

# INVENTORY MANAGEMENT SYSTEM (IMS) PROJECT

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# DESIGN - JIRA

IMS-Project  
Classic software project

IP board  
Board

Backlog

Active sprints

Reports

Issues

Components

Code

Releases

Project pages

Add item

Project settings

Projects / IMS-Project / IP board

Backlog

IH

Only My Issues

Recently Updated

EPICS

Create epic

All issues

Starter

Scope/Deliverables

Codebase (Final Checklist)

Presentation (Final Checklist)

Testing (Final Checklist)

CI (Final Checklist)

Repo & Docs (Final Checklist)

Issues without epics

IMS\_Backend\_Tasks 3

12 issues

Ensure presentation is completed (priority) 7th - ask for help

06/Jan/21 7:13 PM • 07/Jan/21 10:30 PM

JUnit test with 80% test coverage at least	Scope/Deliverables	IP-44	↑	-
Build of application (Maven)	Scope/Deliverables	IP-43	↑	-
Completed project management board (user stories, acceptance criteria, estimations via story pints and priorit	Repo & Docs (Final Che...	IP-86	↑	-
Introduction (Who am I? How did I approach the spec?)	Presentation (Final Che...	IP-93	↑	-
Consultant journey (What tehcnologies have you learned for this project)	Presentation (Final Che...	IP-94	↑	-
Testing (What was tested? Show coverage of scr/main/java folder)	Presentation (Final Che...	IP-96	↑	-
CI (How did you approach version control?)	Presentation (Final Che...	IP-95	↑	-
Demonstration (Run through user stories)	Presentation (Final Che...	IP-97	↑	-
Sprint review (What did you complete? What got left behind?)	Presentation (Final Che...	IP-98	↑	-
Sprint retrospective (What went well? What could be improved?)	Presentation (Final Che...	IP-99	↑	-
Conclusions (reflections on project, future steps, any other relevant info)	Presentation (Final Che...	IP-100	↑	-
Use diagrams where appropriate	Presentation (Final Che...	IP-101	↑	-

Backlog 11 issues

Quickstart

# DESIGN – RISK ASSESSMENT AND ERD

## IMS PROJECT RISK ASSESSMENT

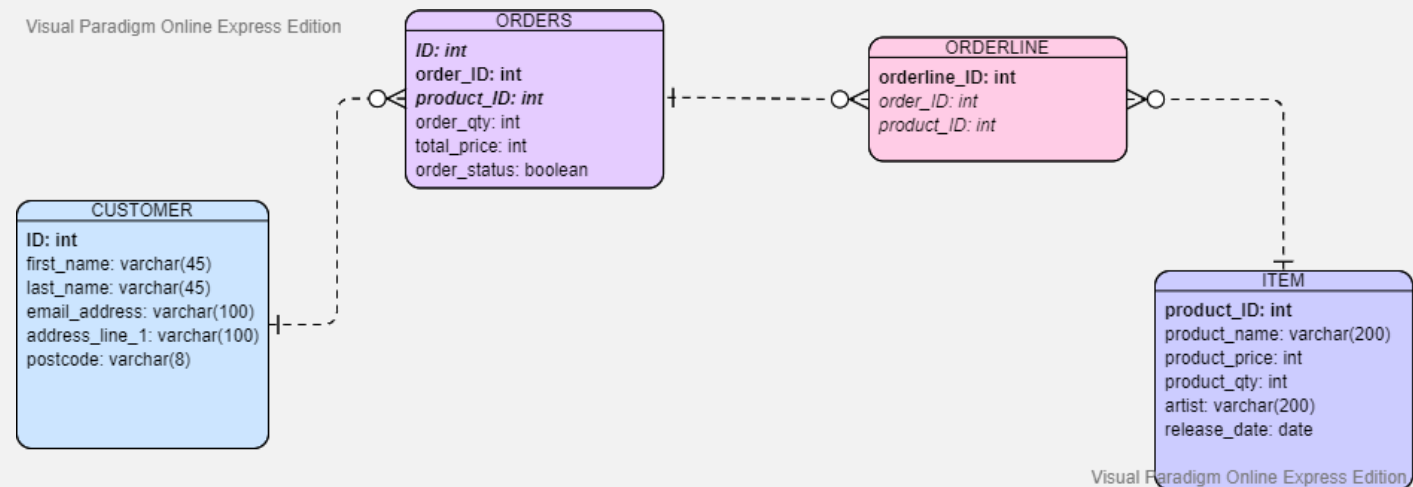
IQRA HUSSAIN

I M P A C T	5 EXTREME	5	10	15	20	25
	4 MAJOR	4	8	12	16	20
	3 MOD	3	6	9	12	15
	2 MINOR	2	4	6	8	10
	1 LOW	1	2	3	4	5
		1 RARE	2 UNLIKELY	3 POSSIBLE	4 LIKELY	5 CERTAIN
		LIKELIHOOD				

**TABLE 1:**  
Displays a table showing the risk rating of potential risks that may arise during the project

ID	RISK DESCRIPTION	CAUSE	EFFECT	RISK RATING			ACTION
				IMPACT	LIKELIHOOD	TOTAL	
1	Contraction of COVID-19 virus	Contact with anyone who may have the virus by going out	May not be able to complete the project	5	3	15	Inform trainer and quarantine self as advised by medical professional
2	Running out of time	Poor time management	Project requirements not fully met	5	4	20	Ensure sprints are adhered to during working day. Plan efficiently
3	Difficulties performing tasks	Untreated ADHD (currently waiting to see a specialist) which makes it difficult to focus	Project requirements not fully met	5	2	10	Take regular breaks and work on tasks which help stimulate brain

Visual Paradigm Online Express Edition

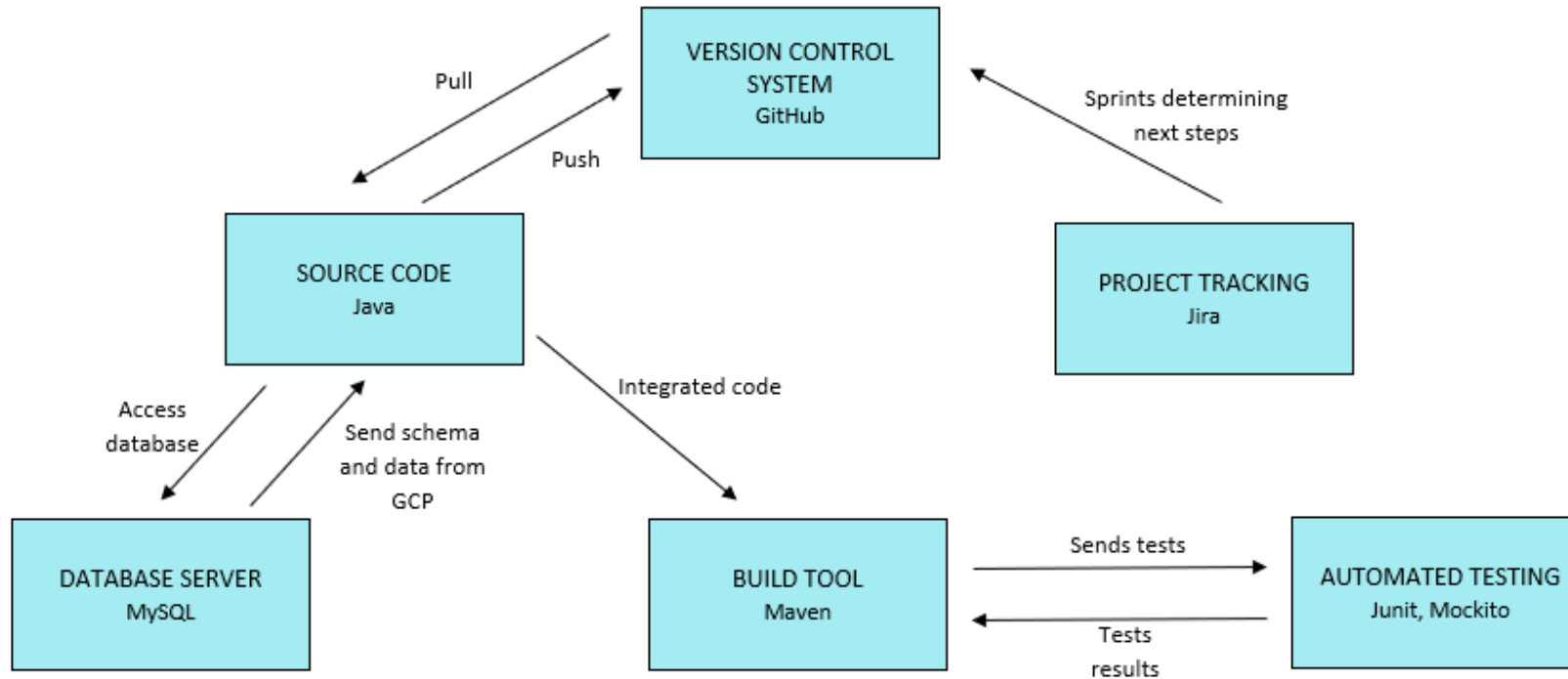


Visual Paradigm Online Express Edition

# CONSULTANT JOURNEY

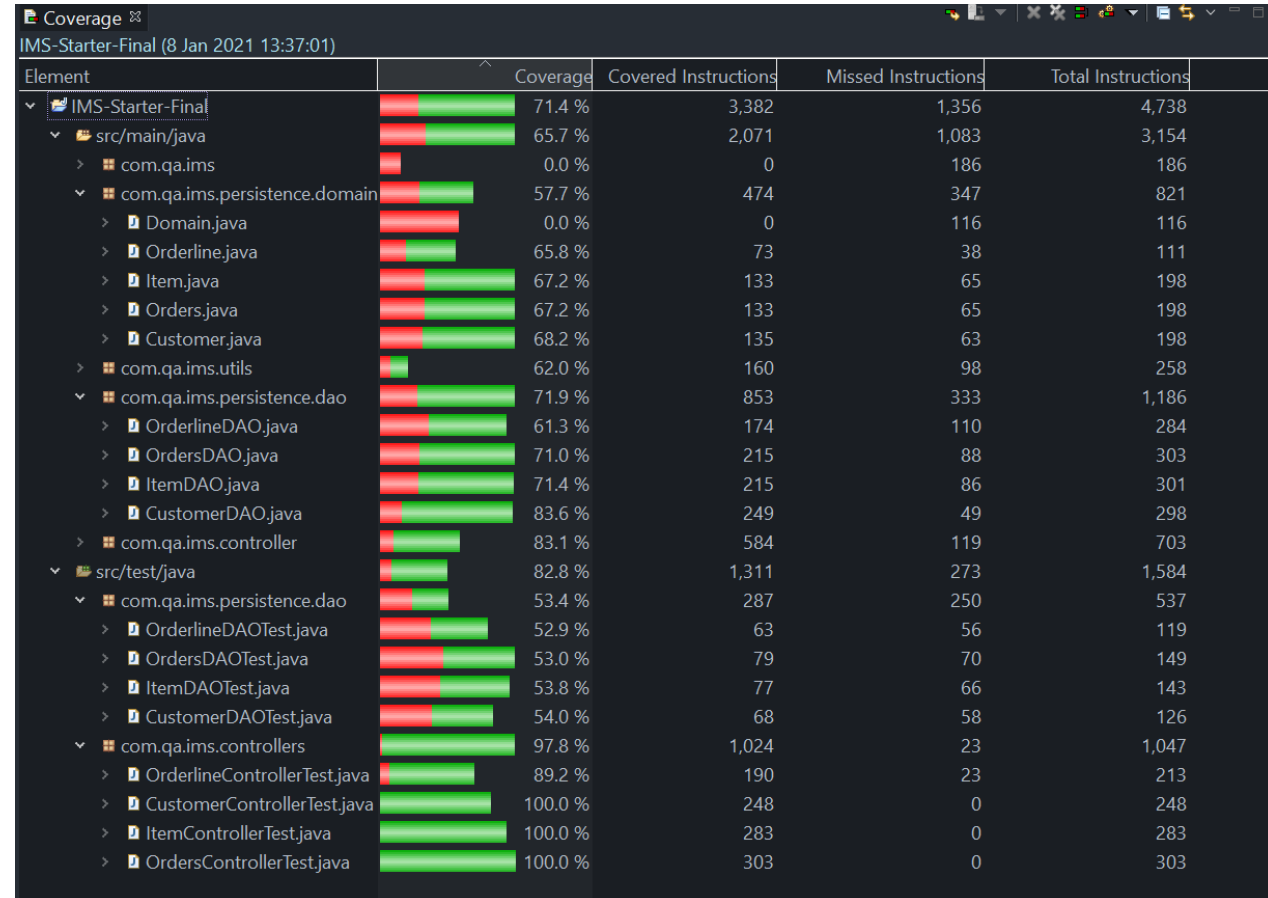
- Agile – Scrum board (Jira)
- Source Control – Git, GitHub
- Cloud – GCP
- Database – mySQL
- Programming language – Java
- Build tool – Maven
- Testing – Junit, Mockito

# CI PIPELINE



# TESTING

- Overall a 71.4% test coverage
- 65.7% coverage in src/main/java



The screenshot shows the Coverage tool window for the project 'IMS-Starter-Final' (8 Jan 2021 13:37:01). The table displays coverage data for various elements, including source files and test files. Each row includes a visual progress bar, the coverage percentage, the number of covered instructions, missed instructions, and total instructions.

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
IMS-Starter-Final	71.4 %	3,382	1,356	4,738
src/main/java	65.7 %	2,071	1,083	3,154
com.qa.ims	0.0 %	0	186	186
com.qa.ims.persistence.domain	57.7 %	474	347	821
Domain.java	0.0 %	0	116	116
Orderline.java	65.8 %	73	38	111
Item.java	67.2 %	133	65	198
Orders.java	67.2 %	133	65	198
Customer.java	68.2 %	135	63	198
com.qa.ims.utils	62.0 %	160	98	258
com.qa.ims.persistence.dao	71.9 %	853	333	1,186
OrderlineDAO.java	61.3 %	174	110	284
OrdersDAO.java	71.0 %	215	88	303
ItemDAO.java	71.4 %	215	86	301
CustomerDAO.java	83.6 %	249	49	298
com.qa.ims.controller	83.1 %	584	119	703
src/test/java	82.8 %	1,311	273	1,584
com.qa.ims.persistence.dao	53.4 %	287	250	537
OrderlineDAOTest.java	52.9 %	63	56	119
OrdersDAOTest.java	53.0 %	79	70	149
ItemDAOTest.java	53.8 %	77	66	143
CustomerDAOTest.java	54.0 %	68	58	126
com.qa.ims.controllers	97.8 %	1,024	23	1,047
OrderlineControllerTest.java	89.2 %	190	23	213
CustomerControllerTest.java	100.0 %	248	0	248
ItemControllerTest.java	100.0 %	283	0	283
OrdersControllerTest.java	100.0 %	303	0	303

DEMO

# SPRINT REVIEW

## COMPLETED

- Completed 5 sprints – each staged based on requirements in the IMS spec
  - Able to show some programming and software development techniques
  - Produce mainly successful tests

## RETURNED TO BACKLOG

- Testing of at least 80% was not achieved
- Didn't understand what I had to do for .gitignore
- Difficulty in some parts of the code so I was not able to complete some tests



# SPRINT RETROSPECTIVE

- To improve the sprint:
  - Better use of how stories were created
  - Pace self so that I don't feel overwhelmed by the number of stories
- However
  - I was able to complete tasks that were required for the product to work to an extent
  - Worked my way from simpler to more complex tasks

# CONCLUSION

- Overall the IMS allowed me to:
  - Experience what working on an individual project with a future client would be like
  - Allowed me to develop organisation skills in an efficient way (Jira)
  - Once I was acquainted with code I was able to easily pick out errors (eventually)
  - Allowed me to hone in on the skills I have learnt so far from past 5 weeks of training