**Week03 – JIRA Management Task – QUESTION PAPER**

Complete the following elements concerning the development of the case study called : **FastBurgersNow**

These should be integrated into the development cycle which is for the database.

**Information:**

* Typical sprint is 4-6 weeks in duration – out of sheer convenience we will suggest a 6 week sprint.
* Give equal timings for each of the epics (just from a convenience point of view).
* Create as many stages as needed (your decision) – to correspond to the stages shown below.
* Normally the **group members** are as follows: Product Owner, Scrum master, 3 – 4 Developers ( Suggest we have 3 developers)
* For the outputs – devise at least 3 tasks for each of the epics within the sprint.
* You will need to complete the development cycle on the word document below – a good indicator would be the homework tasks that I assign each week.
* The epics – could be interpreted as being the “Elements” in the first column shown below.
* Create your own sprint – using the scrum template and assign me as one of its members – that means send me an invite to my college email address: john.piperias@edinburghcollege.ac.uk.
* Invent any other details needed to complete a full cycle – for the development of a complete database (backend) system.
* Use my example on Jira as the model which shows the overall structure for the sprint (Using SCRUM template) as the basis for the design.
* Distribute the various issues (tasks) equally into the various columns: To Do, Progress and Done.

SUBMISSION:

Take a screenshot of the Timeline that shows all the Timeline and the Board – this doesn’t need to show all the tasks. Paste this inside this document in the section below.

Your Name: Lewis Girvan

Date: 26/9/24

Course: Relational Databases

Student Number:

**STAGE: Requirements Definition**

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| **Element** | **Tool(s) Used** | **Purpose** | **Timings** | **Outputs** |
| Read the case study and understand how to deaggregate the system into ENTITIES. | Word processor | PROJECT MANAGER: This is the role of the project manager (YOU) – to understand and interpret the requirements from the information you have being given. |  |  |
| Pull the information from the noun process | Word Processor | Working through the case study, highlight the nouns and add them to a separate column |  |  |
| Define the attributes for the elements | Word Processor | Use the data from the noun process define the attributes for the elements in the tables. |  |  |

**STAGE: Analysis**

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|  | **Tool(s) Used** | **Purpose** | **Timings** | **Output** |
| Devise the ERD (Entity Relationship Diagram) – use appropriate logic to construct the ERD. | io.draw | ANALYST: Mostly you are constructing this – so you can understand the database design. |  |  |
| Implement the primary and foreign keys in the tables | Io.draw | Add the primary and foreign keys to the elements on the table items |  |  |
| Link the tables together regarding the links | Io.draw | With the new keys added to the tables use the build in relational symbols link all the tables together |  |  |

**STAGE: Create the data dictionary**

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|  | **Tool(s) Used** | **Purpose** | **Timings** | **Output** |
| Refer to the ERD created to get the table information | MS Excel | Get the information from the ERD to use to implement into the data dictionary |  |  |
| Layout the tables in the data dictionary | MS Excel | Use MS Excel to layout the data from the ERD in appropriate tables and columns |  |  |
| Add test data to dictionary | MS Excel | Input test data into the dictionary to show the flow of the database |  |  |

**STAGE: Initialize SQL database**

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|  | **Tool(s) Used** | **Purpose** | **Timings** | **Output** |
| Collate the data | MS Excel + Draw.io | Using both the ERD and Data dictionary gather the information need to start the database |  |  |
| Create the database and tables | MySQL | Create the database and the tables outlined in the data dictionary |  |  |
| Primary and foreign keys added | MySQL | Ensure that the primary and foreign keys have been added into the appropriate tables |  |  |

**STAGE: Include test data into the database**

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|  | **Tool(s) Used** | **Purpose** | **Timings** | **Output** |
| Create initial user data | MySQL | Create a small amount of user data to ensure the database handles the information in the intended manor |  |  |
| Create large amounts of data | MySQL, Chat GPT | Using chat gpt, create a large amount of user data and add it into the sql database |  |  |

**STAGE: Test the database**

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|  | **Tool(s) Used** | **Purpose** | **Timings** | **Output** |
| Initial table query for tables | MySQL | Query for the tables to ensure the database and queries are set up properly |  |  |
| Table Joins | MySQL | Join two tables together |  |  |
| Multiple Joins | MySQL | Based on a customer specification join multiple tables together and only show certain elements that were asked for |  |  |

**JIRA EVIDENCE (Screenshots)**

**A screenshot of a computer

Description automatically generated**

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Description automatically generated**