

Group 4 Project
Outland Adventures Case Study
Kevin Meza, Dominique Monroe, Shane Tinsley
Bellevue University CSD 310:
Database Development and Use
Dr. Joseph Issa
December 8, 2023

Synopsis

Established by outdoor enthusiasts Blythe Timmerson and Jim Ford as a side project to their day jobs, Outland Adventures is an outdoorsmen's paradise. They wanted to serve others who enjoyed long hikes and camping trips in remote areas. They believed that Outland Adventures might succeed if they could set up guided trips, supply the necessary equipment, and create effective advertising. They quit their jobs to focus their full time and energies on their joint venture after it became clear that they had found a much-needed market.

They brought on D.B. "Duke" Marland and John "Mac" MacNell as guides when they first started Outland Adventures. These two would organize and schedule the travel, which would include looking into vaccination schedules, visa requirements, and airfare.

Anita Gallegos was also brought on board by Blythe and Jim to handle the organization's marketing division. In addition to ordering supplies for the trips, Dimitrios Stravopolous is in charge of maintaining an accurate equipment inventory. Clients have the option to purchase their equipment outright or rent it. Mei Wong was recently employed to create an online store where prospective clients can learn more about Outland Adventures, view trip schedules, and buy camping and hiking gear.

Jim and Blythe have been handling the office and administrative tasks, but they recently began debating whether it was time to optimize the company. Among the queries that need addressing are:

- ❖ Do enough people purchase equipment to maintain equipment sales?
- ❖ They have led hikes in Southern Europe, Asia, and Africa thus far. Does anyone know of a location where reservations are declining?
- ❖ The age of some of the inventory is causing them a little worry. Do any items in the inventory date back more than five years?

Milestone One

Group Four consists of Shane Tinsley, Kevin Meza, and Dominique Monroe. Milestone One consisted of getting together, discussing work schedules, and thoroughly reading and deciding on a case study. They promptly commenced their work. Dominique, Shane, and Kevin collaborated to gather collective information swiftly, progressing to the subsequent phase of the class. Initial challenges arose mainly in the form of an unforeseen circumstance in the absence of our last member. As a cohesive team, we decided to opt for Outland Adventures, deeming it more conducive for handling the requisite data for the project's creation and upkeep. The group's considerations were primarily oriented towards securing profitability for the company, grounded in the belief that customer satisfaction would be a pivotal factor. The construction of their database entailed leveraging the information provided in the case study, supplemented by their ingenuity to ensure a harmonious and efficient data integration. As a group, we successfully created a list of business rules for the case study, including all assumptions made. Using those business rules, we created an initial ERD to satisfy those rules.

Equipment Sales Rule:

Assumption: Equipment sales are a significant revenue contributor.

If equipment sales contribute less than 40% of the total revenue for two consecutive quarters, reevaluate the marketing strategy, consider e-commerce expansion, or adjust inventory levels to optimize sales.

Booking Trends Rule for Locations:

Assumption: Monitoring booking trends helps in optimizing resources and identifying popular destinations.

If bookings for any specific location show a consistent downward trend over three consecutive quarters, conduct a detailed analysis to consider adjusting trip schedules, exploring new locations, or revising marketing strategies for those locations.

Inventory Age Rule:

Assumption: Maintaining updated inventory is crucial for quality and safety.

Conduct an annual inspection of inventory items, identifying and replacing items over five years old or those failing to meet safety standards, ensuring quality and customer safety.

E-commerce Expansion Rule:

Assumption: E-commerce expansion can enhance equipment sales and reach a broader audience.

Allocate a budget for e-commerce development and marketing efforts, ensuring scalability, security, and user-friendliness of the platform. Continuously evaluate the ROI and adjust the budget as needed.

Guides and Trip Expansion Rule:

Assumption: Hiring and training additional guides can increase revenue by expanding trip offerings.

Evaluate the potential increase in revenue by hiring and training additional guides to explore new locales, niche markets, or cater to increased demand during peak seasons.

Supplier Partnership Rule:

Assumption: Partnering with suppliers may lead to cost-saving opportunities.

Explore bulk purchase options or negotiate partnerships with equipment suppliers to obtain discounts, reducing equipment procurement costs.

Payment Status Rule:

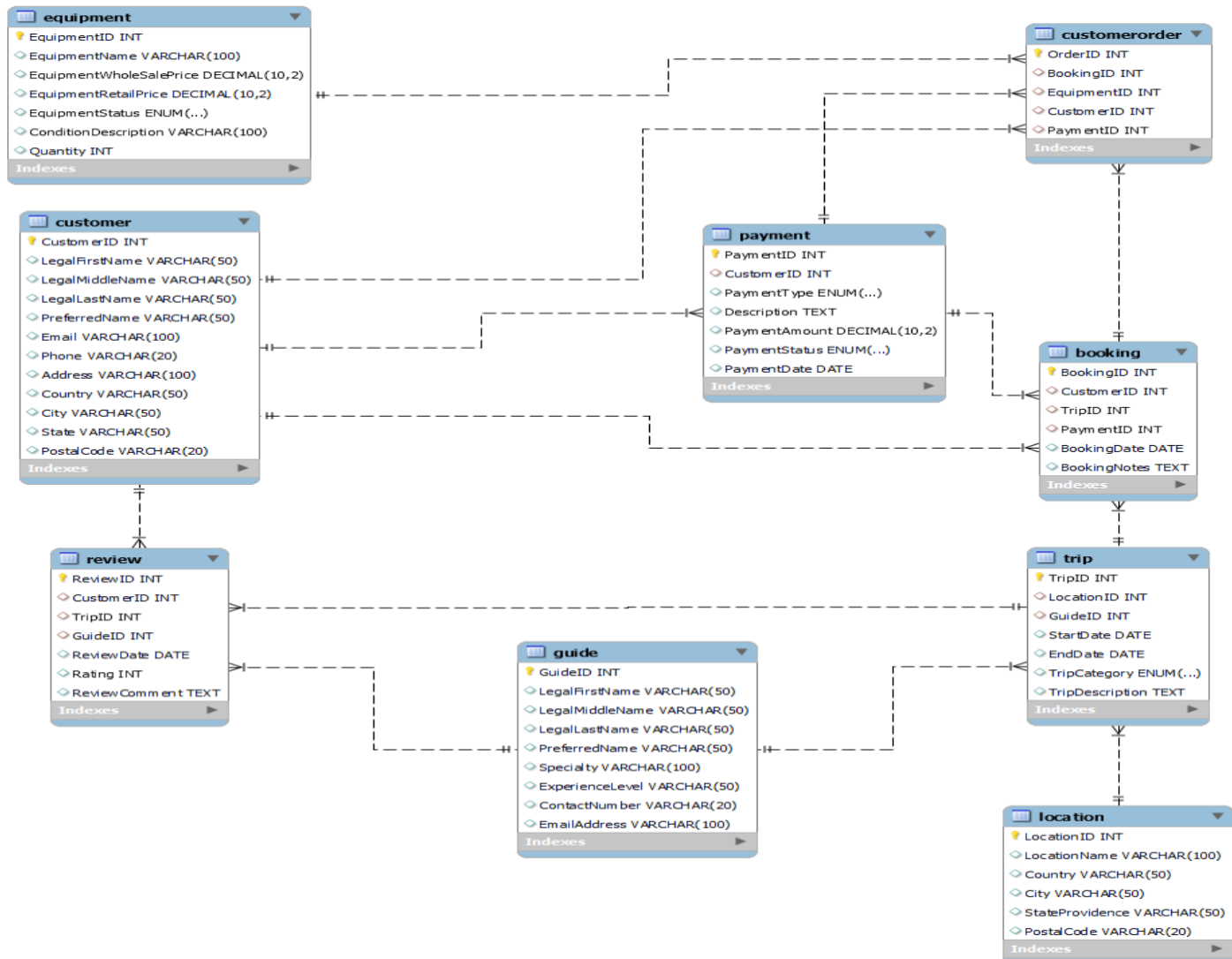
Assumption: Tracking payment statuses ensures transparency in financial transactions.

Define payment statuses as “Confirmed” for completed payments and “Authorization Number” for payments in the authorization stage, refunds, insufficient funds... ensuring clarity in tracking transaction progress.

Visa and Inoculations Rule:

Assumption: Guide needs to easily view and update status and inform customers of deadlines.

Outland Adventures requires all customers to comply with visa and inoculation requirements for their chosen destinations. Customers must provide valid documentation for visas and proof of vaccination for required inoculations prior to departure that will be verified by the guides



Milestone Two

Having completed the first task of the assignment, we took a cursory glance at our initial ERD. To ensure we could fulfill the ask in Milestone Two, we added as many details as needed, including attributes for each table, all while making any revisions. Upon completing the data tables, the next step was to devise a Python script to access the tables in MySQL. We filled the data tables with at least six records using our available data. We then developed a secondary Python script displaying the data in each table, and screenshots of the script's results demonstrating the data in each table were taken to ensure it worked. Mr. Tinsley handled this arduous undertaking with feedback and testing done by the remainder of the team. Milestone Two ended with the successful completion of the tasks asked of us.

Milestone Three

Milestone three brought issues from the previous milestones that revealed themselves in this last process. After a tertiary read-through of the case study, we determine what details retrieved from the tables would help make the business decisions listed in the case study. We created three reports or queries by combining two select portions from the tables created to retrieve answers to questions initially asked in the case study. You can see the development of those three reports and their descriptions below. Creating another Python script, we generated the report and took screenshots of each account as a result of each query.

The key to the successful completion of milestone three is communication. Due to the effective communication of the group, we assessed each milestone. We contributed what we believed to be the best solutions for each problem before progressing to the next steps.

Group Four's MVP

Mr. Shane Tinsley.

Thanks to Shane's communication skills and willingness to put in long hours, all while taking the lead for this assignment, each milestone progressed smoothly.