



Inventory Management System

Felix Marley





Scope, application and ERD

Scope

Kanban Board

Relational database

Functional application

Unit tests and integration tests

Version control system

Continuous integration pipeline

Trello

MySQL

Built in Java

JUnit and sonarqube

Git

Jenkins

Application

Minimum viable product

in list [Done](#)

Description

Add a more detailed description...

☒ Checklist

Hide completed items

Delete

94%

☒ Add a customer to the system

☒ View all customers in the system

☒ Update a customer in the system

☒ Delete a customer in the system

☒ Add an item to the system

☒ View all items in the system

☒ Update an item in the system

☒ Delete an item in the system

☒ Create an order in the system

☒ View all orders in the system

☒ Delete an order in the system

☒ Add an item to an order

☐ Calculate a cost for an order

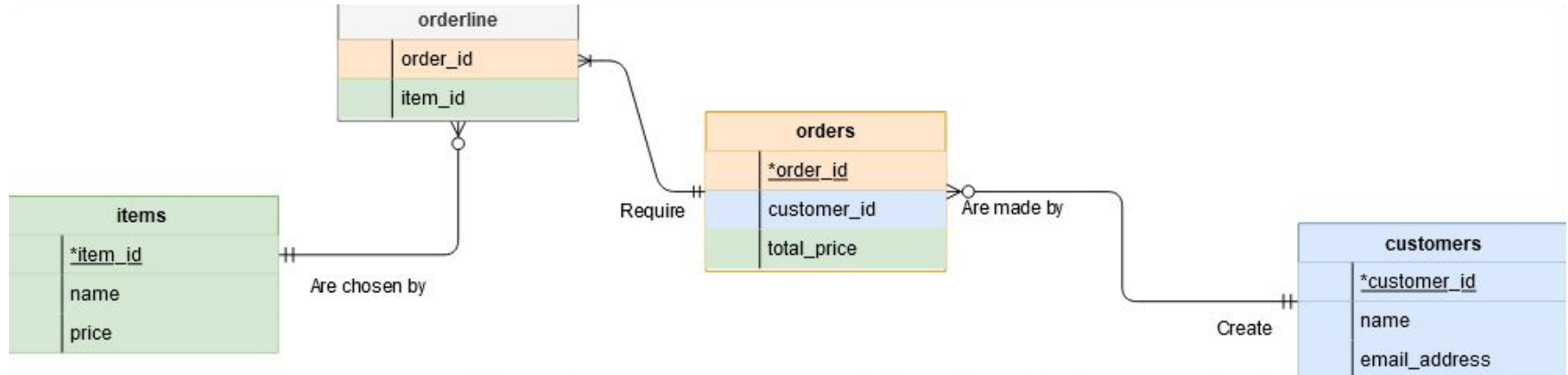
☒ Delete an item in an order

☒ A customer needs to have a name

☒ An item needs to have a name and a value

☒ An order needs to have a customer and contains items

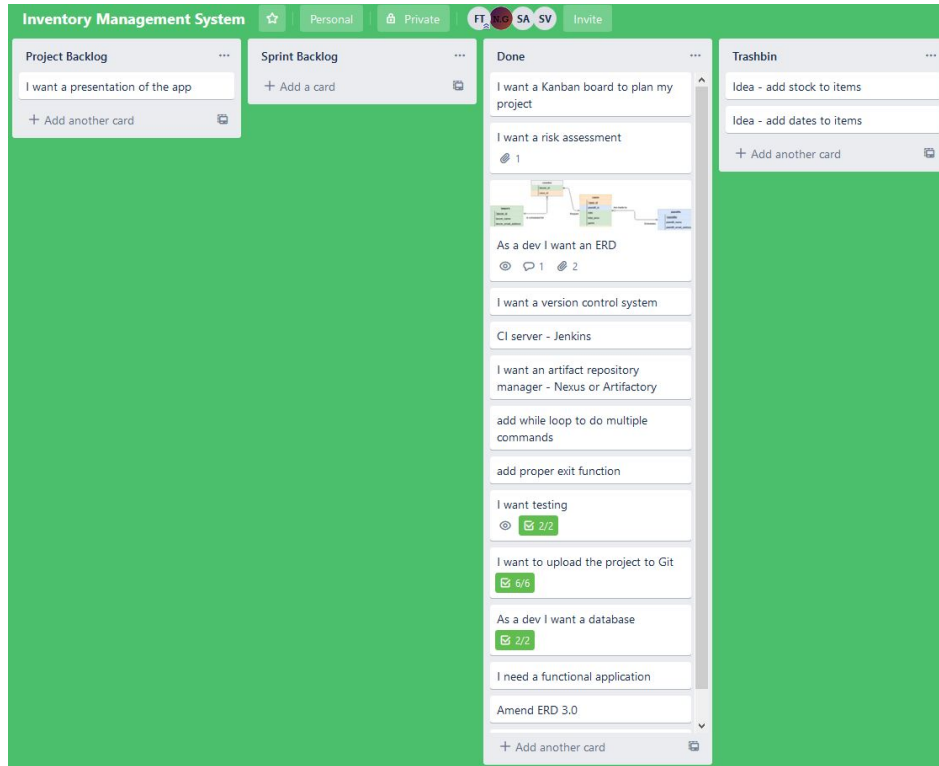
Entity relationship diagram





Trello

Trello





SQL

SQL

```
CREATE TABLE items (  
  item_id int NOT NULL UNIQUE AUTO_INCREMENT,  
  name varchar(45) NOT NULL UNIQUE,  
  price decimal(7,2) NOT NULL,  
  PRIMARY KEY (item_id)  
);
```

```
CREATE TABLE customers (  
  customer_id int NOT NULL UNIQUE AUTO_INCREMENT,  
  name varchar(45) NOT NULL,  
  address varchar(200) NOT NULL,  
  PRIMARY KEY (customer_id)  
);
```

```
CREATE TABLE orders (  
  order_id int NOT NULL UNIQUE AUTO_INCREMENT,  
  customer_id int NOT NULL,  
  total_price decimal(7,2) NOT NULL,  
  PRIMARY KEY (order_id),  
  FOREIGN KEY (customer_id) REFERENCES customers (customer_id)  
);
```

```
CREATE TABLE orderline (  
  order_id int NOT NULL,  
  item_id int NOT NULL,  
  FOREIGN KEY (order_id) REFERENCES orders (order_id)  
  FOREIGN KEY (item_id) REFERENCES items (item_id),  
);
```

SQL

Tables

```
Database changed
mysql> show tables;
+-----+
| Tables_in_ims |
+-----+
| customers    |
| items        |
| orderline    |
| orders       |
+-----+
```

Schemas

```
mysql> describe customers;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| customer_id | int(11)   | NO   | PRI | NULL    | auto_increment |
| name        | varchar(45) | NO   |     | NULL    |               |
| address     | varchar(200) | NO   |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

mysql> describe items
-> ;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| item_id    | int(11)   | NO   | PRI | NULL    | auto_increment |
| name       | varchar(45) | NO   | UNI | NULL    |               |
| price      | decimal(7,2) | NO   |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)

mysql> describe orderline;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| order_id   | int(11)   | NO   | MUL | NULL    |               |
| item_id    | int(11)   | NO   | MUL | NULL    |               |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> describe orders;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| order_id   | int(11)   | NO   | PRI | NULL    | auto_increment |
| customer_id | int(11)   | NO   | MUL | NULL    |               |
| total_price | decimal(7,2) | NO   |     | NULL    |               |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.01 sec)
```



Sonarqube

Sonarqube review

0 🐛 New Bugs

Reliability A

0 🔒 New Vulnerabilities

Security A

20 🛡️ New Security Hotspots ⓘ

0.0% Reviewed

Security Review E

2h 58min Added Debt

24 🕒 New Code Smells

Maintainability A

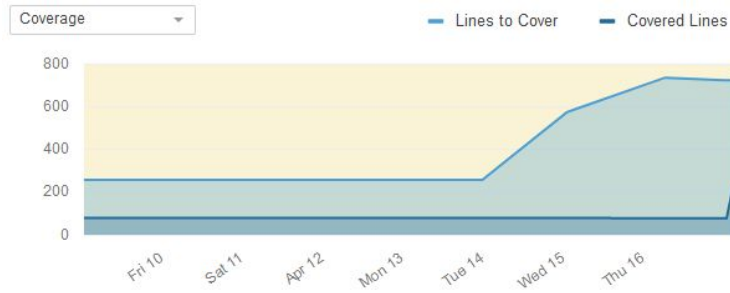
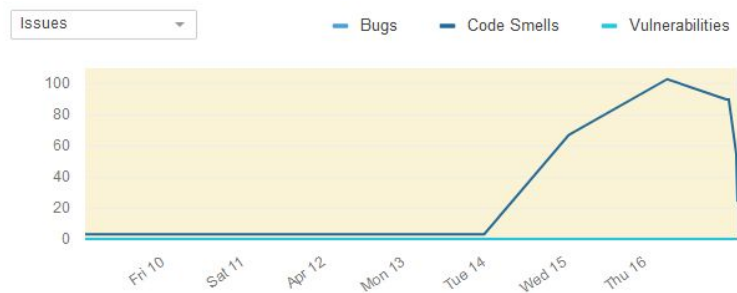
38.7%

Coverage on 721 New Lines to cover

1.5%

Duplications on 2.7k New Lines


Sonarqube review in depth





Jenkins

Jenkins


 **Jenkins**

search ?













admin log out

Jenkins




enable auto refresh

 [add description](#)

All +

S	W	Name ↓	Last Success	Last Failure	Last Duration	
		Inventory_Management_System	4 days 19 hr - #5	4 days 19 hr - #4	44 sec	
		Inventory_Management_System(dev)	2 days 17 hr - #8	2 days 18 hr - #6	22 sec	
		maven-tutorial-fm	10 days - #8	11 days - #6	28 sec	
		SnakeBuilder	N/A	10 days - #4	2.1 sec	

Icon: [S](#) [M](#) [L](#)

[Legend](#)  [Atom feed for all](#)  [Atom feed for failures](#)  [Atom feed for just latest builds](#)

Build Queue

No builds in the queue.

Build Executor Status

1 Idle
2 Idle

Jenkins

Build

Execute Windows batch command

Command `mvn clean package test`

See [the list of available environment variables](#)

Advanced...



























Execute Windows batch command

Command `mvn sonar:sonar --define sonar.host.url=http://35.246.40.69:9000 --define sonar.login.admin=admin --define sonar.password=admin`

See [the list of available environment variables](#)

Advanced...

Jenkins

Build		Time Since ↑	Status	
	Inventory_Management_System(dev) #8	2 days 19 hr	stable	
	Inventory_Management_System(dev) #7	2 days 20 hr	back to normal	
	Inventory_Management_System(dev) #6	2 days 21 hr	broken since this build	
	Inventory_Management_System(dev) #5	2 days 22 hr	stable	
	Inventory_Management_System(dev) #4	2 days 23 hr	stable	
	Inventory_Management_System(dev) #3	3 days 16 hr	stable	
	Inventory_Management_System(dev) #2	3 days 16 hr	stable	
	Inventory_Management_System(dev) #1	4 days 21 hr	stable	
	Inventory_Management_System #5	4 days 21 hr	back to normal	
	Inventory_Management_System #4	4 days 22 hr	broken for a long time	
	Inventory_Management_System #3	4 days 22 hr	broken for a long time	
	Inventory_Management_System #2	4 days 22 hr	broken for a long time	
	Inventory_Management_System #1	4 days 22 hr	broken since this build	



Bug fixes

Bug fixes

```
order
INFO - What would you like to do with order:
INFO - CREATE: To save a new item into the database
INFO - READ: To read an item from the database
INFO - UPDATE: To change an item already in the database
INFO - DELETE: To remove an item from the database
INFO - RETURN: To return to domain selection
create
INFO - Please enter a customer_id
1
INFO - Please enter a total_price
50
INFO - Please enter a item_id
1
DEBUG - [Ljava.lang.StackTraceElement;@6c61a903
ERROR - Unknown column 'item_id' in 'field list'
INFO - Customers created
INFO - Task finished.
```

```
INFO - Which entity would you like to use?
INFO - CUSTOMER: Information about customers
INFO - ITEM: Individual Items
INFO - ORDER: Purchases of items
INFO - ORDERLINE: Manage lists of items
INFO - STOP: To close the application
order
INFO - What would you like to do with order:
INFO - CREATE: To save a new item into the database
INFO - READ: To read an item from the database
INFO - UPDATE: To change an item already in the database
INFO - DELETE: To remove an item from the database
INFO - RETURN: To return to domain selection
update
INFO - Please enter the order_id of the order you would like to update:
1
INFO - Please enter a customer_id
1
INFO - Please enter a total_price
125
INFO - Please enter a item_id
2
DEBUG - [Ljava.lang.StackTraceElement;@6d7fc27
ERROR - Unknown column 'item_id' in 'field list'
INFO - Customers Updated
INFO - Task finished.
```

Bug fixes

```
INFO - Which entity would you like to use?
INFO - CUSTOMER: Information about customers
INFO - ITEM: Individual Items
INFO - ORDER: Purchases of items
INFO - ORDERLINE: Manage lists of items
INFO - STOP: To close the application
orderidline
INFO - What would you like to do with orderline:
INFO - CREATE: To save a new item into the database
INFO - READ: To read an item from the database
INFO - UPDATE: To change an item already in the databa
INFO - DELETE: To remove an item from the database
INFO - RETURN: To return to domain selection
create
INFO - Please enter an order_id
1
INFO - Please enter an item_id
1
DEBUG - [Ljava.lang.StackTraceElement;@4f74980d
ERROR - Column count doesn't match value count at row
INFO - OrderLine created
INFO - Task finished.
```

```
orderidline
INFO - What would you like to do with orderline:
INFO - CREATE: To save a new item into the database
INFO - READ: To read an item from the database
INFO - UPDATE: To change an item already in the databa
INFO - DELETE: To remove an item from the database
INFO - RETURN: To return to domain selection
update
INFO - Please enter the order_id of the orderLine you
1
INFO - Please enter a item_id
2
DEBUG - [Ljava.lang.StackTraceElement;@6e15fe2
ERROR - Illegal operation on empty result set.
INFO - OrderLine Updated
INFO - Task finished.
```



Version Control

Version control

Femarleycode / Inventory_Management_System

Unwatch

1

Unstar

1

Fork

0

Code

Issues 0

Pull requests 0

Actions

Projects 0

Wiki

Security

Insights

Settings

An inventory management application using JDBC to access SQL in a GCP instance. CI Pipelines used. // Useful for somebody with little knowledge of SQL syntax.

Edit

Manage topics

25 commits

5 branches

0 packages

0 releases

1 contributor

MIT

We found a potential security vulnerability in one of your dependencies.

Only the owner of this repository can see this message.

View security alert

Branch: master

New pull request

Create new file

Upload files

Find file

Clone or download

Femarleycode

Merge pull request #7 from Femarleycode/develop

Latest commit 92109f0 12 minutes ago

src	21st commit, codesmells proper name convention	3 days ago
.gitignore	1st commit, added items, orders and edited customers	5 days ago
LICENSE.md	1st commit, added items, orders and edited customers	5 days ago
README.md	24th, README update	12 minutes ago
pom.xml	edited pom properly	5 days ago

README.md

Coverage: 38.7%

Inventory Management System

An application to create, read, update and delete records for a phone store

Version control

Git bash

```
Felix@DESKTOP-CNP6M84 MINGW64 ~/eclipse-workspace/inventory_managment_system2 (develop)
$ git branch
  codesmells
* develop
  feature
  master

Felix@DESKTOP-CNP6M84 MINGW64 ~/eclipse-workspace/inventory_managment_system2 (develop)
$ git status
On branch develop
Your branch is up to date with 'origin/develop'.

nothing to commit, working tree clean

Felix@DESKTOP-CNP6M84 MINGW64 ~/eclipse-workspace/inventory_managment_system2 (develop)
$
```

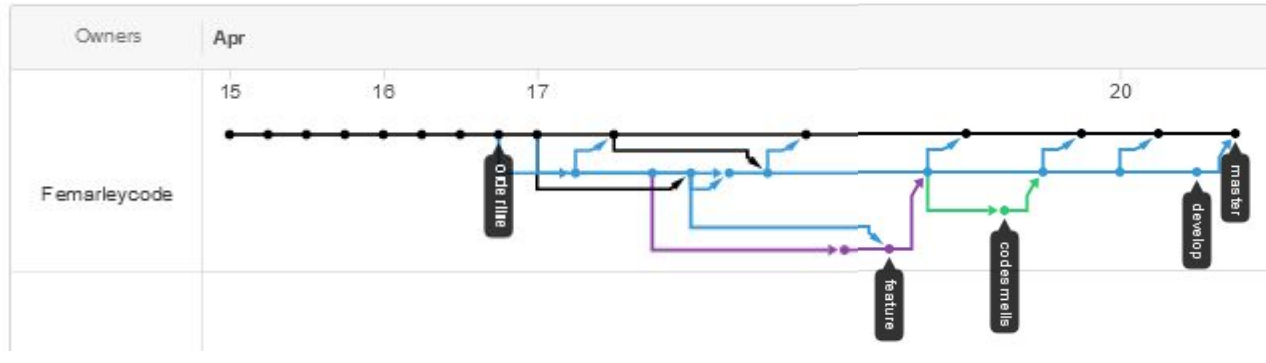
Directory layout

eclipse-workspace > inventory_managment_system2			
Name	Date modified	Type	Size
.dbeaver	14/04/2020 16:45	File folder	
.git	20/04/2020 09:26	File folder	
.settings	15/04/2020 12:37	File folder	
src	14/04/2020 12:29	File folder	
target	15/04/2020 12:39	File folder	
.classpath	14/04/2020 12:31	CLASSPATH File	2 KB
.gitignore	15/04/2020 10:22	Text Document	1 KB
.project	14/04/2020 12:31	PROJECT File	1 KB
LICENSE.md	14/04/2020 12:29	Markdown Source...	2 KB
log-file.log	17/04/2020 14:42	Text Document	133 KB
pom.xml	15/04/2020 12:41	XML Document	4 KB
README.md	20/04/2020 09:26	Markdown Source...	2 KB

Version control

Network graph

Timeline of the most recent commits to this repository and its network ordered by most recently pushed to.



Version control

21st commit, codesmells proper name convention Femarleycode committed 3 days ago	Verified	7ac0ad2	<>
Merge pull request #4 from Femarleycode/develop Femarleycode committed 3 days ago	Verified	45ed89d	<>
Merge pull request #3 from Femarleycode/feature Femarleycode committed 3 days ago	Verified	2dadece	<>
Merge branch 'feature' of https://github.com/Femarleycode/Inventory_M... Femarleycode committed 3 days ago		b14c096	<>
17th commit, large testing update Femarleycode committed 3 days ago		972a43e	<>
Merge pull request #2 from Femarleycode/develop Femarleycode committed 3 days ago	Verified	81d9fb1	<>
Merge branch 'master' into develop Femarleycode committed 3 days ago	Verified	3c7bb2e	<>
Merge pull request #1 from Femarleycode/feature Femarleycode committed 3 days ago	Verified	fd6699f	<>
Merge branch 'develop' into feature Femarleycode committed 3 days ago	Verified	a0aa2cb	<>
code smells - var names & testing Femarleycode committed 3 days ago		917a857	<>
merging tests Femarleycode committed 3 days ago		48cc11a	<>
10th commit, testing for custs and items Femarleycode committed 3 days ago		d9de70a	<>
9th commit, updated orders, cleaned up comments, bugfixes, grammar ch... Femarleycode committed 3 days ago		1432f01	<>



Areas for improvement

Areas for improvement

- Calculate
- Testing coverage at 80%
- Orderline
- Security (SQL injection)



Conclusion

Conclusion

- Coding fundamentals
- Databases
- Developer tools
- Syntax

Thank you

README.md

Coverage: 38.7%

Inventory Management System

An application to create, read, update and delete records for a phone store

Built With

- [Maven](#) - Dependency Management

Versioning

[SemVer](#) has been used for versioning.

Authors

Felix Marley - Author - [Femarleycode](#)

License

This project is licensed under the MIT license - see the [LICENSE.md](#) file for details

For help in [Choosing a license](#)

Acknowledgments

Chris Perrins - *Provided a basis for the project* - [christopherrins](#), basis can be found [here](#)

Nicholas Johnson - *Software trainer* - [nickstewarttds](#)

Jordan Harrison - *Java trainer* - [JHarry444](#)

Korbinian Ring - *Help and idea generation* - [KMRRingQA](#)

Caroline Strassenburgh - *Guidance and planning* - [CarolineS-QA](#)

Luke Conway - *Provided help with Java syntax* - [ConwayQA](#)

Christian Redfern - *Also provided help with Java* - [Christcr](#)

David Williams - *Java support* - [DavidWilliamsQA](#)

Tawanda Siyamachira - *Project management advice* - [TSiyamachiraQA](#)

Inventory Management System
