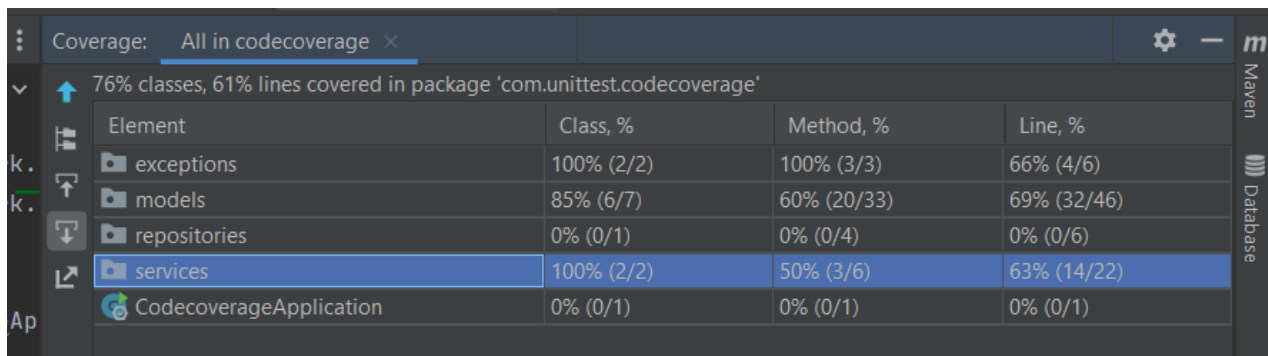


# تمرین Coverage از مهندسی نرم افزار

آدرس گیت‌هاب : <https://github.com/erfanfi79/Az-SE>

پس از اینکه Run All Test With Coverage را انتخاب کردیم فرایند تست را شروع میکنیم.

وضعیت اولیه Coverage :



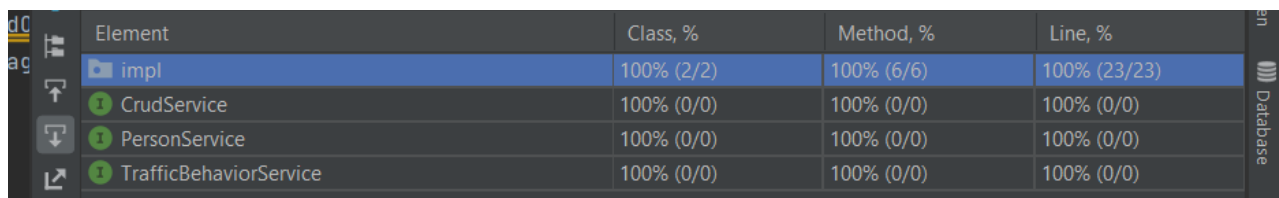
The screenshot shows the IntelliJ IDEA interface with the 'Coverage' tool window open. The package 'com.unittest.codecoverage' is selected, showing 76% classes and 61% lines covered. The table below details the coverage for each element.

Element	Class, %	Method, %	Line, %
exceptions	100% (2/2)	100% (3/3)	66% (4/6)
models	85% (6/7)	60% (20/33)	69% (32/46)
repositories	0% (0/1)	0% (0/4)	0% (0/6)
services	100% (2/2)	50% (3/6)	63% (14/22)
CodecoverageApplication	0% (0/1)	0% (0/1)	0% (0/1)

از بخش سرویس شروع می کنیم و با توجه به کامل بودن همه ان به غیر از `PersonServiceImpl` برای کامل شدن متد های ان تست می نویسیم:

سه تابع `update, get, delete` تست نشدند و برای انها تست اضافه میکنم.

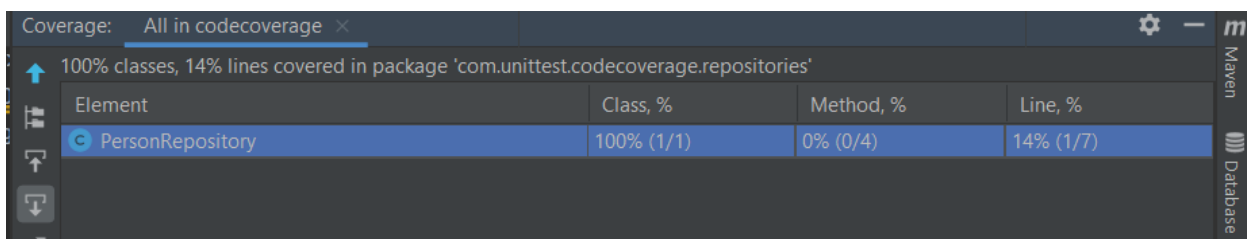
نتیجه بعد از اضافه کردن (کامیت `PersonServiceImpl Test for update, delete, get`):



The screenshot shows the IntelliJ IDEA interface with the 'Coverage' tool window open. The package 'com.unittest.codecoverage.repositories' is selected, showing 100% classes and 14% lines covered. The table below details the coverage for each element.

Element	Class, %	Method, %	Line, %
impl	100% (2/2)	100% (6/6)	100% (23/23)
CrudService	100% (0/0)	100% (0/0)	100% (0/0)
PersonService	100% (0/0)	100% (0/0)	100% (0/0)
TrafficBehaviorService	100% (0/0)	100% (0/0)	100% (0/0)

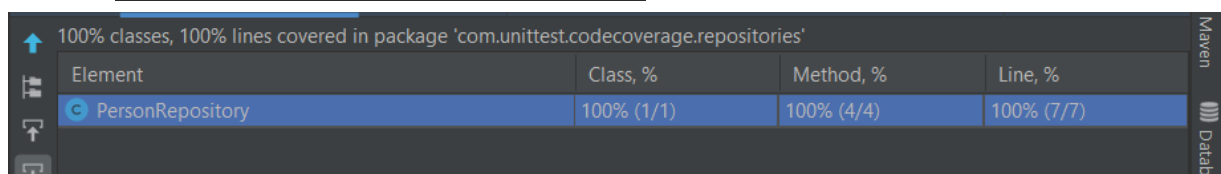
در مرحله بعدی برای `PersonRepository` تست مینویسم:



The screenshot shows the IntelliJ IDEA interface with the 'Coverage' tool window open. The package 'com.unittest.codecoverage.repositories' is selected, showing 100% classes and 14% lines covered. The table below details the coverage for each element.

Element	Class, %	Method, %	Line, %
PersonRepository	100% (1/1)	0% (0/4)	14% (1/7)

نتیجه بعد از اضافه کردن تست برای بررسی `null` بودن ورودی ها (Add `PersonRepositoryTest for crud`):



The screenshot shows the IntelliJ IDEA interface with the 'Coverage' tool window open. The package 'com.unittest.codecoverage.repositories' is selected, showing 100% classes and 100% lines covered. The table below details the coverage for each element.

Element	Class, %	Method, %	Line, %
PersonRepository	100% (1/1)	100% (4/4)	100% (7/7)

در مرحله بعد فقط مدل ها میمانند که ان هارا تست می کنیم:

va

on > Lambda

All in codecoverage

Coverage: All in codecoverage x

85% classes, 71% lines covered in package 'com.unittest.codecoverage.models'

Element	Class, %	Method, %	Line, %
validators	100% (1/1)	100% (4/4)	100% (11/11)
Footpassenger	100% (1/1)	80% (8/10)	81% (9/11)
Gender	100% (1/1)	100% (1/1)	100% (2/2)
Person	100% (1/1)	83% (5/6)	85% (6/7)
StreetDirectionFlow	0% (0/1)	0% (0/1)	0% (0/2)
Traffic	100% (1/1)	20% (2/10)	27% (3/11)
TrafficLigth	100% (1/1)	100% (1/1)	100% (2/2)

Maven Database

پس اضافه کردن unit test برای Person, Traffic نتایج به صورت زیر بدست آمد: (Add tests for

(models(Person, Traffic

100% classes, 91% lines covered in package 'com.unittest.codecoverage.models'

Element	Class, %	Method, %	Line, %
validators	100% (1/1)	100% (4/4)	100% (11/11)
Footpassenger	100% (1/1)	80% (8/10)	81% (9/11)
Gender	100% (1/1)	100% (1/1)	100% (2/2)
Person	100% (1/1)	100% (6/6)	100% (7/7)
StreetDirectionFlow	100% (1/1)	100% (1/1)	100% (2/2)
Traffic	100% (1/1)	80% (8/10)	81% (9/11)
TrafficLigth	100% (1/1)	100% (1/1)	100% (2/2)

Maven Database