



# OpenMRS

## What is OpenMRS?

OpenMRS is an open source H/FOSS project written in Java.

OpenMRS is a software platform and a reference application which enables design of a customized medical records system with no programming knowledge. It is a common framework upon which medical informatics efforts in developing countries can be built.

Team  
Alpha  
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### Test Case Template

- 1) Test Case ID
- 2) Requirement being tested
- 3) Class being tested
- 4) Method(s) being tested
- 5) Test input(s)
- 6) Expected outcome(s)
- 7) Class path
- 8) Driver name

### Test Case Example

- 1) 00011
- 2) MRS-11: The method shall check to see if the list contains the specified object.
- 3) Allergies.java
- 4) Contains(Object o)
- 5) POLLEN
- 6) True
- 7) ../project/src/api/target/classes
- 8) org.openmrs.TestCase00011

### Testing Report

Test #	Requirement	class name	method name	input	expected output	actual output	pass/fail
00001	MRS-1: The method shall return the patient's name when given a string.	PersonName.java	setGivenName()	Nick	Nick	Nick	Passed
00002	MRS-2: The method shall return the patient's birth date when given a birth date.	Person.java	setBirthDate()	04-11-1995	04-11-1995	04-11-1995	Passed
00003	MRS-3: The method shall return the gender when given a gender.	Person.java	setGender()	Male	Male	Male	Passed
00004	MRS-4: The method shall return the date created when given a date created.	FieldAnswer.java	setDateCreated()	10-27-2016	10-27-2016	10-27-2016	Passed
00005	MRS-5: The method shall return true when the patient has a person b.	Relationship.java	setPersonB(Person personB)		true	true	Passed
00006	MRS-6: The method shall return null when the ID is not a positive number.	ProgramWorkflow.java	getState(Integer programWorkflowStateID)	-3	null	null	Passed
00007	MRS-7: The method shall return null when the name is empty.	ProgramWorkflow.java	getStateByName(String name)	" "	null	null	Passed
00008	MRS-8: The method shall return true if an allergy has been added.	Allergies.java	add(Allergy allergy)		true	true	Passed
00009	MRS-9: The method shall return true if the allergy has been removed from the end of the list.	Allergies.java	remove(int index)		true	true	Passed
00010	MRS-10: The method shall clear the list of allergies.	Allergies.java	clear()		No known allergies	No known allergies	Passed
00011	MRS-11: The method shall check to see if the allergies list contains the specified object and return true.	Allergies.java	contains(Object o)	POLLEN	true	true	Passed
00012	MRS-12: The method shall give the index of the allergy in the allergies list and return it.	Allergies.java	indexOf(Object o)	0	0	0	Passed
00013	MRS-13: The method shall return false when the allergies list is not empty.	Allergies.java	isEmpty()		false	false	Passed
00014	MRS-14: The method shall return true when the allergies list is empty.	Allergies.java	isEmpty()		true	true	Passed
000015	MRS-15: The method shall return "" when name and concept are both null.	Drug.java	getDisplayName()				Passed
00016	MRS-16: The method shall update the care setting ID to the ID entered and return the care setting ID.	CareSetting.java	setCareSettingId(Integer careSettingId)	100	100	100	Passed
00017	MRS-17: The method shall return the patient ID number when given an ID.	Patient.java	toString()	13	Patient#13	Patient#13	Passed
00018	MRS-18: The method shall return the patient's ID number when given an ID number.	PatientIdentifierType.java	setPatientIdentifierTypeId(Integer patientIdentifierTypeId)	11113	11113	11113	Passed
00019	MRS-19: The method shall return the text given.	PatientIdentifierType.java	setFormat(String format)	example format	example format	example format	Passed
00020	MRS-20: The method shall return the weight when given a weight.	RelationshipType.java	setWeight(Integer weight)	120	120	120	Passed
00021	MRS-21: The method shall return true when the person is dead.	Person.java	setDead(Boolean dead)	true	true	true	Passed
00022	MRS-22: The method shall return the visit ID when given a visit ID.	VisitType.java	setVisitTypeId(Integer visitTypeId)	25	25	25	Passed
00023	MRS-23: The method shall return the visit number when given an ID.	Visit.java	setId(Integer id)	213	Visit #213	Visit #213	Passed
00024	MRS-24: The method shall return (null) when getPersonName() is null.	User.java	getDisplayString()		(null)	(null)	Passed
00025	MRS-25: The method shall return "" when userID equals null.	User.java	serialize()				Passed

## Our Project.

For our project, we picked an open-source software project and created an automated testing framework. This framework implements the test plan we created which tests 25 different test cases based on the OpenMRS code. Our framework runs on Ubuntu Linux operating system. The testing framework is invoked by one command:

```
./scripts/runAllTests.sh
```

Once invoked, the script accesses our testCase folder with the meta-data our framework uses to execute the test cases. A final report is printed out to display the test case number, the requirement being tested, the class name, the method name, the input, the output, the expected output, and the result of the test. After, we injected faults into the OpenMRS code to ensure that our test cases would fail and were really running. Once confirmed, we commented out our code in the OpenMRS code.

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