == username and p == password
No
Display:"Invalid username or password
Yes
Display: "Login successfull"
Main
Register
Display:"Enter username"
Input: username
Display:"Enter Passsword"
Input: password
Save to user database
Display:"User registered successfully
Main

IV. Deliverables



Along with the program, it also includes a user manual, which dictates on how to use the program, its features, and the menu interface.

V. Evaluation

To evaluate the usability and gather user feedback for our collaborative project, the Java-based payroll calculator, we have chosen to utilize the System Usability Scale (SUS) as a quantitative evaluation method. The SUS offers a standardized approach to measure the perceived usability of software applications. As a team, we will engage a diverse group of individuals who have interacted with the calculator to provide their evaluation. Participants will be requested to complete the SUS questionnaire, comprising a set of statements specifically

designed to assess factors such as ease of use, learnability, efficiency, and overall user satisfaction. By collecting and analyzing the responses, we will derive numerical scores that will serve as objective measures of the system's usability. This collective evaluation will enable us to identify areas for improvement, make informed decisions regarding the project's design and functionality, and ensure a user-centric approach to its development.

VI. Conclusion

MoneyM8 is an automated payroll system designed to provide users with a reliable and convenient method for computing employee salaries after tax deductions, specifically targeting taxes such as Pag-Ibig and SSS (Social Security System) contributions. The primary objective of MoneyM8 is to assist users in effectively managing their finances by offering an accurate representation of their net income after taxes and deductibles have been accounted for. By adopting this system, organizations can ensure the efficiency and accuracy of their payroll processes, thereby reducing errors commonly associated with manual calculations. Additionally, MoneyM8 aims to enhance employee satisfaction by providing a user-friendly interface that simplifies the input of relevant employee information and facilitates streamlined payroll computations. Overall, this proposed automated payroll system not only minimizes errors but also supports efficient tax calculation, contributing to improved financial planning and employee contentment within the organization.

VII. References

Department of Health and Human Services. (n.d.). *System Usability Scale (SUS) | Usability.gov*. https://www.usability.gov/how-to-and-tools/methods/system-usability-scale.html