

Software QA & T Assignment

Flow Graph

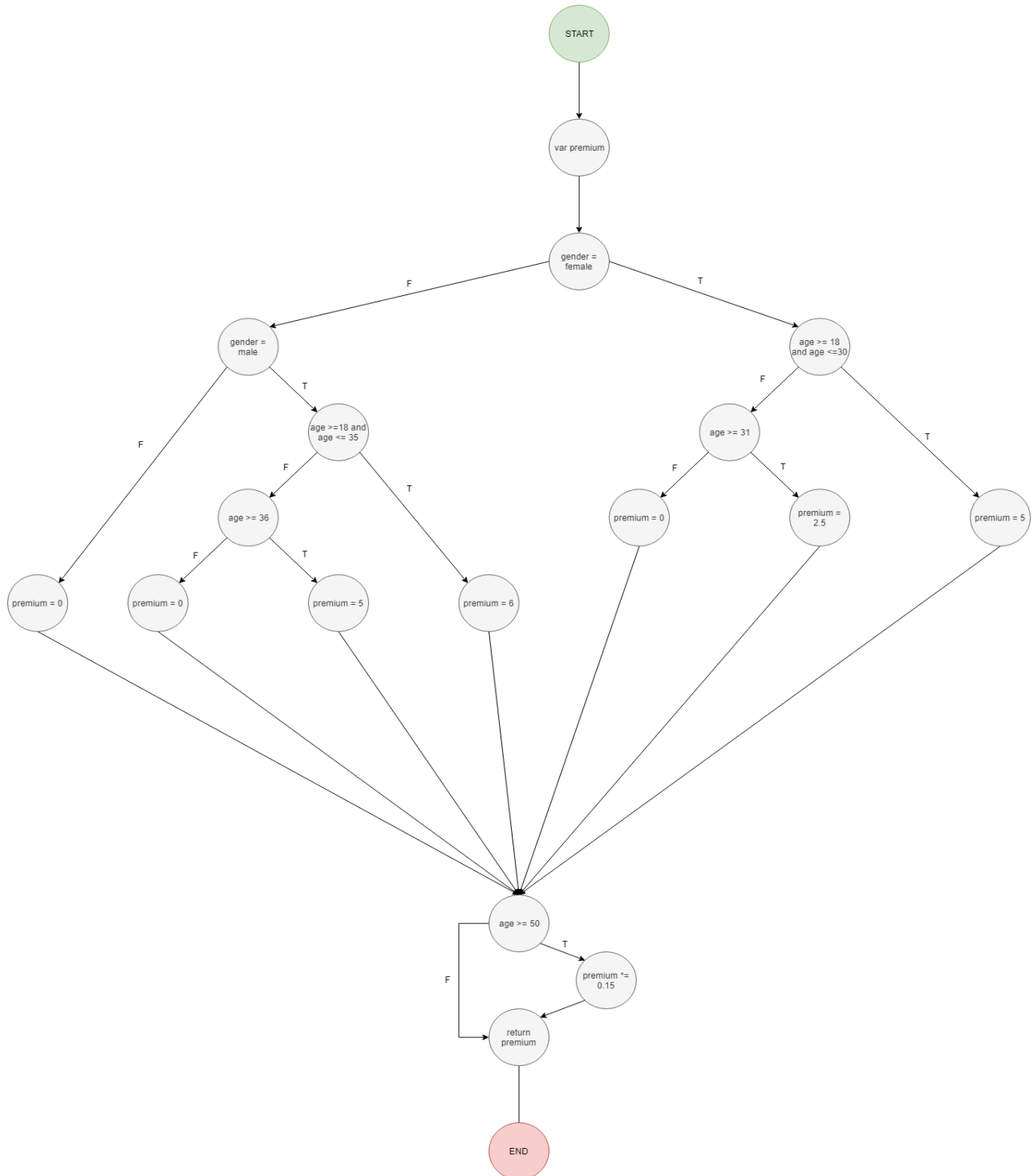


Figure 1 Flow Graph. For the uncompressed version, see GitHub Repo

Calculating Cyclomatic Complexity

$$\text{Cyclomatic Complexity} = \#Edges - \#Nodes + 2(\#Exit Points)$$

$$\text{Cyclomatic Complexity} = 25 - 17 + 2(1)$$

$$\text{Cyclomatic Complexity} = 10$$

Hierarchy	Maintainability Index	Cyclomatic Complexity
insurance_premium_calculator.Controllers	96	2
insurance_premium_calculator.lib	64	11
InsuranceService	64	11
CalcPremium(int, string) : double	55	10
InsuranceService()	100	1

Figure 1 Visual Studio Confirms that the Cyclomatic Complexity is 10

Black Box Testing with Fittesse

Test System: fit:fitsharp\build\debug\Runner.exe

variable defined: `COMMAND_PATTERN=%m -r fittesse.fitserver.FitServer,fitsharp\build\debug\fit.dll %p`

variable defined: `TEST_RUNNER=fitsharp\build\debug\Runner.exe`

classpath: `D:\repos\insurance-premium-calculator\insurance-premium-calculator.Tests\bin\Debug\insurance-premium-calculator.Tests.dll`

insurance_premium_calculator.Tests.CalcPremiumFixture		
age	gender	premium?
17	male	0
18	female	5.0
49	male	5
50	female	1.75 <i>expected</i>
		0.375 <i>actual</i>
60	apple	0

Figure 3 Acceptance test results of black box test cases

Jenkins CI

Back to Project

Status

Changes

Console Output

Edit Build Information

History

Git Build Data

No Tags

Test Result

Previous Build

Jenkins

Insurance Premium Calculator

#15

Test Results

2 failures

7 tests

Took 80 ms.

add description

All Failed Tests

Test Name	Duration	Age
insurance_premium_calculator.Tests.InsuranceTest.CalcPremium(60 "male")	58 ms	1
insurance_premium_calculator.Tests.InsuranceTest.CalcPremium(35 "female")	0 ms	1

All Tests

Package	Duration	Fail (diff)	Skip (diff)	Pass (diff)	Total (diff)
insurance_premium_calculator.Tests	75 ms	2 +2	0	5 +5	7 +7

Figure 4 Jenkins build results