

A decorative graphic on the left side of the slide consisting of white lines and circles on a blue gradient background, resembling a circuit board or a stylized tree structure.

IMS PROJECT – SOFTWARE CORE FUNDAMENTAL

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INTRODUCTION

- The brief was to build an IMS that utilised CRUD functionality and stored information in a mySQL database, whilst implementing various other things we have learned.
- Initially, I reviewed the brief deciding on what my MVP was and how I would approach the project.
- First I set up a jira project.

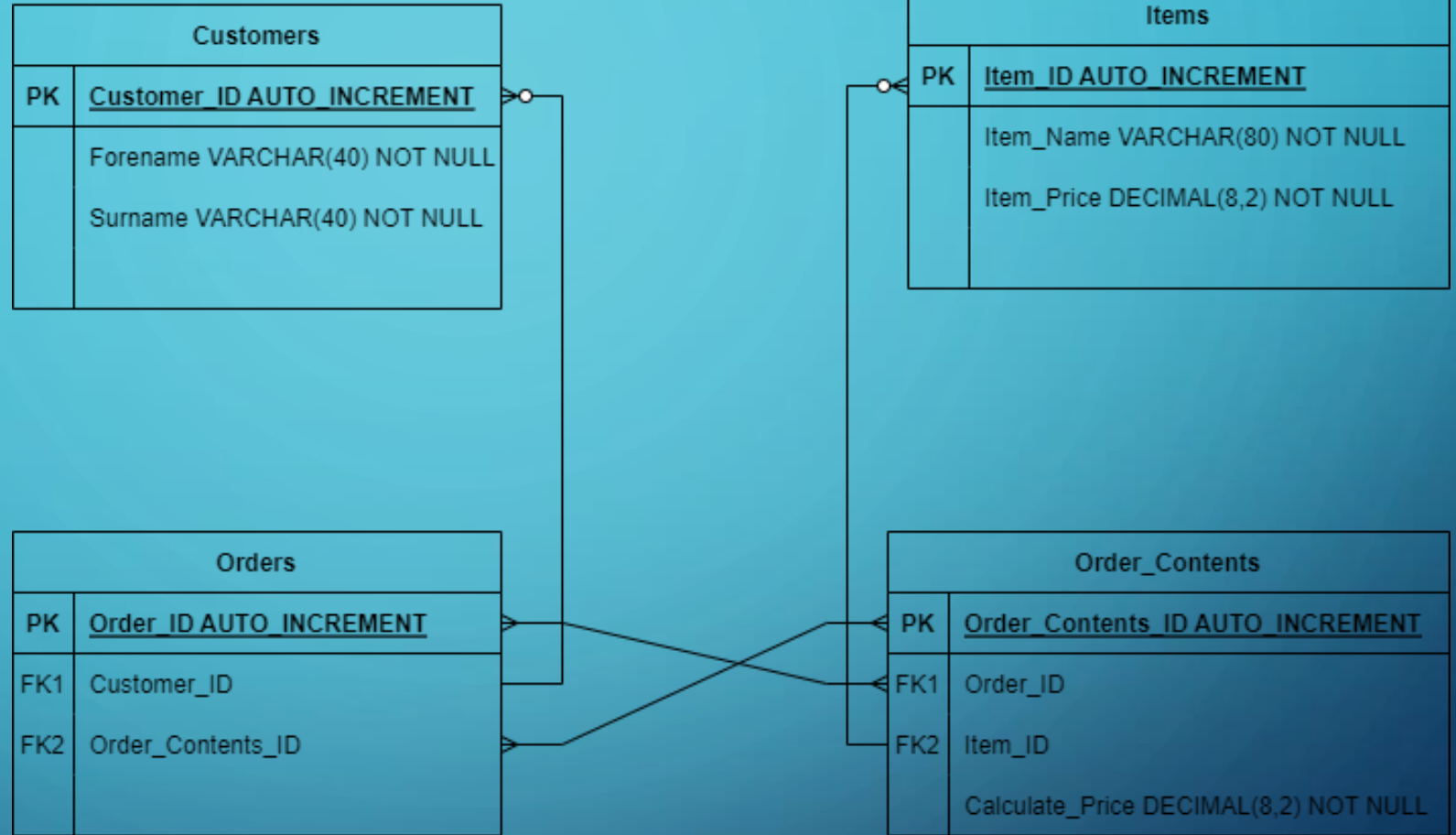
JIRA

- Jira is a tracking program used by developers to plan/track their progress. It enables Agile and makes it good for software development. I utilised the scrum frameworks with a kanban board as suggested by our brief
- Now, I will display and discuss what I did in jira:
 - (This bit is unscripted- exciting!... I'm going to leave myself some pointers : user stories, epics, labels, story points, sprints, kanban board with acceptance criteria and definition of done)

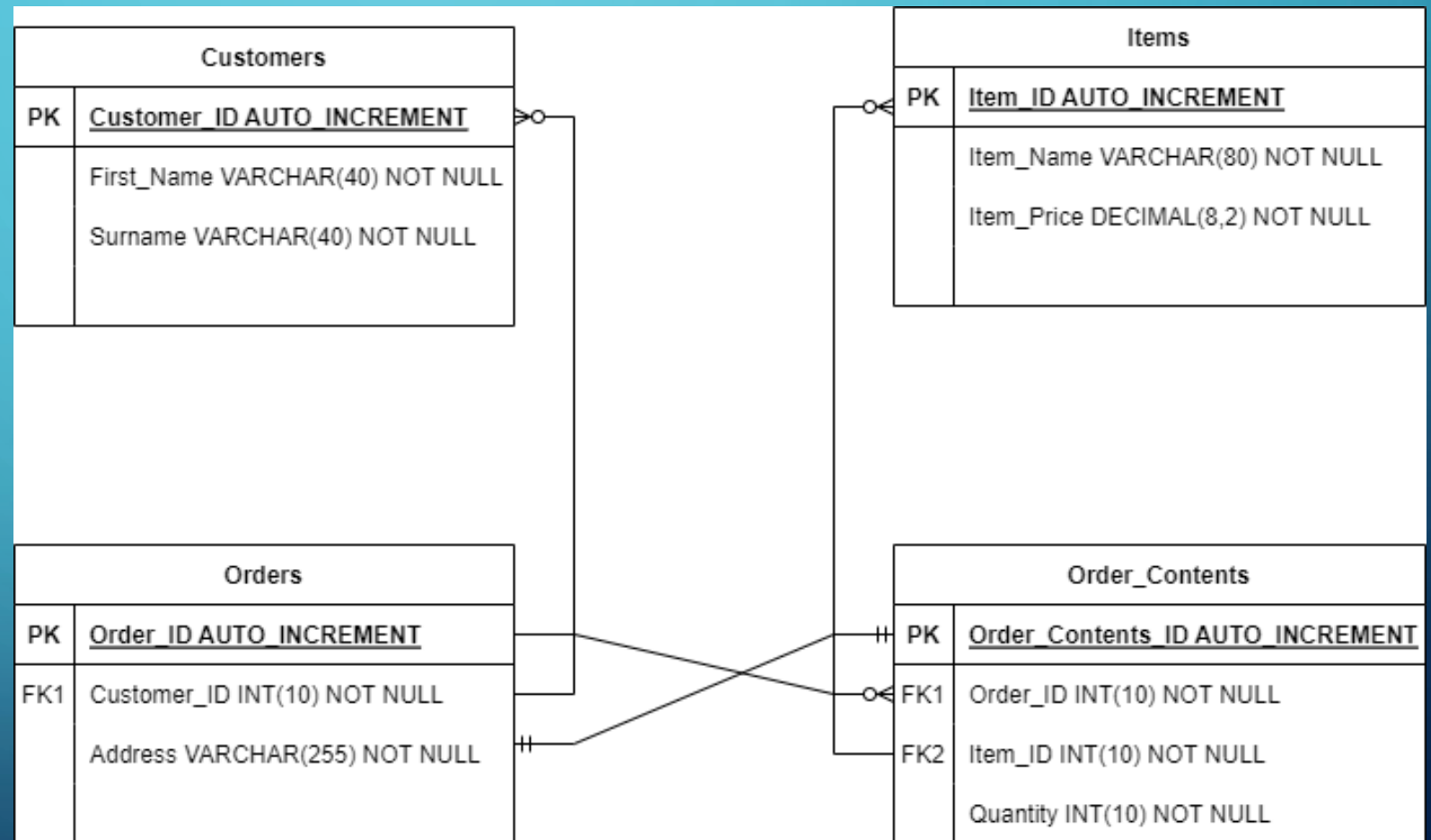
ERD

- Next, I created an entity-relationship diagram based on how I thought I would design the project. I considered the most logical approach within my capabilities, explored the various different options for the tables and thought about their relationship.

ERD-INITIAL



ERD-FINAL



CODEBASE DEMO

- Demonstration
- Key points: CRUD functionality implemented for all parts.

Add item and delete item implemented through orderContents

Nearly there with cost

No testing yet

VERSION CONTROL

- Implemented Feature-branch model through the VCS Git.
- Personally, its helped especially with implementing cost and going back to previous version
- For future: use more features, I was taking a long time to push and completing a significant amount at once.

SPRINT RETROSPECTIVES

- Initially before beginning even though I thought I knew what I was going to do and understood the Java beginner module, I was mistaken. Even on the first day when I read the code I still didn't truly know what was going on, and for I was massively overcomplicating what I thought the MVP was supposed to be.
- Sprint 1 retrospective-
consisted of building the item tables and crud functionality, I found this relatively easy as it was largely similar to the skeleton code but as I was running parts along the way I started to realise exactly what was happening more.
 - As this was largely based on refactoring or mostly repeating the customer functionality, many simple errors were made including spelling and cases. - N
 - Not enough git pushes, only 1 for completing of the whole thing. - N
 - Renaming many variables to a more comprehensible system which included 'id' being renamed with respect to the relative domain classes they were in became useful going into the next sprint. P
 - Made good time in this sprint and also correctly estimated story points - P

SPRINT RETROSPECTIVE CONTINUED...

- Sprint 2 retrospective

Implemented full order table and functionality. Due to what I believed was required based on my ERD logic I also created the same for Order Contents.

- Constructed two more tables very efficiently as I used the same system and method I used in the previous system – P
- Possibly could have reduced the story points based on information from the previous sprint - N

SPRINT RETROSPECTIVE CONTINUED...

- Sprint 3 retrospective

implemented add item, delete item and calculate cost to achieve MVP. This sprint was the longest.

- This sprint made me realise that I didn't quite know what I needed to do and also just how complicated my idea was. My technical ability was good enough for what I initially wanted to do, which I believed we had to do. So I wasted a lot of time figuring out how to get my order table and order contents table to communicate intrinsically to one another. - N
- As I took so long figuring out exactly how I would need to do that, I really explored each file and got to a good understanding of what was happening and eventually realised what I would need to do in order to complete my initial idea. So self-improvement was made which will help future projects and my overall coding ability (but not necessarily for this project!) – P
- Not as good choice of story points – N
- After fully understanding the brief I retrospectively changed my ERD and made the logic much easier and constructed tables that were MVP but were fast to construct and consider. I was able to do this as my understanding and ability increased - P

CONCLUSION

- In the end I overcomplicated the project and confused myself. This leaves me as of right now with MVP without any testing. Hopefully I can complete a fair bit today as I understood the demonstrations.
- However, I think making the mistakes and being forced to spend a long time trying to implement a fancy cost function has really made me understand java and mySQL a lot more.
- Next time, I would like to correctly understand the brief in terms of its MVP primarily. I'd also like to be more time efficient so as to have had more time to test and then implement stretch goals. Other stretch goals that weren't included in brief that I would want to implement are more columns within tables that represent a real inventory system, such as email in customer. I'd also like to use a command line import to improve the appearance of the command line.