

IMS Presentation

Fowsia Bilkeer

22APREnable1

Introduction

- The purpose of this presentation is to show how we were able create an application which would be functional and used all the modules that were taught in the first four weeks.
- Agile & Project Management
- Databases
- Cloud Fundamentals
- Programming Fundamentals

RISK

Risk Matrices						
	Negligible	Minor	Major	Hazardous	Catastrophic	
Very Unlikely	Low	Low medium	Low medium	Medium	Medium	
Unlikely	Low	Low Medium	Low medium	Medium	Medium High	
Moderate	Low	Low Medium	Medium	Medium High	Medium High	
Likely	Low	Low medium	Medium	Medium high	High	
Very Likely	Low medium	Medium	Medium high	High	High	
Risk	Statement	Response	Objective	Likelihood	Impact	Risk Level
GitHub servers being down	There was an issue with the GitHub servers as they were not working and allowing access.	Make sure I regularly check the GitHub status	Make sure my remote repository is up to date with my current git hub repository. Do this throughout the day.	Very unlikely	Catastrophic	Medium
Mentor is not present	My mentor went away on holiday the week that I was working on my project.	Contact some of the previous trainers to see if they would be able to shadow me.	Do some of research relating to the project. Also use the resources on QA community.	Moderate	Minor	Low Medium
Coming down with an illness	I was recently exposed to COVID and have been experiencing a few of the symptoms related to it.					
Not being able to find a good topic	As I have been researching, I have not been able to find a good topic to use as part of my project.	Go through possible ideas with mentors.	Narrow in on the topic that sounds most interesting.	Moderate	Minor	Medium
Office closed due to a fire scare	There was an emergency at the office, a fire scare occurred. Offices had to be shut.	Make sure the fire drill is conducted. And everyone knows where to go for their safety.	Find a coffee shop that I can complete the work in.	Unlikely	Major	Medium
office closing due to COVID outbreak	A new strain of COVID has been found. Which has caused the offices to close.	Make sure I am staying safe by following the precautions.	Keep up with the news. And follow the guidelines set by the government.	Moderate	Minor	Medium
Stuck in traffic	A major accident occurred on the A206 on my way to work which caused a lot of traffic.	Ensure I keep up with any road works/accidents.	Find alternative routes to take.	Moderate	Minor	Low
Water spilling over the laptop	A colleague accidentally knocked over a glass of water which went all over my laptop.	Make sure there aren't any	Remove any cups that are filled with water.	Unlikely	Catastrophic	Medium
Laptop malfunctioning	My laptop has been a little slow, it would not turn on properly today.	Ensure I check my computer's health regularly.	Keep an eye on the computer's health and	Unlikely	Hazardous	Medium

			close any applications that aren't being used.			
Internet connection not working	There was a problem with my internet connection as there was maintenance being carried out in my area.	Make sure I have a strong internet provider.	Ensure that the Wi-Fi I'm using is strong. Could potentially use my phone hotspot.	Unlikely	Hazardous	Medium

End of document

MoSCoW

MoSCoW Prioritisation.

Must have

- Done the necessary research need for the items that are being sold.
- Look into the type of sweets needed.
- Look into the manufacturers that we could possibly use.
- The items need to show the materials that they're made from.
- The products in the store that are being sold

Should have

- The availability of the products
- The products should have the ID on it.
- We should have categories for the different sweet brands/prices.
- The items should show the pricing
- Replenish the stock

Could have

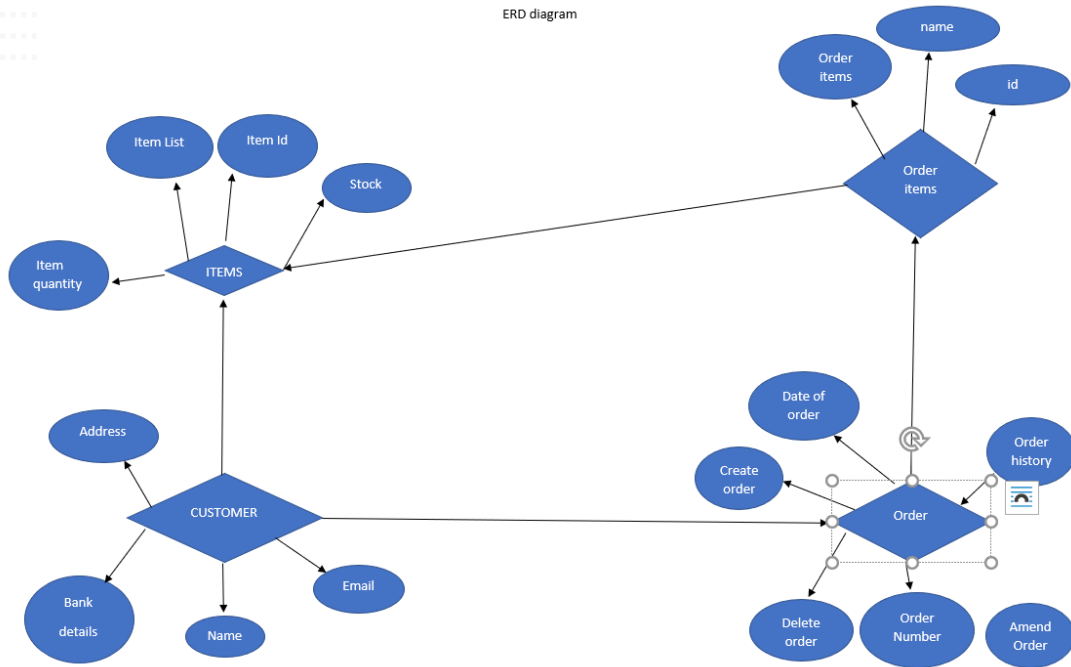
- A range of different sweets that were popular in the 90's
- Extra data conducted to round of the results you are expecting.

Won't have

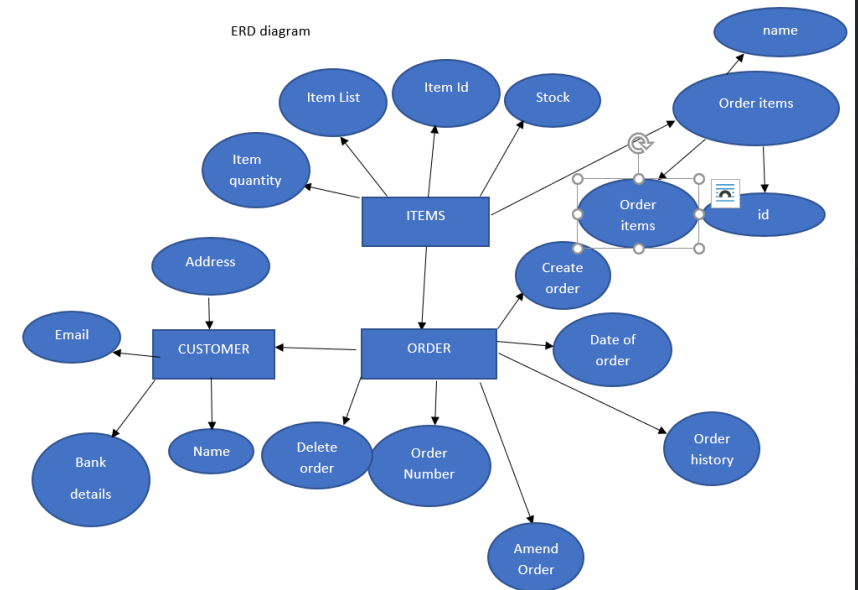
- We don't really need to source manufacturers from other parts of the world.
- We do not need have a list of sweets greater than 25
- We do not need to exceed the price category that has been set.

ERD

ERD diagram

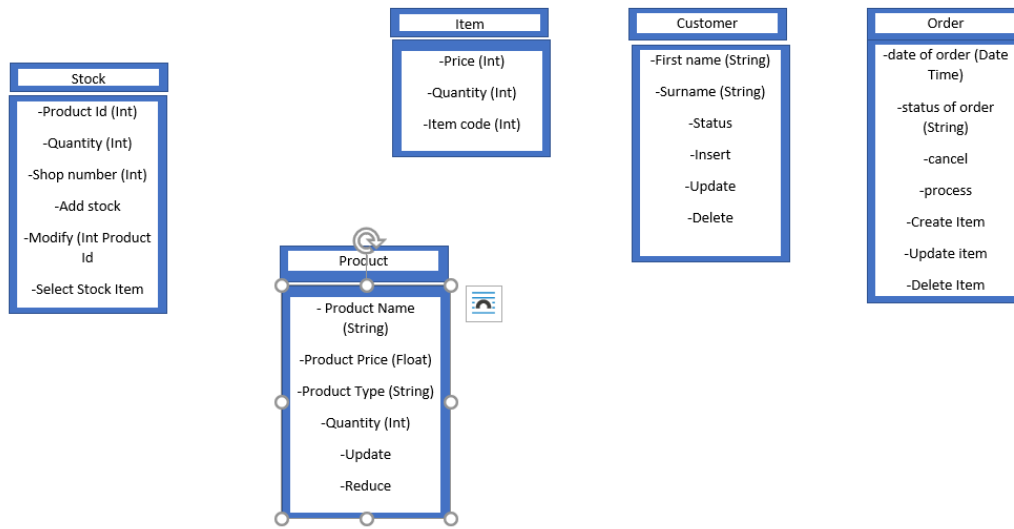


ERD diagram



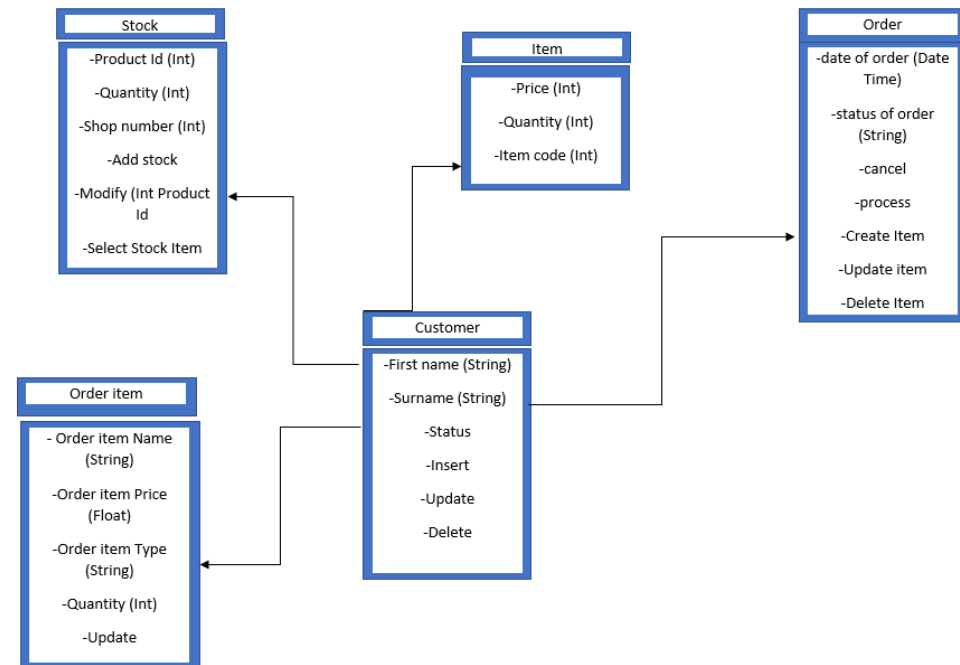
UML Class

UML diagram



Before adding the code to eclipse. And creating the tables in mySQL.

UML diagram



After completing the coding in eclipse.

Sprints

Projects / First Project

FP Sprint 1

FB

Epic ▾

Type ▾

TO DO

IN PROGRESS 3 ISSUES

Research the different categories and what type of sweets are available.
RESEARCH
FP-33 2 = FB

Research the health hazards
RESEARCH
FP-34 1 > FB

When looking at possible sweet manufacturers I decided to stick with manufacturers found within the UK.
FP-43 FB

DONE 4 ISSUES ✓

Research different sweets websites
RESEARCH
FP-31 ✓ 2 < FB

I looked at websites such as sweet store, one pound sweet shop and amazon to find some of the sweet that are currently in the market
FP-41 ✓ FB

Research the type of sweets that are popular
RESEARCH
FP-32 ✓ 1 < FB

Tasks

Projects / First Project

FP Sprint 1



Epic ▾

Type 1 ▾

Clear filters

☐ Story

☒ Task

TO DO

IN

When looking at possible sweet manufacturers I decided to stick with manufacturers found within the UK.

☒ FP-43



DONE 1 OF 4 ISSUE ✓



I looked at websites such as sweet store, one pound sweet shop and amazon to find some of the sweet that are currently in the market

☒ FP-41



User Stories

▼ FP Sprint 1 3 May – 6 May (5 of 7 issues visible) 0 3 6 Complete sprint ...

FP-31 Research different sweets websites	RESEARCH	2	^	DONE	FB
FP-32 Research the type of sweets that are popular	RESEARCH	1	^	DONE	FB
FP-33 Research the different categories and what type of sweets are available.	RESEARCH	2	=	IN PROGRESS	FB
FP-34 Research the health hazards	RESEARCH	1	^	IN PROGRESS	FB
FP-35 Research toy manufacturers	RESEARCH	3	=	DONE	FB

+ Create issue

▼ FP Sprint 3 Add dates (4 issues) 0 1 0 Start sprint ...

FP-37 Items should have a productID	ITEMS			IN PROGRESS	FB
FP-27 Each item should have the pricing on it.	ITEMS			IN PROGRESS	FB
FP-38 Each item should be in a category separated by the age of a child.	ITEMS			IN PROGRESS	FB
FP-39 Each item should show the material it is made from.	ITEMS	1	^	IN PROGRESS	FB






+ Create issue

User Stories

▼ FP Sprint 2  Add dates (5 issues)

0 9 0 Start sprint










- | | |
|---|----------------------|
|  FP-10 Customers should be able to order from the CLI easily. CUSTOMER | 1 = IN PROGRESS ▾ FB |
|  FP-9 Customers should be able to track their orders. CUSTOMER | 2 = IN PROGRESS ▾ FB |
|  FP-11 Customers should be able to cancel orders easily from the CLI. CUSTOMER | 3 = IN PROGRESS ▾ FB |
|  FP-24 Customers should be able to check toys that are in stock. CUSTOMER | = IN PROGRESS ▾ FB |
|  FP-40 Customers should be able to check the material of the toy. CUSTOMER | 3 = IN PROGRESS ▾ FB |

▼ FP Sprint 4  Add dates (7 issues)

0 0 0 Start sprint



- | | |
|---|--------------------|
|  FP-16 Each order item must have a order ID ORDERS | = IN PROGRESS ▾ FB |
|  FP-25 Stores should be able to create an order if a customer comes in. ORDERS | = IN PROGRESS ▾ FB |
|  FP-22 An order needs to be amended. ORDERS | = IN PROGRESS ▾ FB |
|  FP-26 Be able to cancel orders ORDERS | = IN PROGRESS ▾ FB |
|  FP-21 Be able to access customer order history ORDERS | = IN PROGRESS ▾ FB |
|  FP-28 Price listing of every item they offer ORDERS | = IN PROGRESS ▾ FB |
|  FP-18 Stock must be replenished when running low. ORDERS | = IN PROGRESS ▾ FB |

+ Create issue

GitHub

- Forking the repository
- Creating multiple feature branches which we had to push our working codes to. And finally pushing that to the dev branch and then to the main branch.

Developer Journey

The learning on this course has been very intense but interesting. I have really enjoyed the concepts I have learnt so far.

Coding has been quite challenging but with the help of the trainers I am slowly starting to understand it.

QA has definitely created an atmosphere where you do not have to suffer with the workload on your own as they are quite big on team work.

Test Coverage

- The aim of the functional application was to aim for at least 80% coverage.

CRUD

- Create
- Read
- Update
- Delete

```
public class ItemDAO implements Dao<Item> {

    public static final Logger LOGGER = LogManager.getLogger();
    private Connection conn;
    private Statement statement;

    • public ItemDAO() throws SQLException {
        this.conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/ims", "root", "Fbilkeer");
        this.statement = conn.createStatement();
    }

    • public void createPerson(String itemName, double itemPrice) throws SQLException {
        String sql = String.format("CREATE TABLE item(`item_name`, `item_price`) VALUES ('%s', '%d');", itemName, itemPrice);
        statement.executeUpdate(sql);
    }

    • public List<Item> readAll() {
        try (Connection connection = DBUtils.getInstance().getConnection();
            Statement statement = connection.createStatement();
            ResultSet resultSet = statement.executeQuery("SELECT * FROM Items");) {
            List<Item> items = new ArrayList<>();
            while (resultSet.next()) {
                items.add(modelFromResultSet1(resultSet));
            }
            return items;
        } catch (SQLException e) {
            LOGGER.debug(e);
            LOGGER.error(e.getMessage());
        }
        return new ArrayList<>();
    }

    • @Override
    public Item modelFromResultSet1(ResultSet resultSet) throws SQLException {
        Long id = resultSet.getLong("item_id");
        String item_name = resultSet.getString("item name");
        String item_price = resultSet.getString("item_price");
        return new Item(id, item_name, item_price);
    }
}
```