

CPSC-408 Final Project Proposal

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Competitive Analysis in the Online Retail Community

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Project Description

- **<What problem we are solving>** Helping startup retail companies compete with other larger retail companies by providing them with an application that will streamline business operations and also provide analysis tools to continually improve upon processes.
- **<How we plan to solve it>** Create a database that can be used by businesses to help marketing, customer service, and shopping trends
- **<Why we chose this project>** To explore the details and benefits of implementing an online retail database application.

Goals

1. Design and Implement an efficient MySQL Database for a startup online retailer.
2. **Design and Implement a sleek User Interface for accessing data required for business operations such as inventory management, client information, logistics information, etc.**

Specifications

1. Highly polished and well designed application that includes both a backend database and front-end UI component.
2. Intuitive Front-End UI hosted on a website which allows retail staff to log in and insert, delete, update, query data and generate reports.

3. Comprehensive Back-End database that consists of product information, sales information, dates, customer feedback, etc.

Milestones

1. Design the database schema (In progress)
 - OrderInfo (OrderNo, CustId, ProdNo, Qty, TotalValue, OrderDate, ShippingCo, TrkngNo)
 - ProdInfo (ProdNo, Price, WarehouseNo, Supplier
 - CustInfo (CustId, CustName, Address, Email, Phone)
 - Invoice (InvoiceId, BillAddr, BillCity, BillState, BillCountry, CustId, ProdId, Qty, TotalPrice, TrkngNo) --use to query sales info
 - Supplier ()
 - Reviews() – Use to query customer feedback
2. Collect/Generate raw data originally stored in csv files and migrate data to GCP MySql Server
3. Write the application
4. Design the User Interface
5. Implement the User Interface and connect to DB