Errors during payroll app creation

Missing Fullname on saving payslip file

Graphical user interface, text, application, table

Description automatically generated

Missing field mappings in PaySlipMap() – no debugging tool used. I just looked to see what the mappings where. They are still incorrect. As the second column should be Fullname

This will be fixed by adding Fullname to the Employee class.

Superannuation is missing from the payslip

Graphical user interface, application

Description automatically generated

Using Visual studio debugger.

Shows the superannuation in the paySlip object is 0.0

Text

Description automatically generated

This doesn’t answer why

I need to go back further.

Debugging the payCulculator I found the GrossPay is returned from the calculator but not stored internally.

Graphical user interface, text

Description automatically generated

This means when calculating the super it will fail as the GrossPay is 0;

Fixed by adding this. Text

Description automatically generated

Grosspay is now stored in the payCalc object

Fixed the superannuation calculation at the same time.

Graphical user interface, text

Description automatically generated

Now in the debugger the super is being stored.

Text

Description automatically generated

# Null reference exception – taxRatesListWithThreshold

Text

Description automatically generated

Check where the TaxRate is initialised in the constructor.

A screenshot of a computer

Description automatically generated with medium confidence

taxRatesListWithThreshold is not assigned.

Assign the taxRatesList

A screenshot of a computer

Description automatically generated with medium confidence

Retest. Still fails

The code is in the wrong order – rearrange and try again

Text

Description automatically generated

Success!

Graphical user interface, application

Description automatically generated

The maths is wrong but it doesn’t crash.

Input data hrs 40

Pay rate $25

Debugging GetTaxRate Method in PayCalculatorWithThreshold

|  |  |
| --- | --- |
| Expected Results | Actual Results |
| Gross pay = $1000 | $1000 |
| Super = $1000\* 0.1 = $100 | N/A |
| Threshold claimed : Y | N/A |
| RateA = 0.3477 | comparing the rateA instead of low threshold |
| RateB = 186.2119 | comparing rateB instead of High threshold |
| Tax $161.82 = 0.3477 \* (1000.99) – 186.2199 | -999 |
| Net Pay $838.175 = 1000 – 161.82 | $1999 |

Fixed if statement.

A screenshot of a computer

Description automatically generated with medium confidence

A screenshot of a computer

Description automatically generated with medium confidence

Found taxRateA and taxRateB were being initialised twice once in the constructor and once at the object level.

|  |  |
| --- | --- |
| Expected Results | Actual Results |
| Gross pay = $1000 | $1000 |
| Super = $1000\* 0.1 = $100 | N/A |
| Threshold claimed : Y | N/A |
| RateA = 0.3477 | 0.3477 |
| RateB = 186.2119 | 186.2119 |
| Tax $161. 832323 = 0.3477 \* (1000.99) – 186.2199 | 161.832323 = 0.3477 \* 1000.99 – 186.2119 |
| Net Pay $838.167677 | $838.16767 |