TASK 1B

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310 Application Development

Purpose

The purpose of this application is to record expenses incurred by the company's sales representatives so that they can reclaim them. The company have asked for an application that can have the data recorded for each purchase of a certain goods or service. The application will help the company keep track of expenses and make it easier for the company to keep necessary data. Many different points have been asked to be included in this application these include: date incurred, type of expense, name of the sale of the good/service, invoice number provided by the seller, the net amount of the expense, the VAT amount of the expense, the gross amount for the expense and the comments describing the expense. The application must be include all of these points to be fit for purpose and to reach the criteria that needs to be met.

Features

My application is going to have many a features for it to reach the criteria and meet the necessary requirements that is being asked. Firstly when opened you will be greeted by a page, this page will have a log in screen where the user must type in their credentials to enter the application. Once the user has typed in their credentials the application will open the second page. The second page will mostly consist of input boxes, in the form of text boxes, date time pickers etc., where the user can fill out all the relevant information for the VAT to be calculated. I will also hopefully add a section where the user can add any relevant comments about their expenses this is so they can let the company know any special requirements. Once all the relevant information is complete there will be buttons available to the user that will should show an overall summary of the details of expenses. Once this button is pressed the application will take you to the final page where it should show you a summary of what has been entered.

How it is used

The application will require a few common hardware and software products, however it will need no specialist hardware or software. You will need a computer with an appropriate operating system, you will also need a mouse, keyboard and obviously a monitor to use this app. The app will be a desktop application and will need to be clicked on to start it up. Once opened the user must navigate through the app using their mouse and use their keyboard to type in any relevant information that they need to. The app is simple to use and only requires very basic hardware and software.

Proposed development method and life-cycle model

I will be developing this application using object orientated programming (OOP). After looking at different programming paradigms I felt that using OOP will be most appropriate for my application. OOP is a programming paradigm based on the concept of objects, which will contain data. The data is in the form of fields and the code is kept simpler than other paradigms. The code is set in a form of procedures, this is often known as methods. In comparison to other programming methods, OOP will keep my code organised and easy to read.

After looking through many different life cycle models I feel that the best one to use for this project is the waterfall model. Due to its five step method, this makes the waterfall model a simple SDLC and very effective for small projects. The steps consist of: requirements, design, implementation, verification and maintenance. These steps are what I will follow during the process of creating my application. Making the application step by step is very useful for a small project like this. It allows for easy creation as the steps can be followed and the application can be created effectively.

However, a negative to this is that you can't go back on yourself, so if you get to the implementation step you can't go back to the requirements step.

Test Plan

Object/Button	Test	Expected Result	Actual Result
Username input box	Type into the box	Will allow user to type into the box	
Password input box	Type into the box	Will allow user to type into the box	
Clear button	Click the button	Will clear all the credentials	
Login button	Click the button	Will log users in	
Date time picker	Click the date time picker and pick a date	Will allow user to pick a date	
Expense Dropdown	Click the dropdown	Allow the user to choose an expense	
Supplier name input box	Type into the box	Allow the user to type into the box	
Invoice number input box	Type into the box	Allow the user to type into the box	
Invoice value input box	Type into the box	Allow the user to type into the box	
VAT status of invoice dropdown	Click dropdown	Allow the user to select an option	
VAT button	Click button	Calculates VAT	
Comment input box	Type into the comments box	Allow the user to type into the comments	
Clear expense button	Click button	Clear all inputted data	
Add expense to list button	Click the button	Adds all expense to the list	
Show summary button	Click the button	Takes user to a summary of the expense	