

Blackbox testing

CalculatorControlTest.java

Test Description: Test to check if invalid inputs in REST API GET request to Calculator returns status error

Equivalence Classes:

- Numeric inputs (Valid)
- Non-numeric inputs (Invalid)

Input list:

- budget
- cpfAmount
- fixedIncome
- otherIncome

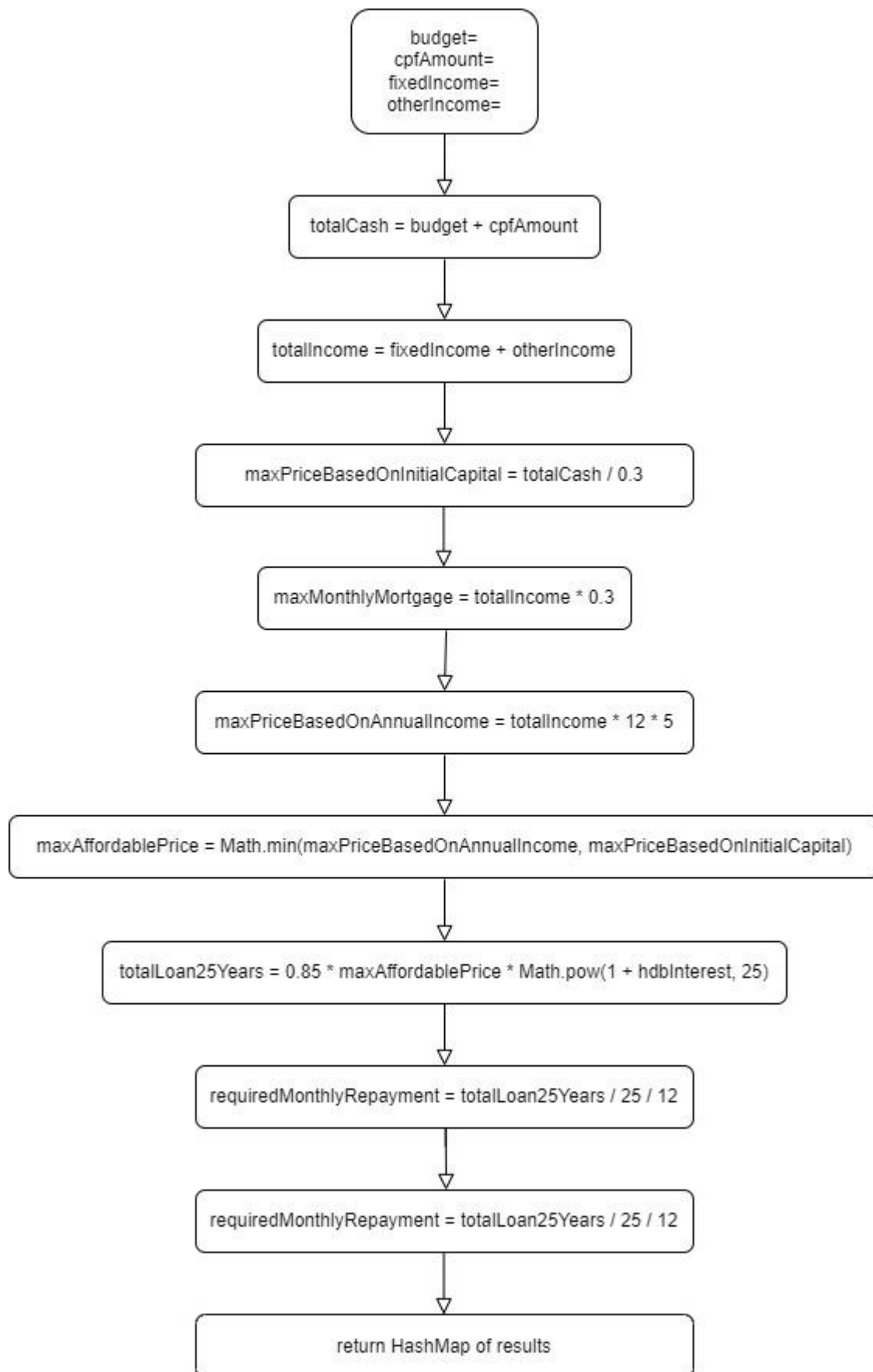
Test cases

Budget	cpfAmount	fixedIncome	otherIncome	Expected Value	Test Result
800000.0	200000.0	5000.0	0.0	HTTP Status 200; Content-type: application/json (Valid)	HTTP Status 200; Content-type: application/json
troll	200000.0	5000.0	0.0	HTTP Status 400 (Invalid)	HTTP Status 400

Whitebox testing

CalculatorServiceWhiteBoxTest.java

Control Flow Graph:



Test Description: Test for correct formula used and correct formatting of rendered results

Test Case

budget	cpf Am ou nt	fixedIncome	other Income	Expected Value	Test Result
80000.0	10000.0	8000.0	0.0	{ "maximumHDBPrice": 300000, "maxMonthlyMortgage": 2400, "requiredMonthlyRepayment": 1615, "totalLoan25Years": 484423 }	{ "maximumHDBPrice": 300000, "maxMonthlyMortgage": 2400, "requiredMonthlyRepayment": 1615, "totalLoan25Years": 484423 }