

Milestone #1 – Group 13

2a) What is the domain of the application? Describe it.

The domain that we are going to model is an inventory management system for a warehouse.

2b) What aspects of the domain are modeled by the database?

The application will focus on collecting and storing important information and the logistics behind some inventory management processes. This will include information such as what product is being stored, what the representative inventory data stores it as, where these products are stored, and the management of incoming and outgoing stock.

3. Database specifications:

a) What benefit does the database application provide to the company or organization?

The database application will allow the user to have a centralized view of what is stored in the warehouse and what orders have been placed. It helps to manage inventory by generating real-time reports of what product categories are selling well and prevent stock-outs (running out of stock) by issuing alerts of low inventory. It also provides relevant information about employees involved in warehouse operations, suppliers, and physical storage location of the products in the warehouse.

b) What functionality will the database provide?

The database stores the information about all products and their quantities. It can be requested to show information about each product's suppliers. The database determines the physical storage location of the product in the warehouse (aisle # and bin) according to its product barcode, product category and/or brand. Any views/report generated can be filtered by product category or brand. The database keeps track of all orders. Orders can comprise inbound or outbound shipments. There will be three different classes of users in this system: the manager, the workers, and the drivers. The database tracks which employees are assigned to activities, where the managers will be responsible for placing orders, drivers responsible for outbound shipments and workers responsible for receiving inbound shipments. It also stores other relevant information about employees. Every order will have at most one product. Every shipment is associated with exactly one driver.

4. Database specifications:

a) platform of the project

b) expected application technology stack

The project will be carried out using MySQL database system and the programming language used is JavaScript (Node.js).

5. ER Diagram:

