Annual Salary Calculator

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# Specification

*To automatically calculate the salary and december bonus of an employee based on a “salary points” credit system.*

# Technical design

## *PSUDOCODE:*

*calculateAnnualBaseSalary() //work out annual salary (no bonus)*

*calculateChristmasBonus() //work out Christmas bonus*

*calculateAnnualSalary() //work out final annual salary*

*calculateDecemberSalary() //work out December salary*

*main{*

*//read in the salary point*

*salaryPoints = input ("Enter the salary point: ")*

*annualBaseSalary = calculateAnnualBaseSalary()*

*christmasBonus = calculateChristmasBonus()*

*annualSalary = calculateAnnualSalary()*

*decemberSalary = calculateDecemberSalary()*

*output ("Annual salary is: £" + annualSalary)*

*output ("December monthly salary is: £" + decemberSalary )*

*}*

*calculateAnnualBaseSalary{*

*return salaryPoints \* scalePointValue*

*}*

*calculateChristmasBonus{*

*return ((annualBaseSalaryIn \* bonusRate) / 100)*

*}*

*calculateAnnualSalary{*

*return annualBaseSalaryIn + christmasBonusIn*

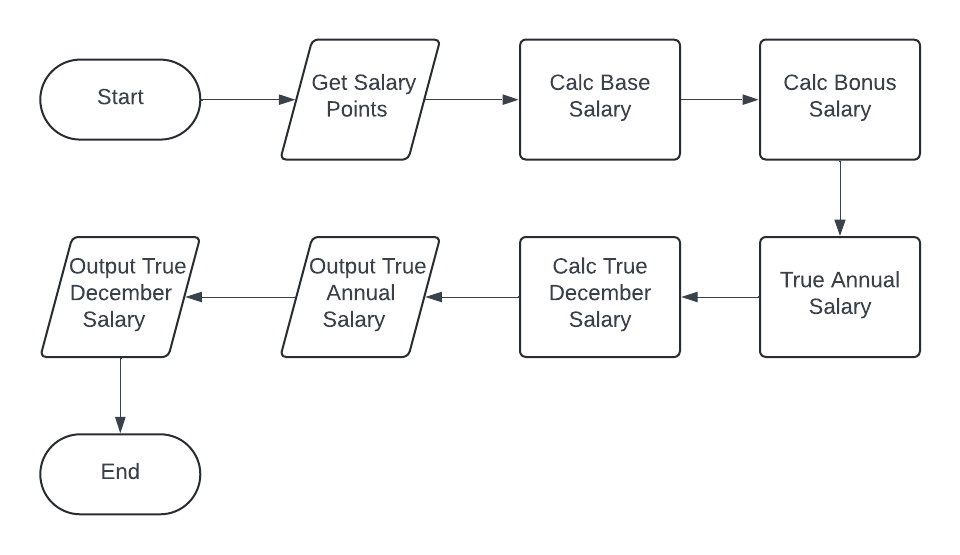
*}*

*calculateDecemberSalary{*

*return monthlySalary + christmasBonus*

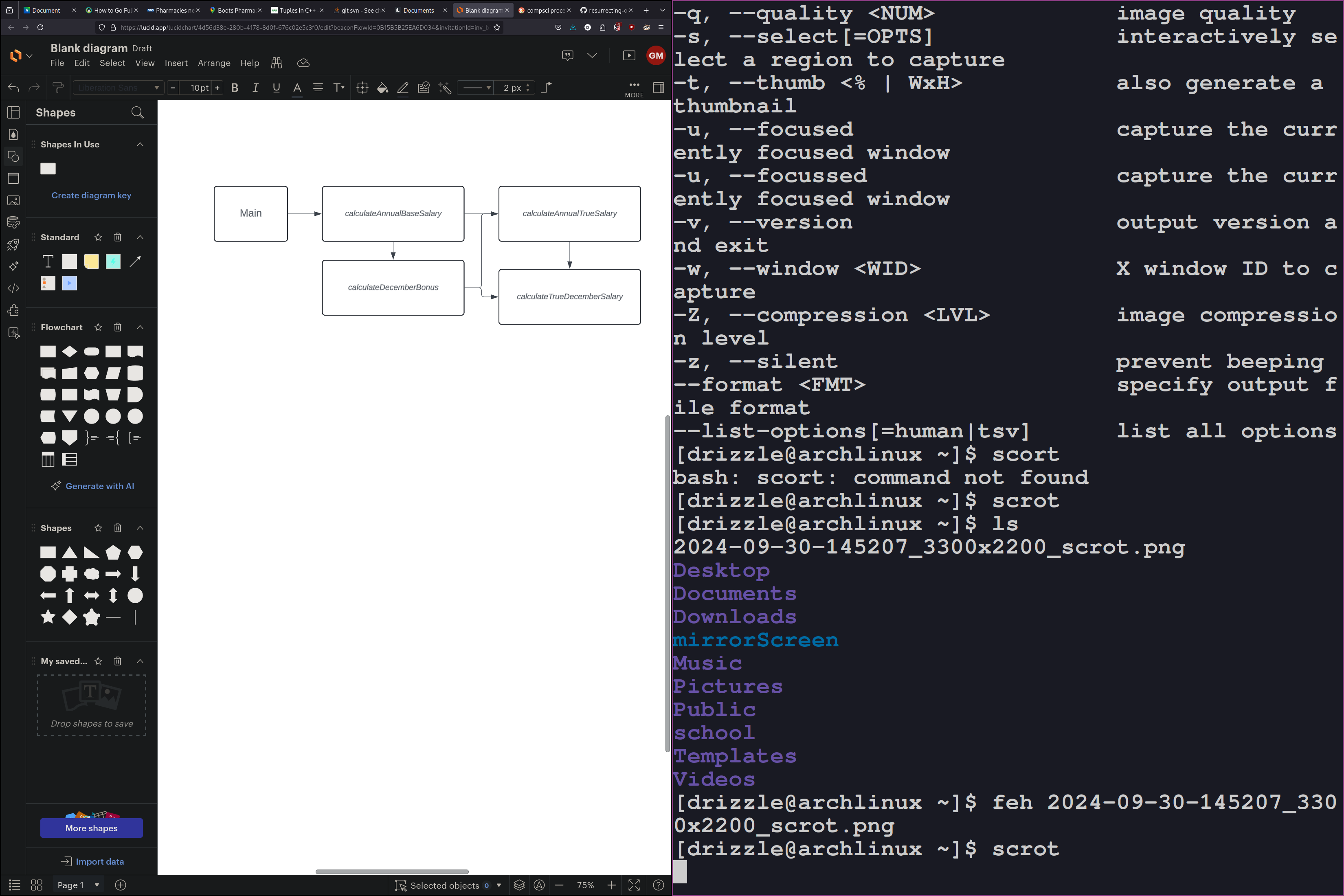
*}*

## Flowchart:



## Procedure Dependency Diagram:

# Test plan



*Fill out the following testing table and fix any errors.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Input **salaryPoint** | Rationale | Output  **annualSalary** | | Output  **decemberSalary** | |
| Expected | Observed | Expected | Observed |
| 6 | Integer value, in range | 12300.00 | 12300.00 | 1300.00 | 1300.00 |
| 1 | Integer value, min value in range | 2050.00 | 2050.00 | 216.67 | 216.67 |
| 24 | Interger value, max in range | 49200.00 | 49200.00 | 5200 | 5200 |
| 0 | Integer value, out of range (null) | 2050.00 | 2050.00 | 216.67 | 216.67 |
| -1 | Integer value, out of range (low) | 2050.00 | 2050.00 | 216.67 | 216.67 |
| 999 | Integer value, out of range (High) | 49200.00 | 49200.00 | 5200 | 5200 |
| 1.2 | Float value | 2050.00 | 2050.00 | 216.67 | 216.67 |
| foo | Non number value | ? | 2050.00 | ? | 216.67 |

# GiT commit log

|  |
| --- |
| commit 32fc1f9c0d5643ec1982265059de5bbc93e273c0  Author: Field <c4024637@my.shu.ac.uk>  Date: Fri Nov 15 13:35:48 2024 +0000  addedW1Evidence  commit 3733c29f3c29afb641761e4743573935348705ff  Author: dr1zzleGDShu <c4024637@my.shu.ac.uk>  Date: Fri Nov 15 10:52:11 2024 +0000  w1Hw |

# Schedule

|  |  |  |
| --- | --- | --- |
| ***Task*** | ***Estimated Hrs*** | ***Actual Hrs*** |
| *Design* | *1* | *2* |
| *Implement* | *1* | *0.5* |
| *Debug and test* | *0.5* | *1* |
| *Uploading And Packing* | *0.25* | *0.25* |
| ***total*** | ***3.75*** | ***3.75*** |