

# Person Budget Planner

## User Manual

by Joshua Ochayon

20117048



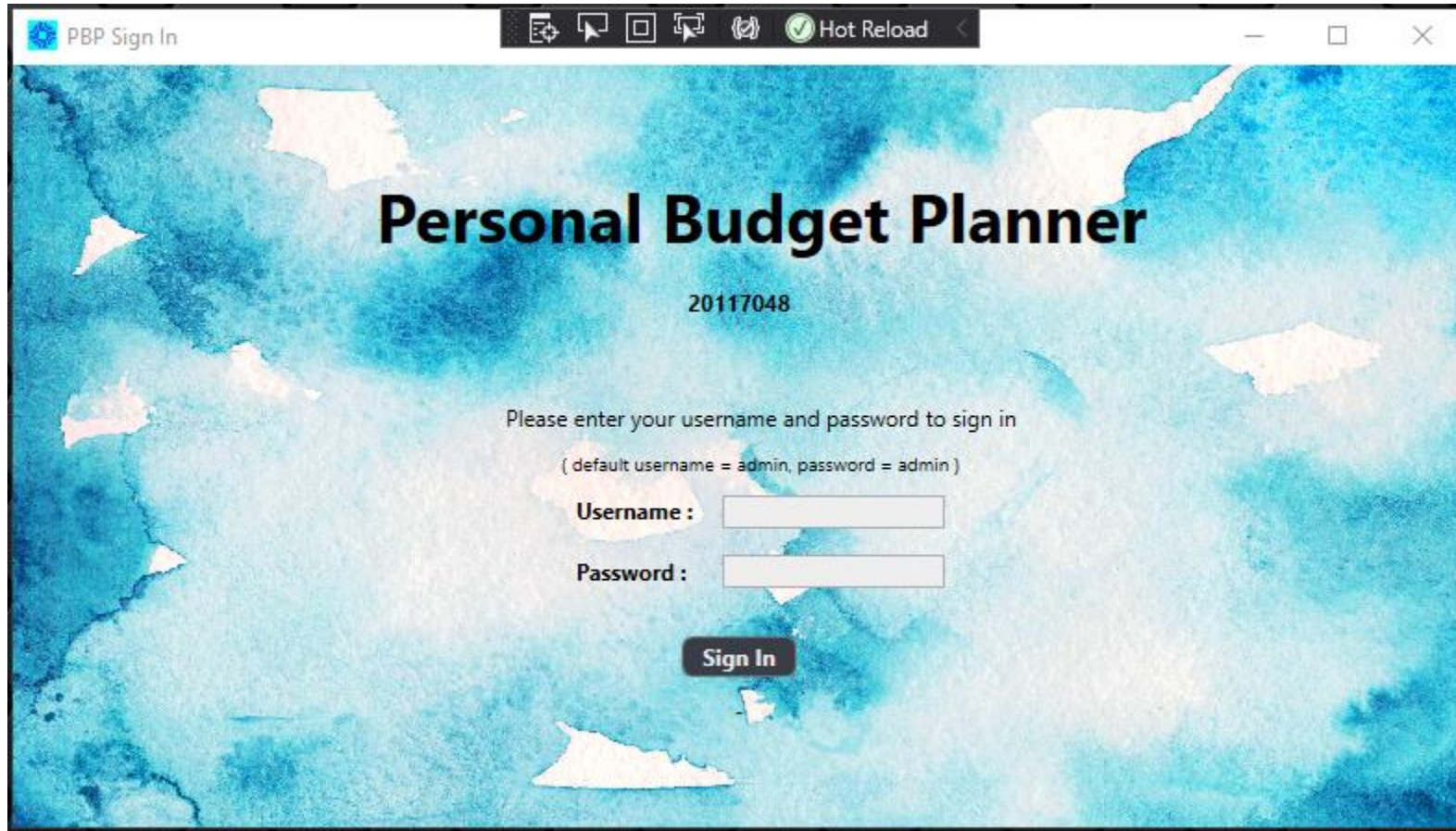
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# Application Overview

- The Person Budget Planner allows the user to input their monthly gross income as well as their estimates tax and other expenses.
- The user will then be given the option to choose a type of accommodation (renting / buying) and will be prompted for values in respect of their input.
- The user will also be given the option to include buying a vehicle in their budget planner and will be prompted for values in respect of their input. (NOTE: loan repayment based on 5 year repayment period).
- The user will be given the option to create save up for something by a selected date. The user will be asked for a reason, amount, they will be given the option to select a date, the program will calculate the rounded amount of months. The user will also input their saving interest rate.
- A report will then be displayed to user showing their expenses arranged in descending order and will alert then if their expenses exceed 75% of their gross income as well as should the monthly home loan repayment exceed 1/3 of their gross income.
- A graph will be generated and displayed showing the users monthly income, total expenses and available balance over a 120 month (10 year) period.
- The user can then choose to save the report which will create the directory in the users device's documents folder called "20117048 - POE Final" and save the report under the name of their choice as a text file.
- This user can then load and/or edit this report at a later stage, the combo box will automatically search for saved reports on their device.

# Sign in



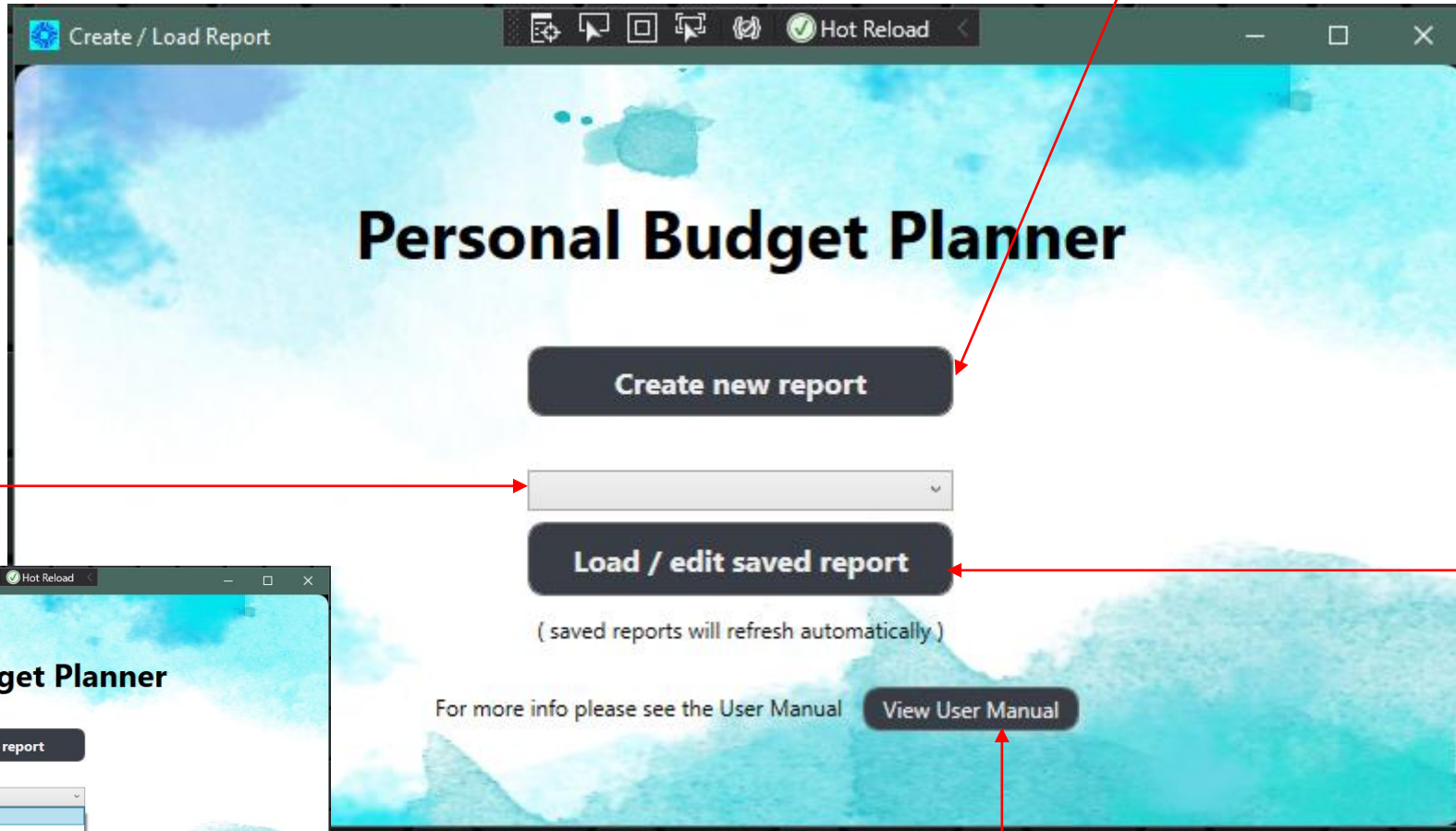
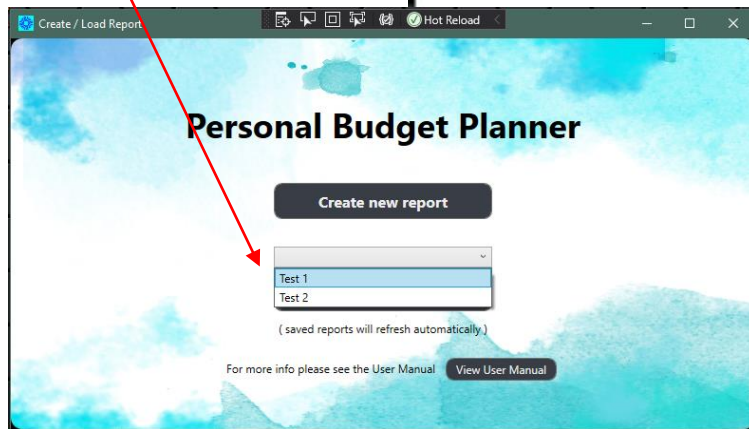
Upon running the app you will be initially prompted with the PBP sign in page, enter the default values (**username = admin / password = admin**) to continue.

Any invalid inputs will result in an error message and the fields being cleared.

# Create / Load

Click here to create a new report

If there are any saved reports on the users device they will load automatically and fill the combo box

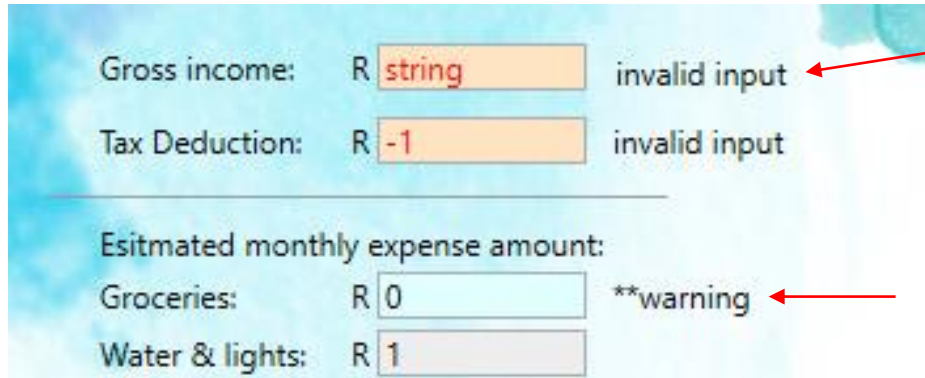


Click here to load a saved report to view or to edit

Click here to launch default browser and see the User Manual on GitHub

# Budget (input errors & warnings)

When inputting the numeric amounts, you will be given feedback based on if your input is valid



The screenshot shows a budget input form with the following fields and feedback:

Field	Input	Feedback
Gross income:	R string	invalid input
Tax Deduction:	R -1	invalid input
Estimated monthly expense amount:		
Groceries:	R 0	**warning
Water & lights:	R 1	

Red arrows point from the 'Errors' and 'Warnings' text blocks to the 'string' and '0' inputs respectively.

## Errors:

The program will try parse the input, if the input is invalid the colours will change and the warning message will appear

## Warnings:

The user will be able to enter 0 for certain inputs in which it could be a real possibility, this will result in a warning message and the textbox going blue, however the report can still be created

Validated inputs will reset the colours and error messages

Any errors (not warnings) or empty fields will not allow the user to continue and create the report



# New Budget

Fill in the various fields with their respective monthly amounts

## Important Notes:

- Ensure to only enter the actual numerical amount and do not enter the currency symbol (i.e. 1000 not R1000)
- Use a comma ( , ) to represent a decimal point (i.e. 1000,00 not 1000.00)

Create new report

## Personal Budget Planner

Gross income: R  -

Tax Deduction: R  -

Estimated monthly expense amount:

Groceries: R  -

Water & lights: R  -

Travel costs: R  -

Cell & Telephone: R  -

Other expenses: R  -

Purchase a vehicle: ☐ Yes

Accommodation selection:

☐ Renting ☐ Buying

Would you like to save up for something: ☐ Yes

Create budget report

Close

# New Budget (Accommodation)

It is required that you choose a type of accommodation (the program will not let you proceed otherwise). The radio buttons are grouped so if you select one the other will deselect

Choosing one will also reset all the other options fields and error/warning messages

The diagram illustrates the accommodation selection interface in two states: **Renting** and **Buying**. Red arrows indicate the flow and dependencies between the two states.

**Renting State:**

- Accommodation selection: ☒ Renting ☐ Buying
- Renting**
- Monthly rental amount: R  -

**Buying State:**

- Accommodation selection: ☐ Renting ☒ Buying
- Buying**
- Purchase Price: R  10000
- Total deposit: R  100
- Interest Rate %:  10
- Repayment Months: ☐ 240 (20 years) ☒ 360 (30 years)

If buying is selected the app will calculate the monthly home loan repayment amount

The month radio buttons are also grouped



# New Budget (Buy Vehicle)

You can also choose to purchase a vehicle and calculate the monthly vehicle loan repayment amount

Unselecting the checkbox  
will reset all respective fields

Purchase a vehicle: ☒ Yes

**Vehicle Purchase**

Make:	Lamborghini
Model:	Aventador SV
Purchase price:	R 1000000,00
Total deposit:	R 50000
Interest rate %:	10
Estimated insurance premium:	R 2500

You can enter numeric values  
with or without the decimal  
points

# New Budget (Save Up Goal)

You can choose if you would like to include a savings goal in your budget report, the program will calculate how much you need to save every month

Unselecting the checkbox  
will reset all respective fields

Would you like to save up for something: ☒ Yes

## Save Up

Reason for saving:

Holiday to Brazil

Amount to save:

R 40000

Target date:

2022/03/25

15

Interest rate % :

10

Rounded months :

9

You can choose the date which you would like to save up by and the program will calculate the rounded amount of months you have to save. This value will displayed at the bottom.

Would you like to save up for something: ☒ Yes

## Save Up

Reason for saving:

Holiday to Brazil

Amount to save:

R 40000

Target date:

Select a date 15

Interest rate % :

Rounded months :

June 2021						
S	M	T	W	T	F	S
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	1	2	3
4	5	6	7	8	9	10

report

# New Budget (Create Report)

Once all values have been entered, click this button to proceed and create the budget report

The program will only proceed should all inputs be filled in and valid

Or click here to close this window and re-open the New / Load window

Budget Details

## Personal Budget Planner

Gross income: R 10000000  
Tax Deduction: R 1000

Estimated monthly expense amount:  
Groceries: R 20  
Water & lights: R 30  
Travel costs: R 40  
Cell & Telephone: R 50  
Other expenses: R 60

Purchase a vehicle: ☒ Yes

### Vehicle Purchase

Make: Lamborghini  
Model: Aventador SV  
Purchase price: R 1000000  
Total deposit: R 50000  
Interest rate %: 10  
Estimated insurance premium: R 2500

Accommodation selection:  
☐ Renting ☒ Buying

### Buying

Purchase Price: R 1000  
Total deposit: R 100  
Interest Rate %: 10  
Repayment Months: ☐ 240 (20 years) ☒ 360 (30 years)

Would you like to save up for something: ☒ Yes

### Save Up

Reason for saving: Holiday to Brazil  
Amount to save: R 40000  
Target date: 2022/03/25  
Interest rate %: 10  
Rounded months: 9

Create budget report  
Close



# New Budget (Create Report Error)

Any errors or missing fields will produce this error message and will prevent you from proceeding

The screenshot shows a web form for creating a budget report. An error message box is overlaid on the form, indicating that some inputs are invalid. The form includes fields for various expenses, accommodation selection, purchase price, total deposit, interest rate, repayment months, amount to save, target date, and rounded months. A red arrow points from the text on the left to the error message box.

**Error**

Invalid inputs, please make sure all fields are filled in correctly and try again

OK

Cell & Telephone: R 50

Other expenses: R 60

Interest rate %: 10

R 2500

Accommodation selection:

☐ Renting ☒ Buying

**Buying**

Purchase Price: R  invalid input

Total deposit: R 100

Interest Rate %: 10

Repayment Months: ☐ 240 (20 years) ☒ 360 (30 years)

Amount to save: R 40000

Target date: 2022/03/25 15

Interest rate %: 10

Rounded months: 9

Something: ☒ Yes

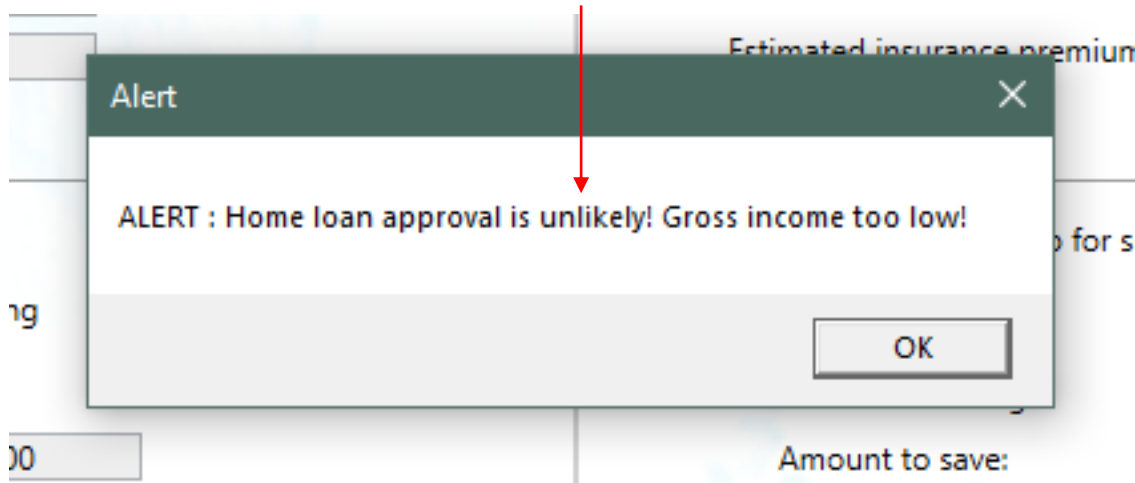
Holiday to Brazil

Create budget report

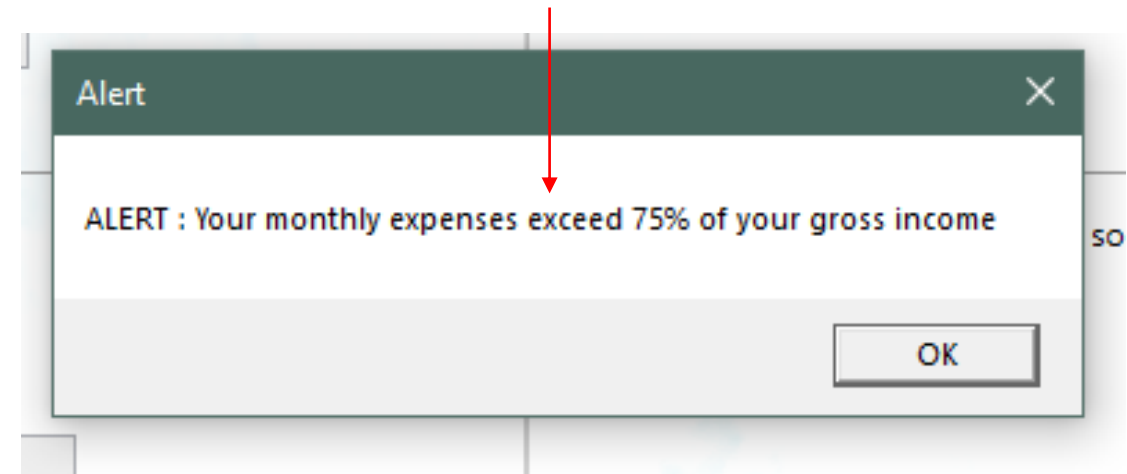
Close

# New Budget (Alerts)

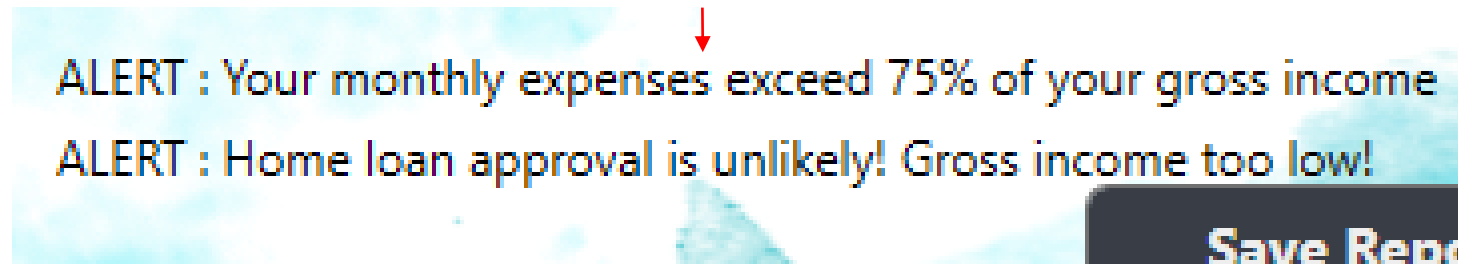
If buying a property is selected, the program will alert you should the monthly home loan repayment be more than 1/3 of your gross income



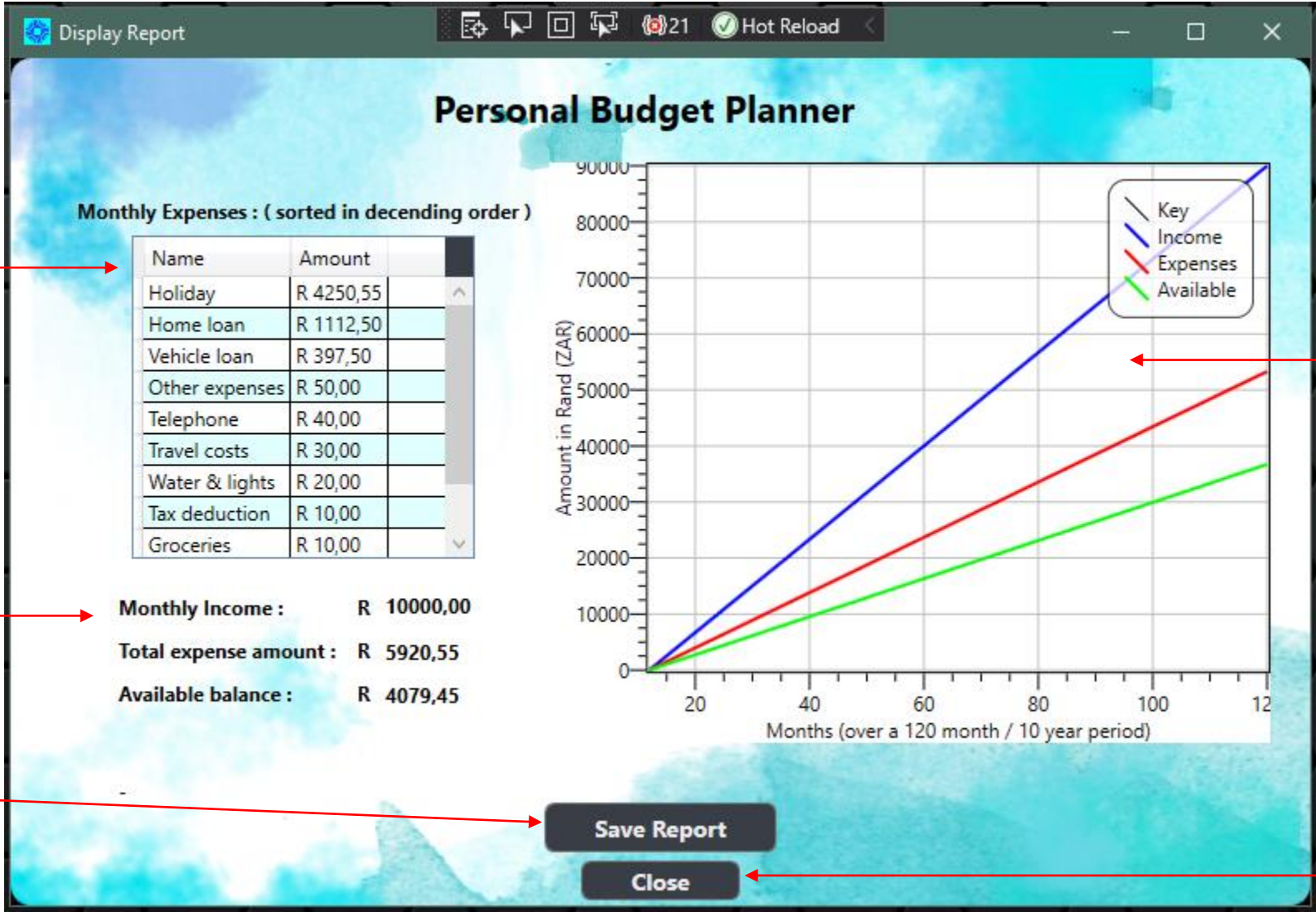
The program will also alert you should the monthly expense total exceed 75% of your monthly gross income



These alerts will also be displayed at the bottom of the Show Report window



# Budget Report



Expenses  
displayed in  
descending order

Monthly income,  
expense total  
and available  
balance  
displayed

Click here to  
close save report

Monthly income,  
expense total and  
available balance  
displayed as a graph  
over 120 months /  
10 years

Click here to close  
report and re-open  
the New / Load  
window

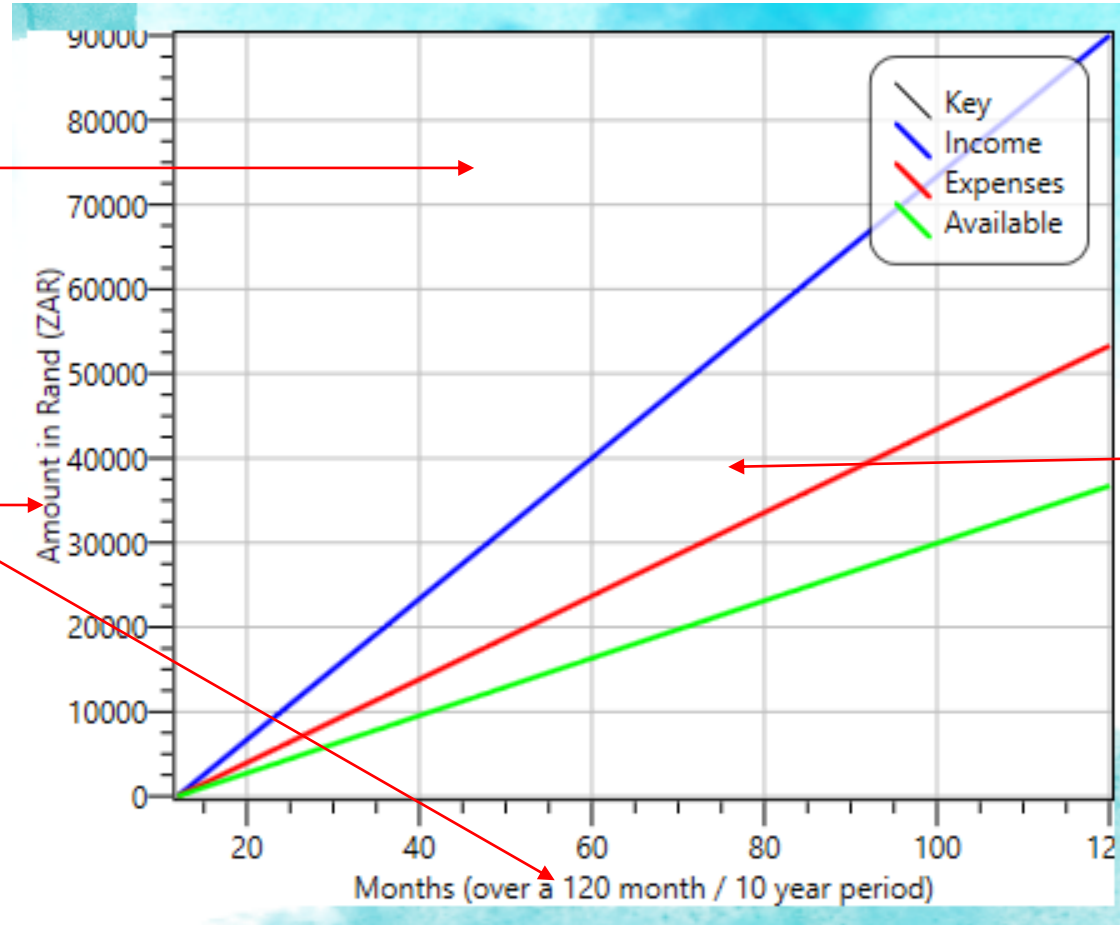


# Budget Report (Graph)

There is quite a bit of control over the graph

You can zoom in and out by hovering your mouse here and scrolling

You can also only zoom in on one axis by hovering over the label then scrolling



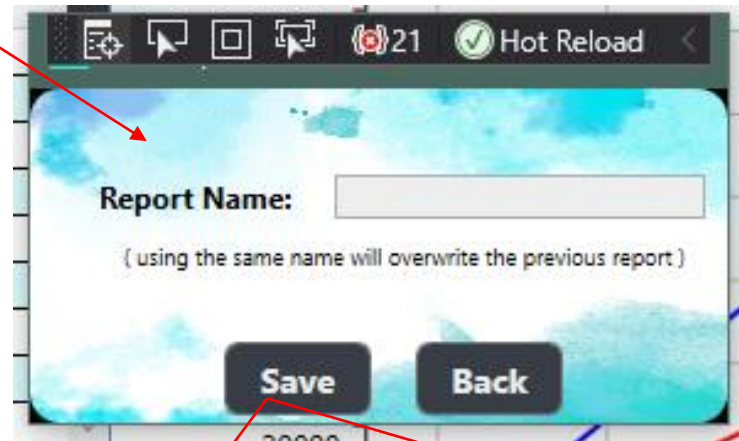
You can pan by clicking and holding and dragging in the direction you desire

# Budget Report (Saving)

Saving the report will create a directory in your documents folder called “20117048 – POE Final”. The name given will be the text file name you enter + “ – Budget Summary”, the report will be saved in this directory as a .txt file

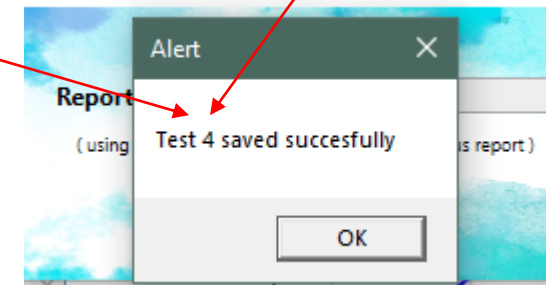
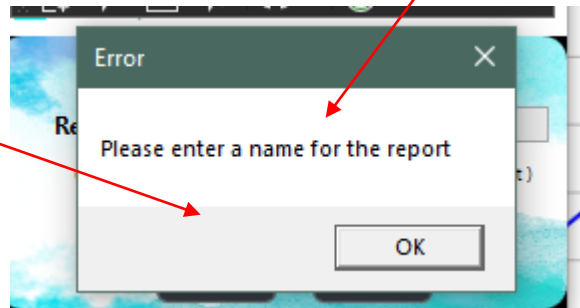
Once you click save this window will pop up requesting a name for the report

If you enter the same name as a previous report it will overwrite the previous one



Should the save be successful you will be notified with this message containing the report name

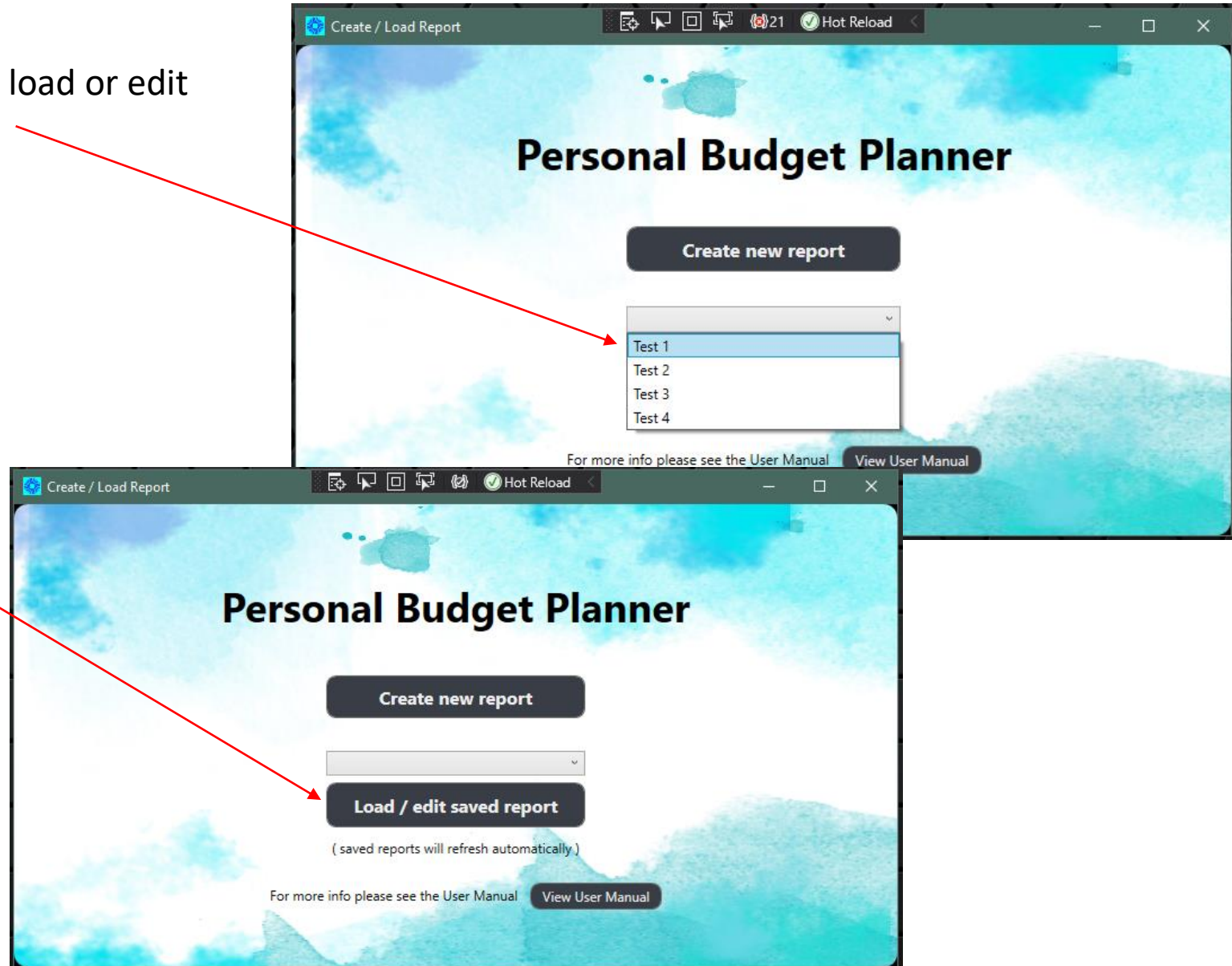
Leaving the name field empty will result in this error message



# Load / Edit Budget

Select the budget you wish to load or edit

Then click this button to load it





# Load / Edit Budget

The program will read the saved text file and pull all relevant data into their respective fields

To view the same report simple re-click the create budget report button again to regenerate the same report

Alternatively, edit whichever fields you desire and then create the new report

The screenshot shows a web application titled "Personal Budget Planner" within a window labeled "Budget Details". The interface is divided into four main sections for data entry:

- Income and Taxes:** Includes fields for "Gross income" (R 10000,00) and "Tax Deduction" (R 10,00).
- Estimated monthly expense amount:** A list of categories with input fields: Groceries (R 10,00), Water & lights (R 20,00), Travel costs (R 30,00), Cell & Telephone (R 40,00), and Other expenses (R 50,00).
- Vehicle Purchase:** Includes a checkbox for "Purchase a vehicle" (checked), and fields for "Make" (Lamborghini), "Model" (Aventador SV), "Purchase price" (R 10000,00), "Total deposit" (R 100,00), "Interest rate %" (10), and "Estimated insurance premium" (R 150,00).
- Accommodation selection:** Radio buttons for "Renting" and "Buying" (selected). Under "Buying", there are fields for "Purchase Price" (R 100000,00), "Total deposit" (R 11000,00), "Interest Rate %" (10), and "Repayment Months" (selected: 240 (20 years), unselected: 360 (30 years)).
- Save Up:** Includes a checkbox for "Would you like to save up for something?" (checked), and fields for "Reason for saving" (Holiday), "Amount to save" (R 40000,00), "Target date" (2022/03/25), "Interest rate %" (10), and "Rounded months" (9).

At the bottom center, there are two buttons: "Create budget report" and "Close".





# End

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