

PERSONAL BUDGETING APPLICATION USER MANUAL

Personal Monthly Budget Planner

Income:

Please enter the following details
(Rands for Gross Monthly Income field and
% for Tax Deduction field.)

Gross Monthly Income:

Tax Deduction:

General Expenses:

Please enter your estimated
monthly expense below(In Rands)
(If the field does not apply to you,
please enter a 0.)

Groceries:

Utilities:

Travel:

Communication:

Other:

Living Expense:

Will you be renting or purchasing a property?

- ☐ Renting
☒ Purchasing

Please fill out the following fields (In Rands)

Purchase Price:

Deposit:

Interest Rate(%):

Payment Term (Months):

Savings: (Optional)

Will you be using the savings module?

- ☒ Yes ☐ No

Saving Reason:

Goal Amount:

Estimated Interest Rate:

Duration (In Years):

Vehicle Expense:

Will you be purchasing a vehicle?

- ☒ Yes
☐ No

Please enter the following details (In Rands)

Make:

Model:

Purchase Price:

Deposit:

Interest Rate(%):

Insurance Premium:

Submit Details

Expense Report:

Balance:

Savings Result:

Contents:

- Introduction
- System Requirements
- How to install/setup
- Income Module
- General Expense Module
- Living Expense Module
- Vehicle Purchase Module
- Savings Module
- Reports
- Credits



Introduction:

This is a simple, yet effective application that assists the user with their budgeting and saving needs. This project is now in it's 3rd iteration and many improvements have been made since launch, the most notable being the shift over to a fully fledges GUI over the legacy console functionality.

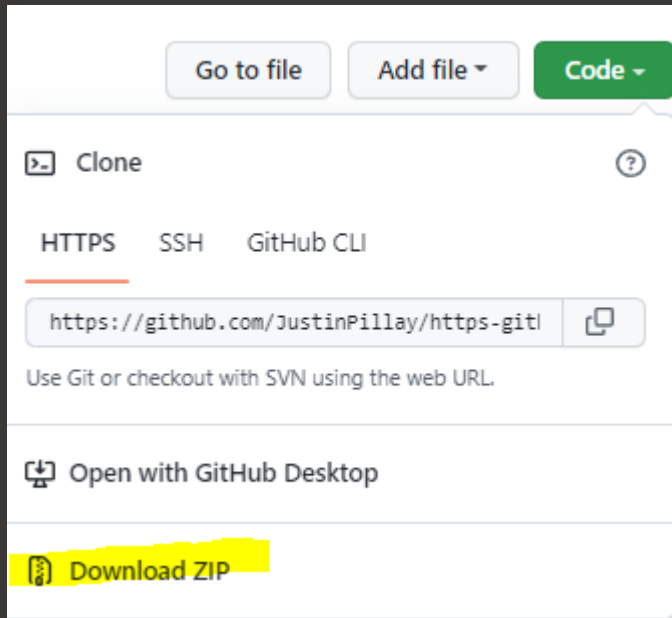
1 st ITERATION (LEGACY)	2 nd ITERATION (LEGACY)	3 RD ITERATION (CURRENT)
<ul style="list-style-type: none">- Initial Application.- Usage of console.- Array data structure used- Prompts user for various expenses and stores them.- Functionality for home loan repayment to be calculated.- Reports available funds after expenses are taken into account.	<ul style="list-style-type: none">- Calculation errors fixed.- Added functionality for user to input details regarding vehicle purchase.- Data structures changed to generic lists.- Displays all the users expenses in descending order.	<ul style="list-style-type: none">- Program moved away from console, GUI added.- Functionality for savings and interest earned added.- Fully fledged user-manual created.- General cleanup of code and bug-fixing.

System Requirements

This application requires the user to have a computer or laptop with at least Windows 7. Since WPF is utilized for the GUI, the following hardware requirements are recommended:

- Processor: x86 or x64.
- RAM : 512 MB (minimum), 1 GB (recommended)
- Hard disc: up to 3 GB of free space may be required.
- Windows 7 or higher

How to install/setup



Download the package from the GitHub link (below) and run the .exe file from this file path:

~rootfolder~\\Prog6211_POE_Part_3\\bin\\Debug\\net6.0windows\\Prog_6211_POE_Part_3.exe

Double click the .exe file to run the application.(Please note that the ~root folder~ is where you have saved the package on your pc.)

<https://github.com/JustinPillay/https-github.com-JustinPillay-PROG-6211-POE-Part-3-GUI-Console-Application>

Income Module

Income:

Please enter the following details
(Rands for Gross Monthly Income field and
% for Tax Deduction field.)

Gross Monthly Income:

Tax Deduction:

The income module allows the user to input their gross income and estimated tax deduction.

These are mandatory fields that the programme won't allow to be left blank.

General Expense Module

General Expenses:

Please enter your estimated
monthly expense below(In Rands:)
(If the field does not apply to you,
please enter a 0.)

Groceries:	<input type="text"/>
Utilities:	<input type="text"/>
Travel	<input type="text"/>
Communication:	<input type="text"/>
Other:	<input type="text"/>

The General Expense module allows the user to input values for their general expenses such as groceries and travel etc.

These fields cannot be left blank and require a value, 0 if there is no expense for that category.

Living Expense Module

Living Expense:

Will you be renting or purchasing a property?

☐ Renting
☒ Purchasing

Please fill out the following fields (In Rands:)

Purchase Price:

Deposit:

Interest Rate(%):

Payment Term (Months):

Living Expense:

Will you be renting or purchasing a property?

☒ Renting
☐ Purchasing

Please enter your rent amount (In Rands:)

Monthly Rental Amount:

The Living Expense module allows the user to choose whether they are renting or purchasing a property.

If Renting, the GUI is changed to just allowing the user to input their rent amount.

If Purchasing, the GUI is changed to allowing the user to enter all the fields required to calculate their monthly bond payment.

Vehicle Purchase Module

Vehicle Expense:

Will you be purchasing a vehicle?

☒ Yes
☐ No

Please enter the following details (In Rands:)

Make:

Model:

Purchase Price:

Deposit:

Interest Rate(%):

Insurance Premium:

Vehicle Expense:

Will you be purchasing a vehicle?

☐ Yes
☒ No

The Vehicle Purchase module allows the user to choose whether or not they are buying a vehicle.

If Yes, the GUI allows the user to enter multiple fields required to calculate the monthly repayment on a car loan.

If No, the GUI has no place for user input and the programme moves on.

Savings Module

Savings: (Optional)

Will you be using the savings module?

☒ Yes ☐ No

Saving Reason:

Goal Amount:

Estimated Interest Rate:

Duration (In Years:)

The Savings module is the only optional module where the user doesn't have to have any input, even the choice.

If the user chooses Yes, the GUI changes to allow for input of fields that calculate how much they would need to save every month in order to meet a savings goal with a given interest. This calculation assumes the interest is compounded annually.

Formula: $P = A / (r/n)^{nt}$

If the user chooses No, the GUI changes to allow no input from the user.

Reports Module

The Reports module tie up all the information the user has provided and displays useful information to them. These display the information once the Submit button is clicked.

Submit Details

- Expense Report: This module lists all the users expenses for the month in descending order.
- Balance: This module shows the user what their balance will be after all deductions and expenses are accounted for.
- Savings Result: This module outputs the monthly savings target to meet the goal with the criteria the user input, if they used the Savings module.

Expense Report:

A large, empty rectangular box with a light blue border, intended for displaying the expense report data.

Balance:

A large, empty rectangular box with a light blue border, intended for displaying the balance information.

Savings Result:

A large, empty rectangular box with a light blue border, intended for displaying the savings result information.

Credits

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Software Used:
Visual Studio 2022, Visual Studio Code
Languages: C#
Frameworks': .NET, WPF for C#