



QA: IMS PROJECT

USAMA MALIK



INTRO

CONSULTANT JOURNEY



JAVA

REINFORCEMENT
OF KNOWN
KNOWLEDGE



AGILE

READY FOR
PROFESSIONAL
ENVIRONMENT



MAVEN

PROJECT
STRUCTURE &
TESTING

PRELIMINARY WORK

Projects / QA_IMS / QI board

Backlog

Share ...

Only My Issues Recently Updated

EPICS Create epic x

VERSIONS

- All issues
- > customer
- > item
- > order
- Issues without epics

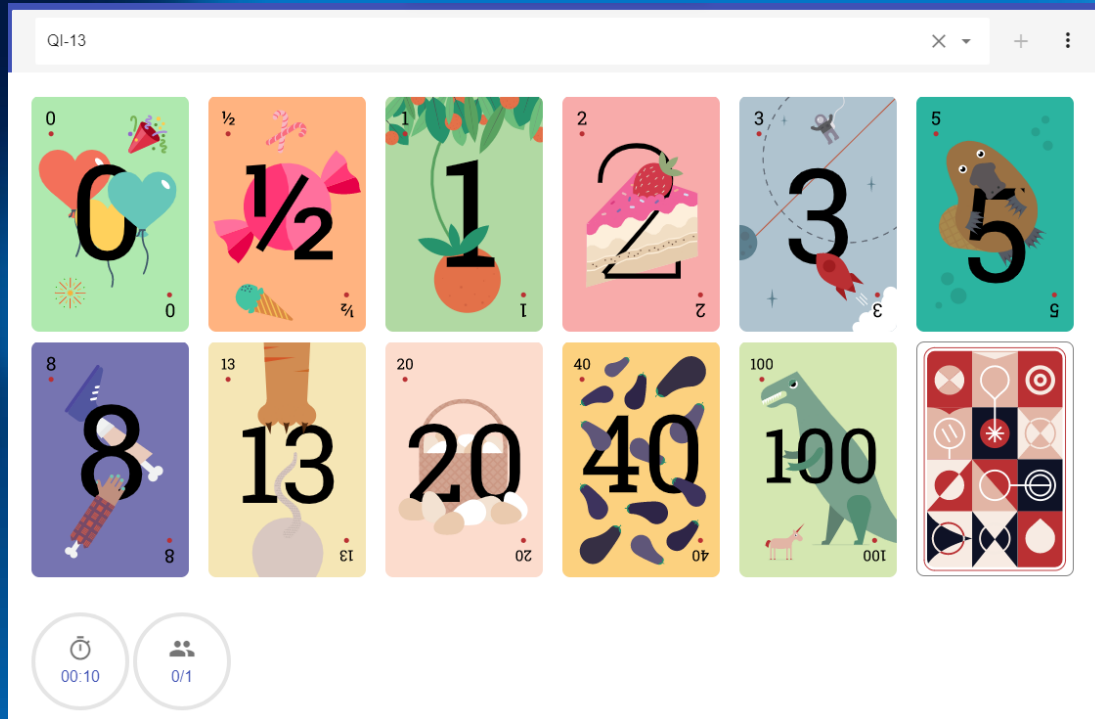
Backlog 15 issues

Create sprint ...

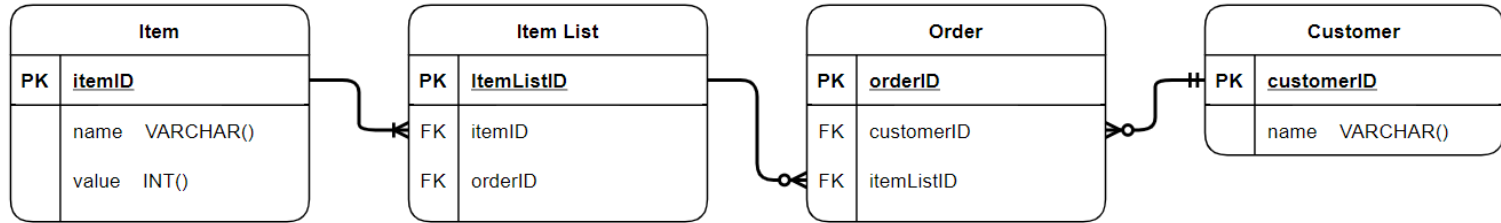
As a User I need to be able to interact with the application via a CLI. So that I can use and navigate the application	customer	UM	QI-1	↑	13
As a User I need to add a customer to the System. So I can add new customers in the system	customer	UM	QI-2	↓	3
As a User I need to view all customers in the system, So I can easily view how many and which customers exist in the system	customer	UM	QI-3	↓	3
As a User I need to be able to update a customer in the system. So if a customers details change I can also update it in the system	customer	UM	QI-6	↑	5
As a User I need to be able to delete a customer from the system. So old customers or customers wanting to close their account don't remain in the system	customer	UM	QI-4	↓	3
As a User I need to add an item to the system, So I can add new products to the system for customers to be able to buy	item	UM	QI-5	↑	5
As a User I need to be able to view all items in the system. So I can view all products currently present in the system	item	UM	QI-7	↓	3
As a User I need to be able to update an item in the system. So I can update details of a product	item	UM	QI-8	↓	3
As a User I need to be able to delete an item in the system, So products I no longer sell are removed from the system	item	UM	QI-9	↓	3
As a User I need to be able to create an order in the system, So I can add items a customer ordered to the order	order	UM	QI-10	↑	8
As a User I need to be able to view all orders in the system, So I can see all the orders that have been placed by a customer	order	UM	QI-11	↑	5
As a User I need to be able to delete an order in the system, So I can remove fulfilled orders from the system	order	UM	QI-12	↑	5
As a User I need to be able to add an item to an order. So a order can have multiple items	item	UM	QI-13	↑	8
As a User I need to be able to calculate the cost for an order, So I can produce an invoice for the customer	order	UM	QI-14	↑	5
As a User I need to be able to delete an item from an order, So customers who have changed their minds can remove products from an order	item	UM	QI-15	↑	8

+ Create issue

PRELIMINARY WORK



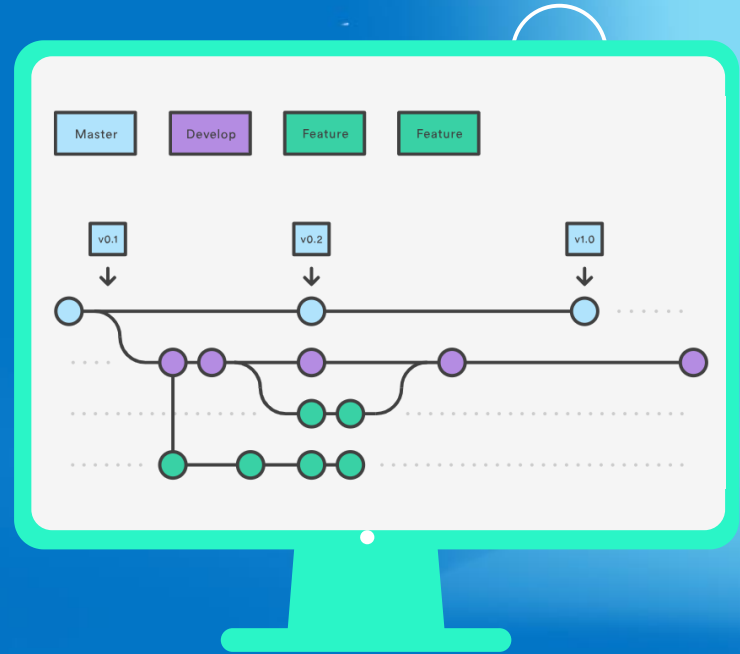
PRELIMINARY WORK



CI – CONTINUOUS INTEGRATION



MASTER → DEV → FEATURES





ACKNOWLEDGEMENTS

IMS STARTER – BY CHRIS PERRINS

<https://github.com/christophperrins>

TABLE OUTPUT – BY LOGICBIG.COM

<https://www.logicbig.com/how-to/code-snippets/jcode-java-cmd-command-line-table.html>



INITIAL PROBLEMS

BEFORE

```
public Double getDouble() {
    String input = getString();
    Double doubleInput = null;
    do {
        try {
            doubleInput = Double.parseDouble(input);
        } catch (NumberFormatException nfe) {
            LOGGER.info("Error - Please enter a number");
        }
    } while (doubleInput == null);
    return doubleInput;
}
```

AFTER

```
public Double getDouble() {
    Double doubleInput = null;
    do {
        String input = getString();
        try {
            doubleInput = Double.parseDouble(input);
        } catch (NumberFormatException nfe) {
            LOGGER.info("Error - Please enter a number");
        }
    } while (doubleInput == null);
    return doubleInput;
}
```

INITIAL PROBLEMS

BEFORE

```
public Double getDouble() {  
    String input = getString();  
    Double doubleInput = null;  
    do {  
        try {  
            doubleInput = Double.parseDouble(input);  
        } catch (NumberFormatException nfe) {  
            LOGGER.info("Error - Please enter a number");  
        }  
    } while (doubleInput == null);  
    return doubleInput;  
}
```

AFTER

```
public Double getDouble() {  
    Double doubleInput = null;  
    do {  
        String input = getString();  
        try {  
            doubleInput = Double.parseDouble(input);  
        } catch (NumberFormatException nfe) {  
            LOGGER.info("Error - Please enter a number");  
        }  
    } while (doubleInput == null);  
    return doubleInput;  
}
```

INITIAL PROBLEMS

```
What is your username
wrongUser
What is your password
wringPassword
Wrong credentials!
What is your username
|
```





TESTING

UNIT TESTING TECHNOLOGY



WHAT WAS TESTED?

CONTROLLER
CLASSES

80%
COVERAGE

ALL DATABASE
INTERACTIONS

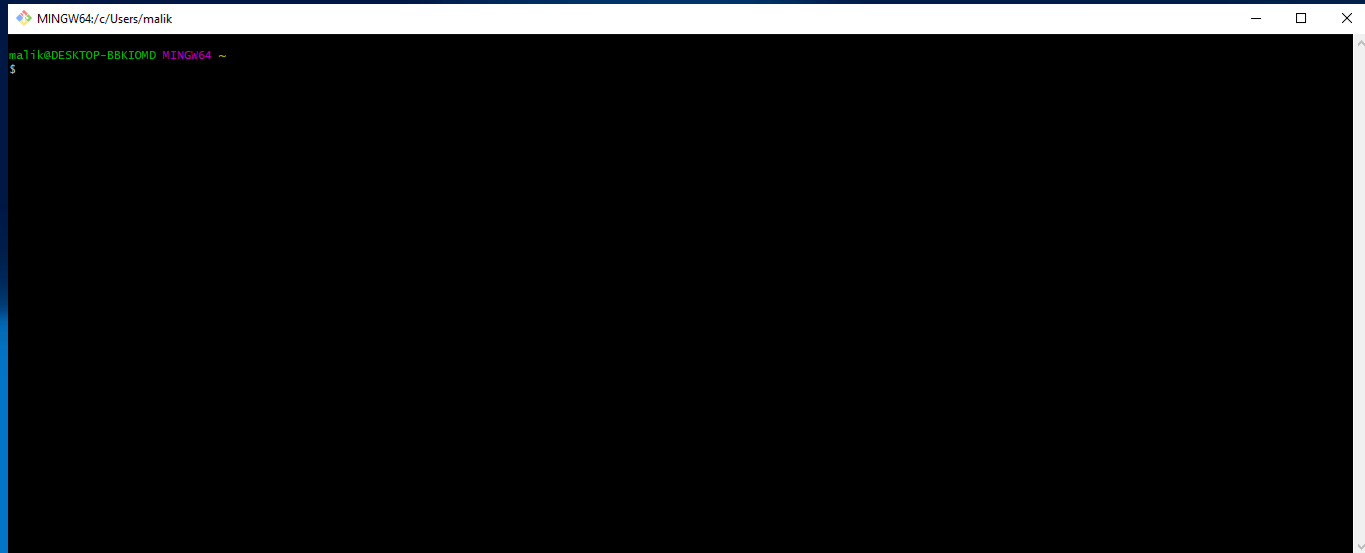




DEMO TIME!

WORKING DEMO OF IMS PROJECT





```
MINGW64: c:/Users/malik
malik@DESKTOP-BBK1OMD MINGW64 ~$
```


SPRINT REVIEW

01

02

03

04

CUSTOMER
ALL CUSTOMER
USER STORIES
INTO ONE
SPRINT

ITEM
ALL ITEM USER
STORIES INTO
ONE SPRINT

ORDER
ALL ORDER USER
STORIES INTO
ONE SPRINT

MISCELLANEOUS
ALL OTHER USER
STORIES +
ADDITIONAL
UNFORSEEN TASKS

SPRINT RETROSPECTIVE

- **Agile method helped me stay on track**
- **Provided priority indicator to all parts of the project**
- **Finished well in time**

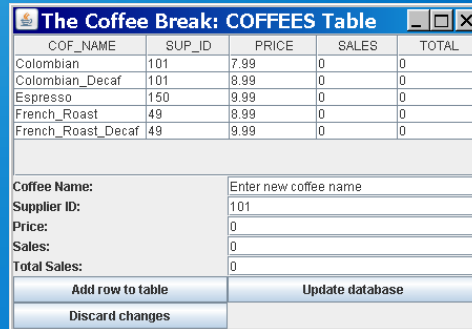
- **Didn't actively manage JIRA board towards the end of project**
- **Requires a lot of preliminary work which I was not used to**



CONCLUSION

FUTURE DEVELOPMENT

IMS + GUI



COF_NAME	SUP_ID	PRICE	SALES	TOTAL
Colombian	101	7.99	0	0
Colombian_Decaf	101	8.99	0	0
Espresso	150	9.99	0	0
French_Roast	49	8.99	0	0
French_Roast_Decaf	49	9.99	0	0

Coffee Name:

Supplier ID:

Price:

Sales:

Total Sales:



THANK YOU!

QUESTIONS?

