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Programming 2A POE User Manual

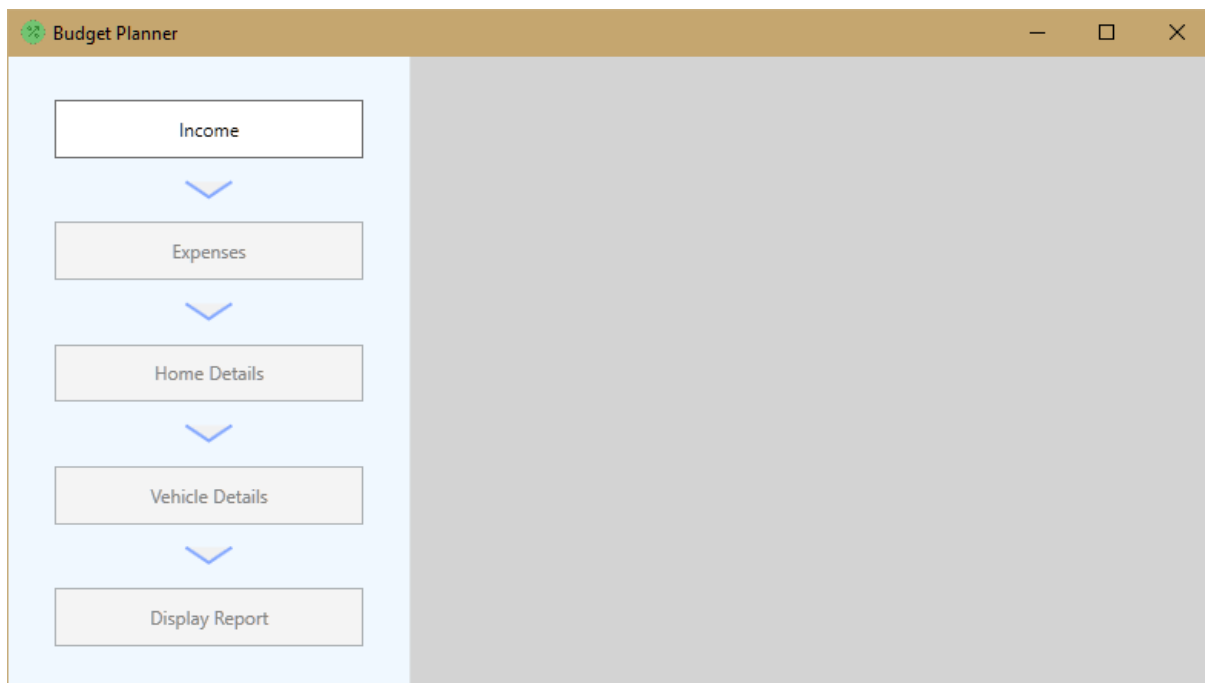
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BudgetPlannerWPF

This WPF application helps the user calculate and plan their budget and savings. It consists of a single screen containing multiple pages for each aspect of the program process. User friendliness has been a focus of this app, through features such as automatically moving between pages, highlighting finished or incorrect data, highlighting the selected page, the ability to update your data, and dynamic adjustment for savings values.

MainWindow



This screen shows on application start-up. This is the only window in the application, the rest of the screens are pages that will appear in the grey area. On the left are buttons with which you can display the pages to input your data. These unlock as you progress down the list. They also turn green or red depending on if the entered data is valid, and the currently selected button will have a blue outline.

IncomePage

The screenshot shows a web application window titled "Budget Planner". On the left is a light blue sidebar with a vertical menu of buttons: "Income" (highlighted with a blue border), "Expenses", "Home Details", "Vehicle Details", and "Display Report". Each button is connected to the next by a blue downward-pointing chevron. The main content area has a grey background and contains two input fields: "Gross Monthly Income:" with the value "50000" and "Tax Deduction:" with the value "5000". Below these fields is a "Submit" button.

On this page, you enter your gross monthly income and tax deduction. Clicking submit will check the data before moving to the next page.

ExpensePage

Budget Planner

Income

Expenses

Home Details

Vehicle Details

Display Report

Groceries: 1250

Water and Lights: 1100

Travel: 1500

Phone: 750.50

Other: 2345.56

Submit

On this page, the general expenses are entered. When submit is clicked, the user is asked if they would like to rent or buy a house:

Budget Planner

Income

Expenses

Home Details

Vehicle Details

Display Report

Groceries: 1250

Water and Lights: 1100

Travel:

Phone:

Other: 2345.56

Submit

Home finance type

Will you be renting your house?
(Select No for buying with a loan)

Yes No

RentPage

Budget Planner

Income

Expenses

Home Details

Vehicle Details

Display Report

Monthly Rent: 5000

Submit

Here the monthly rent is entered.

LoanPage

Budget Planner

Income

Expenses

Home Details

Vehicle Details

Display Report

Property Purchase Price: 800000

Property Deposit: 80000

Interest Rate on Loan (%): 7.5

Repay Months (240-360): 265

Submit

Alternatively, if you selected No, the loan page will be shown. After clicking submit on either the loan or rent pages, you will be asked if you want to buy a vehicle or not.

Budget Planner

Income

Expenses

Home Details

Vehicle Details

Display Report

Property Purchase Price: 800000

Property Deposit: 80000

Interest Rate on Loan (%): 7.5

Repay Months (240-360): 265

Submit

Buy Vehicle

Will you be buying a vehicle?

Yes No

VehiclePage

Budget Planner

Income

Expenses

Home Details

Vehicle Details

Display Report

Make and Model: Nissan Almera

Price: 60000

Deposit: 6000

Interest Rate (%): 8

Insurance Premium: 3000

Submit

If you selected yes to buy a vehicle, this page will be shown, otherwise the program will skip to the report page and this button will remain disabled. If you change your mind, you can go back and click submit on a home details page again and choose yes when prompted.

ReportPage

The screenshot shows the 'Budget Planner' application window. On the left is a sidebar with five green buttons: 'Income', 'Expenses', 'Home Details', 'Vehicle Details', and 'Display Report'. The 'Expenses' button is selected. The main area is titled 'List of expenses' and contains a list of expenses: Home Loan Repayments: R7,200.00, Vehicle Repayments: R4,260.00, Other: R2,345.56, Travel: R1,500.00, Groceries: R1,250.00, Water & Lights: R1,100.00, and Phone: R750.50. Below this is a section titled 'Save for: Honours Degree'. It includes a 'Reason' dropdown set to 'Honours Degree', a 'Target' input field with '100000', a '5 Years' slider, an 'Interest (6.7 % pa)' slider, and 'Compounded Monthly' text. The 'Available Monthly Money' is displayed as R26,593.94 in green, and the 'Monthly Savings Required' is R1407.66.

Category	Amount
Home Loan Repayments	R7,200.00
Vehicle Repayments	R4,260.00
Other	R2,345.56
Travel	R1,500.00
Groceries	R1,250.00
Water & Lights	R1,100.00
Phone	R750.50

Save for: Honours Degree

Reason: Honours Degree

Target: 100000

5 Years

Interest (6.7 % pa)

Compounded Monthly

Available Monthly Money: R26,593.94

Monthly Savings Required: R1407.66

On the final report page, you can see the list of expenses, and a savings calculator at the bottom. Changing the values here will dynamically update the page to display how much you will need to save each month. If this value is lower than your available monthly money, the monthly money value will be green. Otherwise, it will turn red, as shown below:

This screenshot shows the same 'Budget Planner' application window, but with updated values. The 'List of expenses' remains the same. In the 'Save for: Honours Degree' section, the 'Target' input field now contains '678940'. The 'Interest' slider is now set to '4.0 % pa'. The 'Available Monthly Money' is still R26,593.94, but it is now displayed in red. The 'Monthly Savings Required' is now R27219.78.

Category	Amount
Home Loan Repayments	R7,200.00
Vehicle Repayments	R4,260.00
Other	R2,345.56
Travel	R1,500.00
Groceries	R1,250.00
Water & Lights	R1,100.00
Phone	R750.50

Save for: Honours Degree

Reason: Honours Degree

Target: 678940

2 Years

Interest (4.0 % pa)

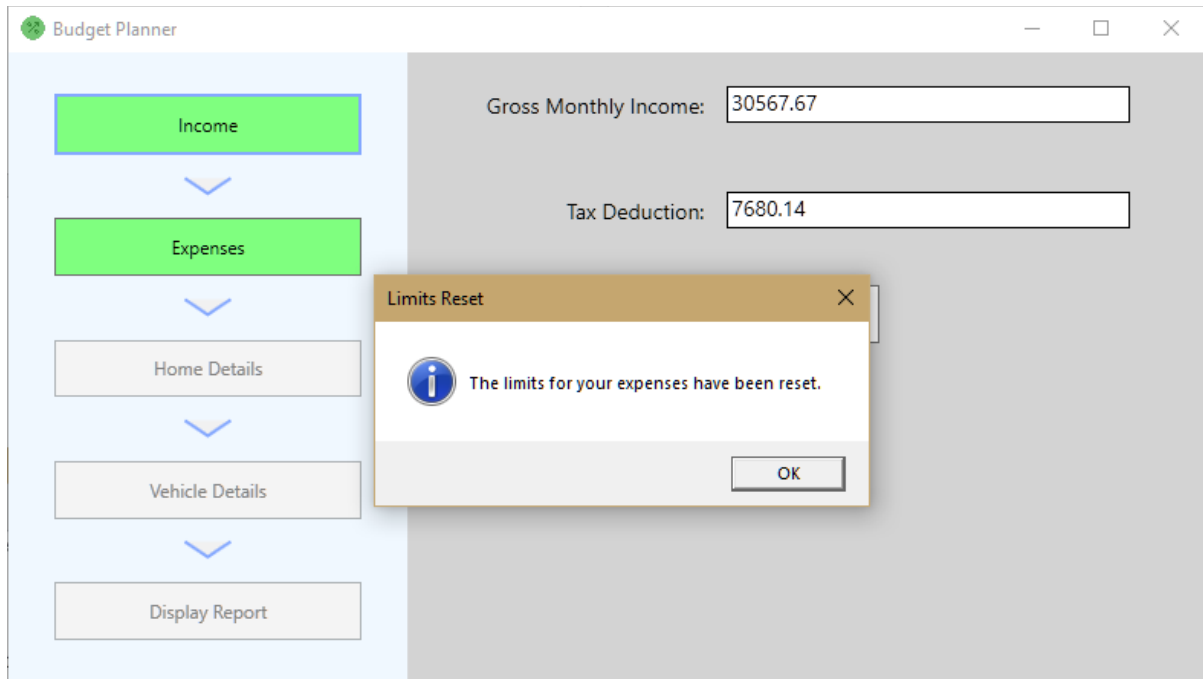
Compounded Monthly

Available Monthly Money: R26,593.94

Monthly Savings Required: R27219.78

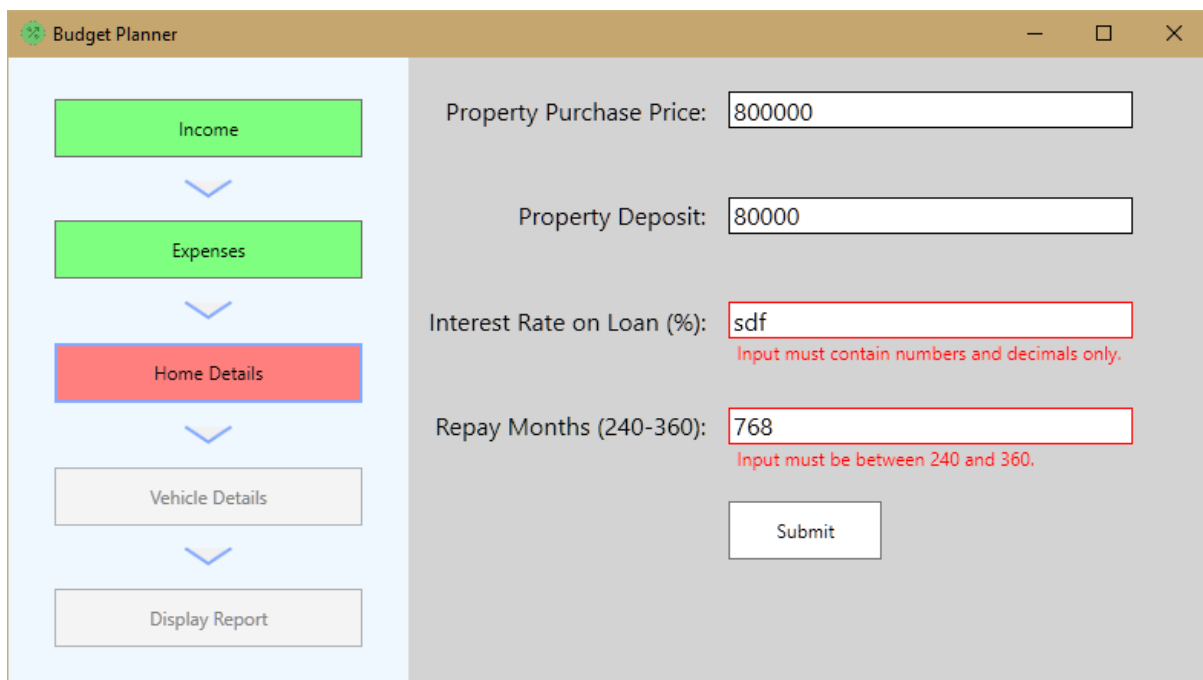
Other Features

Various other features include notifying you when your expenses are greater than 75% of your income, warning you with visuals if you enter incorrect data, and the ability to update or reset your data without reopening the application, as shown below:



The screenshot shows the 'Budget Planner' application window. On the left is a sidebar with five buttons: 'Income', 'Expenses', 'Home Details', 'Vehicle Details', and 'Display Report'. The 'Income' and 'Expenses' buttons are green, while the others are light gray. On the right, there are two input fields: 'Gross Monthly Income' with the value '30567.67' and 'Tax Deduction' with the value '7680.14'. A modal dialog box titled 'Limits Reset' is open in the center. It contains an information icon and the text 'The limits for your expenses have been reset.' with an 'OK' button at the bottom right.

Starting from the beginning again.



The screenshot shows the 'Budget Planner' application window. The sidebar is the same as in the previous image, but 'Home Details' is now highlighted in red. The main area contains four input fields: 'Property Purchase Price' (800000), 'Property Deposit' (80000), 'Interest Rate on Loan (%)' (sdf), and 'Repay Months (240-360)' (768). The 'Interest Rate' and 'Repay Months' fields have red borders and red error messages below them: 'Input must contain numbers and decimals only.' and 'Input must be between 240 and 360.' respectively. A 'Submit' button is located at the bottom right.

Invalid data entry.

Budget Planner

Income

Expenses

Property Purchase Price: 15000000

Property Deposit: 2000


Interest Rate on Loan (%): 12.4

40-360): 240

Submit

Display Report

WARNING

 Your expenses are now greater than 75% of your income.

OK

The warning shown when your expenses grow too large.