CPSC & Class Title Final Project Report Project Name

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ABSTRACT

This project is about an artist named Bob Bee who has worked on designing and printing shirts and jerseys for various teams and events for his entire life. He owns a company named Cerulean Bee. He wants a system to check and view all orders placed by customers. It is up to the owner to manage the details of the customer as well as employees too. He may also prepare invoices for different orders, and the prices may also be influenced by the size, location, color, fabric, and number of artworks. Owner can also view and edit the details as well of customers and employees both. Besides keeping records of his employees, he can also view their work logs and artwork..

1.0 Introduction

1.1 Background

This project is all about the sales report for Bob. The main aim of this project is about Bob bee, who is an artist and has a company that produces designed or printed t-shirts or jerseys. This database project is for the management of Bob Bee himself to check the employee logs, print orders, project cost analyses, and artwork orders. The project is implemented using MYSQL. These projects refer to the technology for creating and managing databases. This project can organize all CRUD operations easily.

The main feature of the project is that it stores all the details of employees and customers and which artwork they need computer printed or anything as well. There would be four prominent figures. They would be:

1. Artwork: It will store the details of customers like name, contact, phone, their orders, which date their order has been approved, what type of item they need in how much quantity or which color they need. And the detail of the employee about the completion date, which employee is doing that item, and how much is they get paid.

Artwork_order (Customer_id, customer_name, contact, phone, discount, total_price, order_date, date_approval, scheduled_print_date, event, theme, apparel_item, base_colors, max_colors, **Art**(art_location, art_description, art_cost), employee_name, date_complete, art_colors)

2. An employee works log: Employee works log stores the details of employee which task is assigned to which employee, which employee is working on which project for how much time is the employee full time or part-time employee, and what are they using in the art as the employees are paid according to their time logs.

Employee_work_log (**Employee** (employee_id, employee_name, employee_phone, job_type, job_date, start_time,employee_work_time), **Project** (Project_id, project_description, art_item, task))

1.2 Project Goals and Benefits

• The owner gets a system which he can use to analysis the orders placed by customer and check the revenue of the company whether the company has made profit or loss.

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1.3 Relevance and Significance

- 1. Gained experience with normalizing tables and implementing this in a database.
- 2. Learned how to create tables for a specific purpose

3.

1.4 Assumptions and Limitations

Assumptions:

• The employee can view, edit, delete, and add the details of customer and their artwork also. They must enter their worklog

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Limitations:

- There is no analysis system which can tell that what kind of customer are coming to the
- •

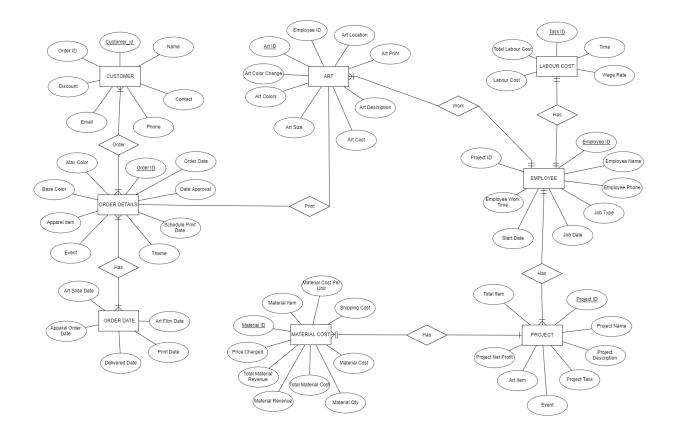
2.0 Project Requirements

2.1 Data requirements

2.1.1 Conceptual Model (ER Model)

In the ER model for this project, we are showing all the different entities and their relations. We offer all additional attributes used for the respective entities and show the cardinality of the relationship between entities.

The ER diagram is as follows.

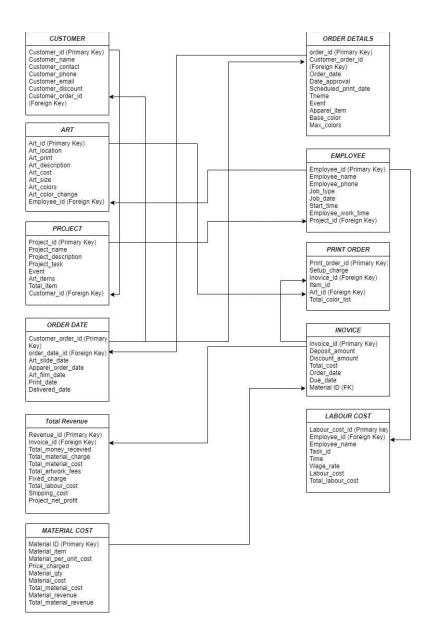


To determine the relationships between the tables:

Once the information is divided in their subjective tables, we need to make the relationship between the tables. Relationships between the tables are grouped in 4 parts:

- 1. One to one (1-1)
- 2. One to many (1 M)
- 3. Many to many (M M)
- 4. Many to One (M-1)

This relationship between the table is figured in the Class Diagram.



2.2.1 Interface Requirements

Customer

- Customer id accepts numeric data entry
- Customer name accept text data entry
- Customer contact accept numeric data entry
- Customer phone accept numeric data entry
- Customer email accept email data entry

- Customer discount accepts numeric data entry
- Customer order id accepts numeric data entry

Employee

- Employee_id accepts numeric data entry
- Employee name accepts character entry
- Employee_phone accept numeric data entry
- Job type accept boolean type
- Job date accept data entry
- Start time accept time entry
- Employee work time accept time entry
- Project id accept numeric data entry.

Project

- Project_id accept numeric data entry
- Project name accept character entry
- Project description accept character entry
- Project task accept character entry
- Event accept character entry
- Art items accept character entry
- Customer id accept numeric data entry

3.0 Methodology

The following topics are intended to serve as a guide:

This section, you may include the following items.

- 1. Database and tables creation DDLs.
- 2. Project methods, tools, and techniques.
- 3. System requirements: Hardware and software requirements and system architecture, programming languages being used.
- 4. Data Model and Data requirements: Source of data inputs and reports in details.

3.1 DDL Commands

Order Details Table

```
--
-- Table structure for table `order_details`
--

CREATE TABLE `order_details` (
    `order_id` int(11) NOT NULL,
    `customer_order_id` int(11) NOT NULL,
    `order_date` date NOT NULL,
    `order_date` date NOT NULL,
    `scheduled_print_date` date NOT NULL,
    `theme` text NOT NULL,
    `event` text NOT NULL,
    `apparel_item` text NOT NULL,
    `base_color` text NOT NULL,
    `max_colors` text NOT NULL,
    PRIMARY KEY ('order_id'),
    CONSTRAINT 'customer_order_id' FOREIGN KEY ('customer_order_id') REFERENCES 'order_date' ('customer_order_id')

ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Revenue Table

```
-- Table structure for table `revenue`

-- Table structure for table `revenue`

-- CREATE TABLE `revenue` (
    `revenue_id` int(11) NOT NULL,
    `invoice_id` int(11) NOT NULL,
    `total_money_recevied` text NOT NULL,
    `total_material_charge` text NOT NULL,
    `total_material_cost` text NOT NULL,
    `total_artwork_fees` text NOT NULL,
    `fixed_charge` text NOT NULL,
    `shipping_cost` text NOT NULL,
    `shipping_cost` text NOT NULL,
    `project_net_profit` text NOT NULL,
    PRIMARY KEY ('revenue_id'),
    CONSTRAINT 'invoice_id' FOREIGN KEY ('invoice_id') REFERENCES 'inovice' ('invoice_id')

> ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

3.2 Software Stack

3.2.1 Database:

MySQL

3.2.2 Software:

- Xampp
- PhpMyAdmin
- Visual Studio Code Editor

3.2.3 Hardware:

• Operating System: Windows 11

5.0 Conclusions

5.1 Significance

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5.2 Learnings from this project

- Performing CRUD operations
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5.3 Future Work

- In Future using AI and Computer Vision on the system we can create 3D trial on the system itself.
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