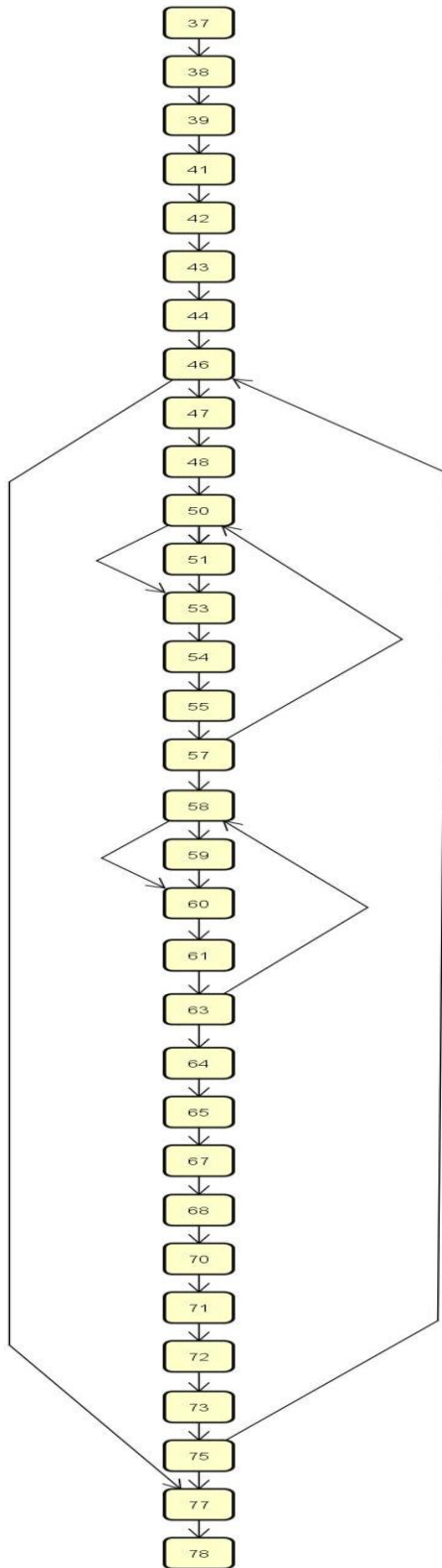


Control Flow Graph for Amount_saved().



The Passing of calcCostTest.java, Including coverage.

The screenshot displays an IDE interface with the JUnit test results and code coverage for `calcCostTest.java`. The test results on the left show that the test `test.java.calcCostTest` passed after 0.023 seconds, with 7/7 runs, 0 errors, and 0 failures. The test results list includes `calcCostCart1[0]` through `calcCostCart7[0]`, all of which passed.

The code coverage table on the right shows the following data:

Element	Coverage	Covered
Code Spring 2020 given	37.9 %	
src	37.9 %	
test.java	48.4 %	
> CartTest.java	0.0 %	
> WhiteBoxGiven.java	0.0 %	
> calcCostTest.java	100.0 %	
main.java	16.7 %	
> Cart.java	9.6 %	
> Cart	9.6 %	
● calcCost()	0.0 %	
● Amount_saved()	0.0 %	
● RemoveItem(Product)	0.0 %	
● getTax(double, String)	46.7 %	
● Cart(int)	100.0 %	
● addItem(Product)	100.0 %	
> Main.java	0.0 %	
> UnderAgeException.java	0.0 %	
> Alcohol.java	100.0 %	

The Passing of CartTest.java and its coverage.

Package ... JUnit Coverage Cart.java calcCostTes... Product.java

Finished after 0.03 seconds

Runs: 7/7 Errors: 0 Failures: 0

test.java.CartTest [Runner: JUnit 4]

[0] (0.000 s)

- Amount_savedCart1[0] (0.000 s)
- Amount_savedCart2[0] (0.000 s)
- Amount_savedCart3[0] (0.000 s)
- Amount_savedCart4[0] (0.000 s)
- Amount_savedCart5[0] (0.000 s)
- Amount_savedCart6[0] (0.000 s)
- Amount_savedCart7[0] (0.000 s)

CartTest (Apr 8, 2020 1:32:24 AM)

Element	Coverage	Cov
Code Spring 2020 given	45.9 %	
src	45.9 %	
test.java	49.3 %	
calcCostTest.java	0.0 %	
WhiteBoxGiven.java	0.0 %	
CartTest.java	100.0 %	
main.java	39.1 %	
Cart.java	41.0 %	
Cart	41.0 %	
calcCost()	0.0 %	
getTax(double, String)	0.0 %	
RemoveItem(Product)	0.0 %	
Amount_saved()	95.0 %	
Cart(int)	100.0 %	
addItem(Product)	100.0 %	
Main.java	0.0 %	
UnderAgeException.java	0.0 %	
Alcohol.java	100.0 %	
Dairy.java	100.0 %	
FrozenFood.java	100.0 %	
Meat.java	100.0 %	

First gradle build.

```
all > test.java
```

```
all > test.java
```

tests

failures

ignored

duration


successful

Class	Tests	Failures	Ignored	Duration
CartTest	7	0	0	0.005s
calcCostTest	7	0	0	0.011s




Sessions


This coverage report is based on execution data from the following sessions:


Session	Start Time	Dump Time
 Islam-eeaede8e	Apr 8, 2020, 2:13:13 AM	Apr 8, 2020, 2:13:14 AM


Execution data for the following classes is considered in this report:


Class


 com.esotericsoftware.kryo.io.Input


 com.esotericsoftware.kryo.io.Output


 [main.java.Alcohol](#)


 [main.java.Cart](#)


 main.java.Cart3


 [main.java.Dairy](#)


 [main.java.FrozenFood](#)


 [main.java.Meat](#)


 [main.java.Produce](#)


 [main.java.Product](#)


 org.apache.commons.lang.StringUtils


 org.gradle.api.internal.tasks.testing.AbstractTestDescriptor


 org.gradle.api.internal.tasks.testing.DefaultTestClassDescriptor


 org.gradle.api.internal.tasks.testing.DefaultTestClassRunInfo


 org.gradle.api.internal.tasks.testing.DefaultTestDescriptor


 org.gradle.api.internal.tasks.testing.DefaultTestOutputEvent


 org.gradle.api.internal.tasks.testing.DefaultTestSuiteDescriptor


 org.gradle.api.internal.tasks.testing.JULRedirector


 org.gradle.api.internal.tasks.testing.SuiteTestClassProcessor


 org.gradle.api.internal.tasks.testing.TestCompleteEvent


 org.gradle.api.internal.tasks.testing.TestStartEvent


 org.gradle.api.internal.tasks.testing.junit.AbstractJUnitSpec


 org.gradle.api.internal.tasks.testing.junit.AbstractJUnitTestClass

 org.gradle.api.internal.tasks.testing.junit.JUnitSpec

 org.gradle.api.internal.tasks.testing.junit.JUnitTestClassExecu

 org.gradle.api.internal.tasks.testing.junit.JUnitTestClassProce

 org.gradle.api.internal.tasks.testing.junit.JUnitTestEventAdap


 org.gradle.api.internal.tasks.testing.junit.JUnitTestFramework


html


File Home Share View


← → ↕ ⬅️ << Code Spring 2020 giv


☐ Name ^

 ihandouk

 jacoco-resources


 main.java

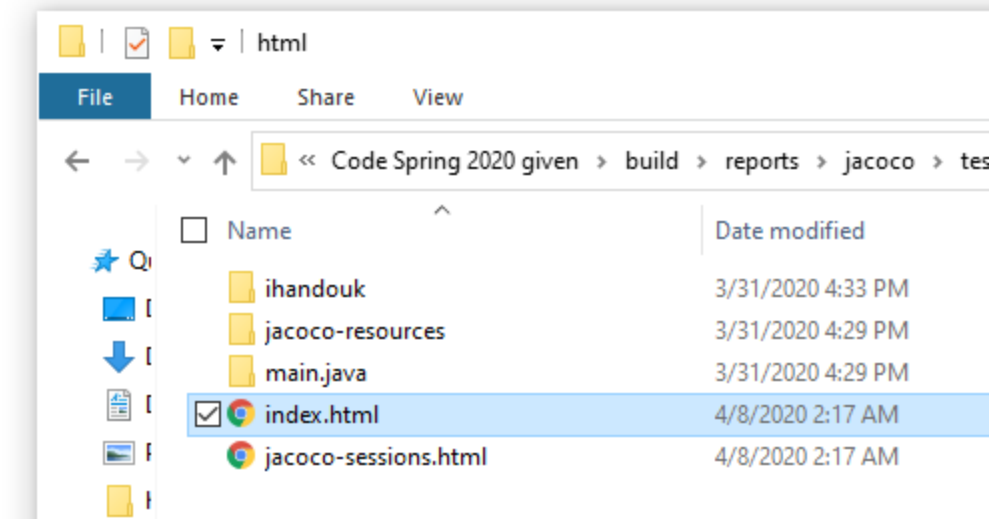
 index.html

 **jacoco-sessions.html**

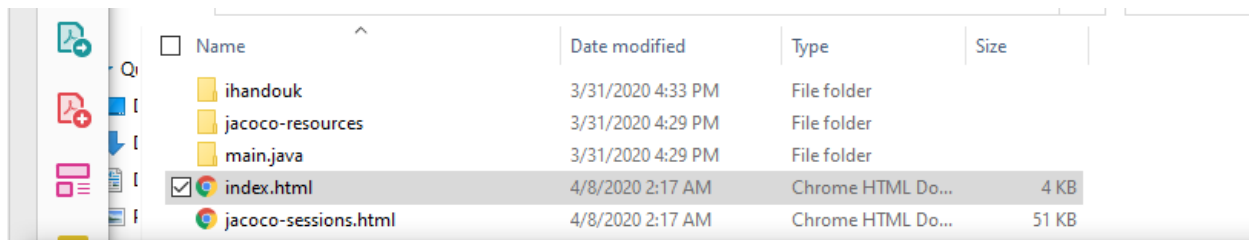
Jacoco code coverage report.

Code Spring 2020 given

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty
 main.java	<div><div></div></div>	42%	<div><div></div></div>	36%	23	46
Total	263 of 459	42%	30 of 47	36%	23	46



Command window, running gradle build, gradle test, and gradle jacoco.



```
C:\WINDOWS\system32\cmd.exe

D:\School\SER316\module 2\Code Spring 2020 given(1)\Code Spring 2020 given>gradle build
Starting a Gradle Daemon (subsequent builds will be faster)

BUILD SUCCESSFUL in 10s
7 actionable tasks: 7 executed
D:\School\SER316\module 2\Code Spring 2020 given(1)\Code Spring 2020 given>gradle test

BUILD SUCCESSFUL in 1s
3 actionable tasks: 3 up-to-date
D:\School\SER316\module 2\Code Spring 2020 given(1)\Code Spring 2020 given>gradle jacocoTestReport

BUILD SUCCESSFUL in 3s
2 actionable tasks: 1 executed, 1 up-to-date
D:\School\SER316\module 2\Code Spring 2020 given(1)\Code Spring 2020 given>
```

Questions:

1. What is the overall code coverage for the whole program?
 - a. The overall coverage is for the whole program is 45.9%.
2. What is the code coverage for Cart.java with your tests from CartTest.java?
 - a. The coverage for Cart.java is 41%, while the coverage for CartTest.java is 100%. The total average is 70.5% coverage.
3. What is the Code Coverage you were able to reach for the class as a whole?
 - a. The code coverage for the class is 80.7%

Coverage			
src (Apr 8, 2020 2:36:26 AM)			
Element	Coverage	Covered Instructio...	Missed Instructions
Code Spring 2020 given	80.7 %	1,090	260
src	80.7 %	1,090	260
main.java	42.2 %	190	260
Cart.java	45.3 %	146	176
Cart	45.3 %	146	176
calcCost()	0.0 %	0	126
RemoveItem(Product)	0.0 %	0	28
getTax(double, String)	46.7 %	14	16
Amount_saved()	95.0 %	115	6
Cart(int)	100.0 %	11	0
addItem(Product)	100.0 %	6	0
Main.java	0.0 %	0	80
UnderAgeException.java	0.0 %	0	4
Alcohol.java	100.0 %	7	0
Dairy.java	100.0 %	7	0
FrozenFood.java	100.0 %	7	0
Meat.java	100.0 %	7	0
Produce.java	100.0 %	7	0
Product.java	100.0 %	9	0
test.java	100.0 %	900	0
calcCostTest.java	100.0 %	436	0
CartTest.java	100.0 %	444	0
WhiteBoxGiven.java	100.0 %	20	0