

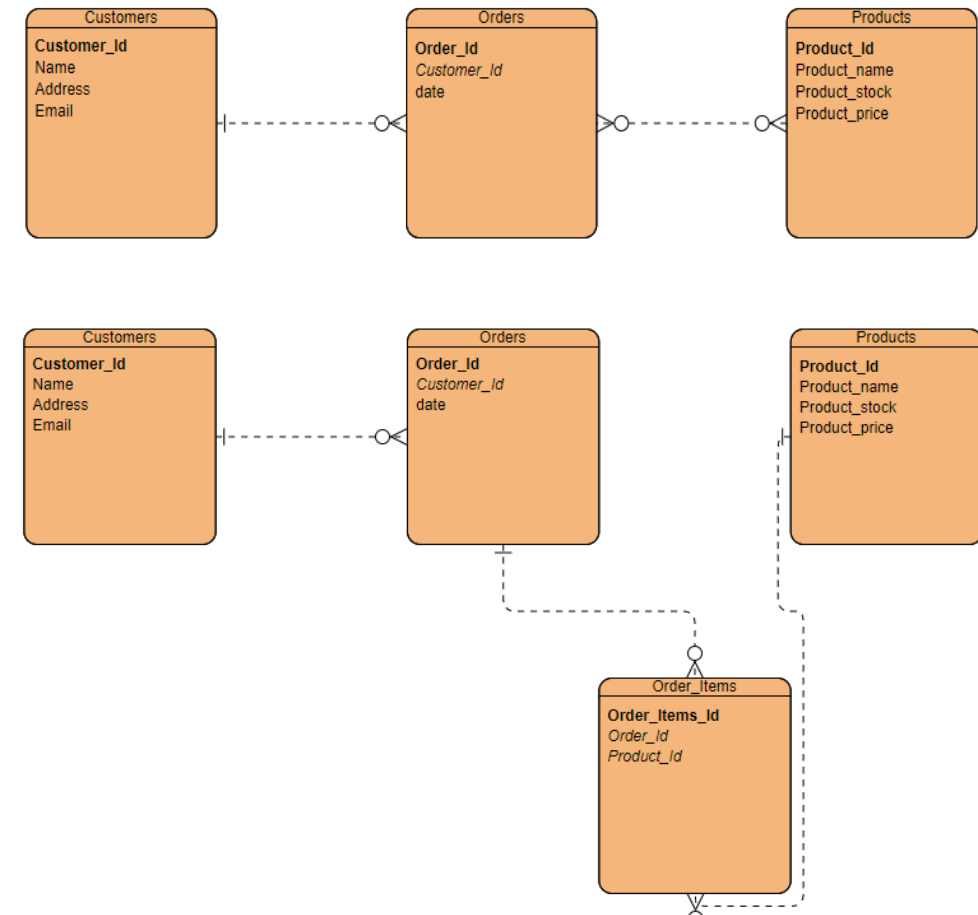
# Inventory Management System



Risk	Response Strategy	Likelihood (1-5)	Impact	Risk Level
There is the risk of not saving work often enough which could cause work to be lost in the event of software/computer crashing	Periodically save the work to ensure that the work completed does not get lost in the event of something crashing.	1	High	50%
There is the risk of falling behind in the project due to utilizing unfamiliar programs	Ensure that the functionality of the program is understood prior to using the program and do some further reading on the program to ensure full understanding of the capabilities and limitations of the program	2	Medium	30%
Not having enough time	Plan thoroughly through daily/weekly sprints with tasks each with their own estimations on effort	3	High	60%
Technical issues with my PC	Ensure to push to github frequently and ensure the documentation on the local computer is backed up on a separate storage device or on cloud storage.	1	High	25%

# Design

- UML Diagram is available to view in the documentation folder in the github



# Kanban Board

The screenshot displays the Jira Kanban board for a project named 'QA-Project'. The interface is organized into several sections:

- Header:** Includes the Jira Software logo, navigation tabs (Your work, Projects, Filters, Dashboards, People, Apps), a 'Create' button, and a search bar.
- Left Sidebar:** Contains navigation links for 'QA-Project', 'QAP board', 'Kanban board' (selected), 'Reports', 'Issues', 'Components', 'Code', 'Releases', 'Project pages', 'Add item', and 'Project settings'.
- Breadcrumbs:** Shows the path 'Projects / QA-Project / QAP board'.
- Board Title:** 'Kanban board' with a search icon and filters for 'Only My Issues', 'Recently Updated', and 'Clear all'.
- Columns:**
  - BACKLOG 10:** Contains 7 issues (QAP-9, QAP-3, QAP-4, QAP-5, QAP-1, QAP-11) with user avatars and priority indicators.
  - SELECTED FOR DEVELOPMENT 4:** Contains 4 issues (QAP-6, QAP-7, QAP-8, QAP-10). Issue QAP-10 is highlighted in blue.
  - IN PROGRESS 0:** Currently empty.
  - DONE 0:** Currently empty, with a message: 'We're only showing recently modified issues. [Looking for an older issue?](#)'
- Bottom Right:** A 'Quickstart' button.

# Kanban Board

The screenshot displays the Jira Kanban board for the 'QA-Project'. The interface includes a top navigation bar with 'Jira Software', 'Your work', and various filters. A left sidebar lists project components like 'QA-Project', 'QAP board', and 'Kanban board'. The main area shows the 'Kanban board' with columns for 'BACKLOG 6', 'SELECTED FOR DEVELOPMENT 4', 'IN PROGRESS 0', and 'DONE 4'. Each column contains user stories (issues) with their IDs (e.g., QAP-9, QAP-1, QAP-15). A search bar and filters like 'Only My Issues' are at the top of the board. A 'Quickstart' button is in the bottom right corner.

**Jira Software** Your work **Projects** Filters Dashboards People Apps **Create**

Search

QA-Project  
Classic software project

QAP board  
Board

Kanban board

Reports

Issues

Components

Code

Releases

Project pages

Add item

Project settings

Projects / QA-Project / QAP board

## Kanban board

Search

JB

Only My Issues Recently Updated Clear all

**BACKLOG 6**

- As the user, I want to be able to add a customers details to the system so that they can make orders in the system  
QAP-9
- As the user I want to be able to view all customers in the system so that I can see how many people there are  
QAP-3
- As the user, I want to be able to update a customers details because they may have some changes that need to be recorded in the system  
QAP-4
- As the user, I want to be able to delete a customer from the system as they may not be needed in the system anymore  
QAP-5
- As the customer I need to be able to see the total cost of an order so that I know how much to pay for the order  
QAP-14
- As the user I need to be able to remove an item from an order because the customer may not require the item in the order anymore  
QAP-15

**SELECTED FOR DEVELOPMENT 4**

- As a customer I need to be able to place an order so that I can pick up or have the product delivered  
QAP-1
- As the user I need to be able to view all the orders in the system so that I can see how many orders need to be fulfilled  
QAP-11
- As the user I need to be able to delete an order from the system because it may have been cancelled by the customer  
QAP-12
- As the user I need to be able to add an item to an order because it may be included by the customer in the order  
QAP-13

**IN PROGRESS 0**

**DONE 4**

- As the user I want to be able to add an item to the system because there may be new stock available for customers  
QAP-6
- As the user I want to be able to update an item in the system because they may have some changes that the customer needs to be aware of  
QAP-7
- As a user I need to be able to delete an item because it may not be available for purchase anymore  
QAP-8
- As the user I need to be able to view all the items in the system so that I can see what products are available for sale and the ones that are out of stock  
QAP-10

We're only showing recently modified issues.  
[Looking for an older issue?](#)

**Quickstart**

# Kanban Board

The screenshot displays the Jira Kanban board for the QA-Project. The interface includes a top navigation bar with 'Jira Software', 'Your work', and various filters. A left sidebar lists project navigation options like 'QA-Project', 'QAP board', and 'Kanban board'. The main area shows the 'Kanban board' with columns for 'BACKLOG 6', 'SELECTED FOR DEVELOPMENT 0', 'IN PROGRESS 2', and 'DONE 6'. Each column contains user stories with their respective IDs (e.g., QAP-9, QAP-13, QAP-6). A 'Quickstart' button is visible in the bottom right corner.

**Jira Software** Your work **Projects** Filters Dashboards People Apps **Create**

Search

QA-Project  
Classic software project

QAP board  
Board

Kanban board

Reports

Issues

Components

Code

Releases

Project pages

Add item

Project settings

Projects / QA-Project / QAP board

## Kanban board

Only My Issues Recently Updated Clear all

**BACKLOG 6**

- As the user, I want to be able to add a customers details to the system so that they can make orders in the system  
QAP-9
- As the user I want to be able to view all customers in the system so that I can see how many people there are  
QAP-3
- As the user, I want to be able to update a customers details because they may have some changes that need to be recorded in the system  
QAP-4
- As the user, I want to be able to delete a customer from the system as they may not be needed in the system anymore  
QAP-5
- As the customer I need to be able to see the total cost of an order so that I know how much to pay for the order  
QAP-14
- As the user I need to be able to remove an item from an order because the customer may not require the item in the order anymore  
QAP-15

**SELECTED FOR DEVELOPMENT 0**

**IN PROGRESS 2**

- As the user I need to be able to view all the orders in the system so that I can see how many orders need to be fulfilled  
QAP-11
- As the user I need to be able to add an item to an order because it may be included by the customer in the order  
QAP-13

**DONE 6**

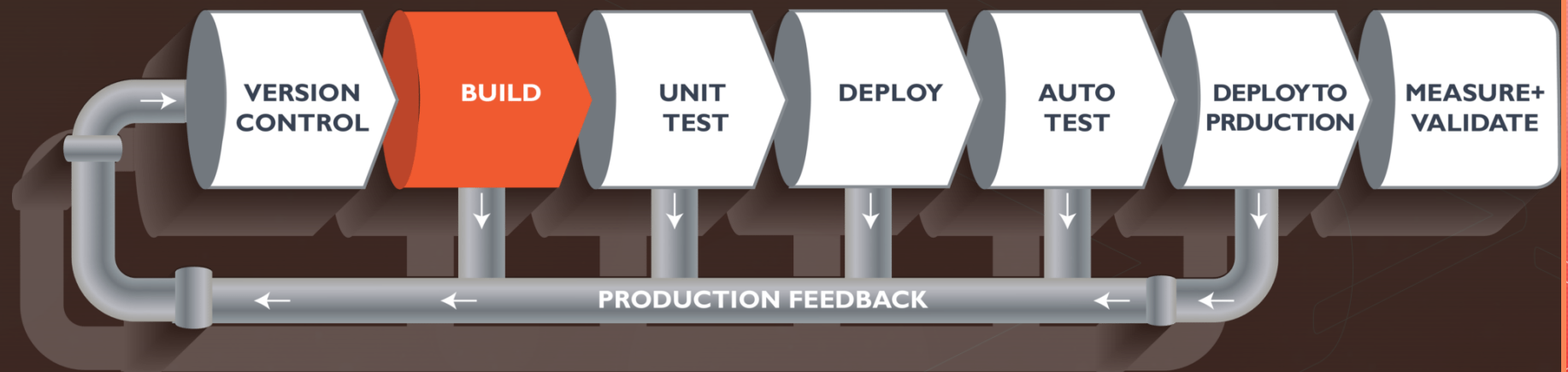
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QAP-10
- As a customer I need to be able to place an order so that I can pick up or have the product delivered  
QAP-1
- As the user I need to be able to delete an order from the system because it may have been cancelled by the customer

**Quickstart**



# CI Pipeline

- I. Begin with the database server
- II. Java source code
- III. VCS (Version Control System) - Project gets tracked through Jira/Trello
- IV. CI Server such as Jenkins
- V. Build tool – Maven when using Java
- VI. Automated testing – Junit/Mockito





# Consultant Journey

Agile – Kanban board, SCRUM methodology

Source Control – Git and GitHub

Database – MYSQL through MYSQL Workbench

Programming Language – Java

Build tool – Maven

Testing – Mockito and Junit



# Testing

- 83.7% test coverage
- 33/33 tests run successfully

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
ims	83.7 %	3,934	764	4,698
src/main/java	70.8 %	1,842	761	2,603
com.qa.ims.persistence.domain	62.4 %	383	231	614
Domain.java	0.0 %	0	105	105
Orders.java	77.5 %	165	48	213
Items.java	73.3 %	121	44	165
Customer.java	74.0 %	97	34	131
com.qa.ims	0.0 %	0	173	173
IMS.java	0.0 %	0	157	157
Runner.java	0.0 %	0	16	16
com.qa.ims.controller	75.0 %	497	166	663
Action.java	0.0 %	0	119	119
OrdersController.java	82.3 %	219	47	266
CustomerController.java	100.0 %	110	0	110
ItemsController.java	100.0 %	168	0	168
com.qa.ims.persistence.dao	85.7 %	790	132	922
CustomerDAO.java	74.7 %	183	62	245
ItemsDAO.java	77.8 %	217	62	279
OrderDAO.java	98.0 %	390	8	398
com.qa.ims.utils	74.5 %	172	59	231
Utils.java	33.3 %	23	46	69
DBUtils.java	92.0 %	149	13	162
src/test/java	99.9 %	2,092	3	2,095





**DEMO**

# Sprint Review

- What went well:
- Getting CRUD functionality out of each object.
- Keep track of what is left to be completed
- Testing turned out to be slightly above the industry standard
- What didn't go well:
- Some features could be improved on
- Some features were implemented but not accessible
- Slightly better time management



# Improvements

- Implementing Jira with GitHub from start of project
- Planning poker
- More in-depth risk assessment