

GROUP 8

ONLINE BIKE SHOP

LET'S BUILD
AN ONLINE BIKE SHOP



No machine learning or boring chart.
we just want illustrate how a typical online
shop is designed using some database
concept.



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WELCOME TO OUR BIKE SHOP



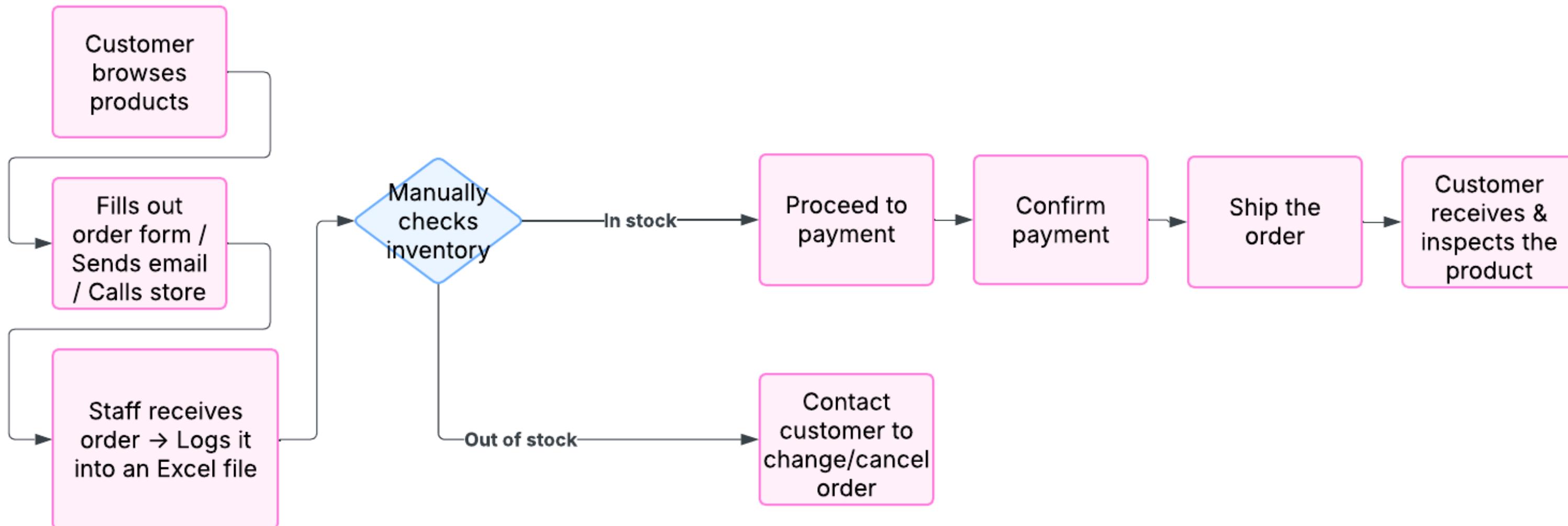
Welcome to our bike shop, your go-to online store for high-quality bicycles! We offer a wide range of bikes, from road and mountain bikes to electric and hybrid models, catering to all cycling enthusiasts. Our shop provides top-notch customer service, secure payment options, and fast shipping to ensure a smooth shopping experience.

**Whether you're a casual rider or a professional cyclist,
we have the perfect bike for you.**

Explore our collection today and ride with confidence!



HOW WE OPERATE



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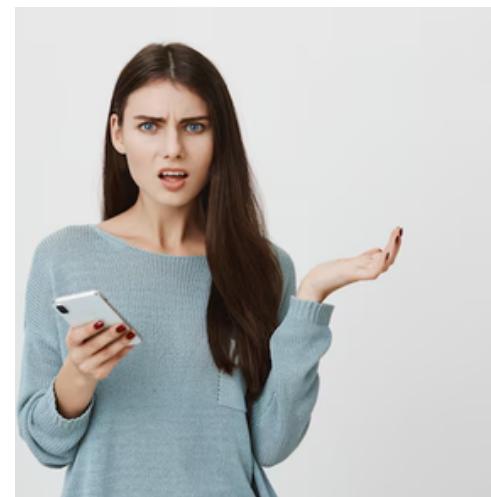
OUR PROBLEMS

Yes, just like other online shopping startups, we definitely have our problems. **Some customers love us, and some do not**



Adeline - Warehouse Manager

Counting bikes manually is such a waste of time and prone to mistakes. It's inefficient and leads to errors, making inventory management a real headache.



Juliana - Customer

It's so frustrating that every time I want to check if a bike is in stock, I have to call the shop. This is so inconvenient and time-consuming!

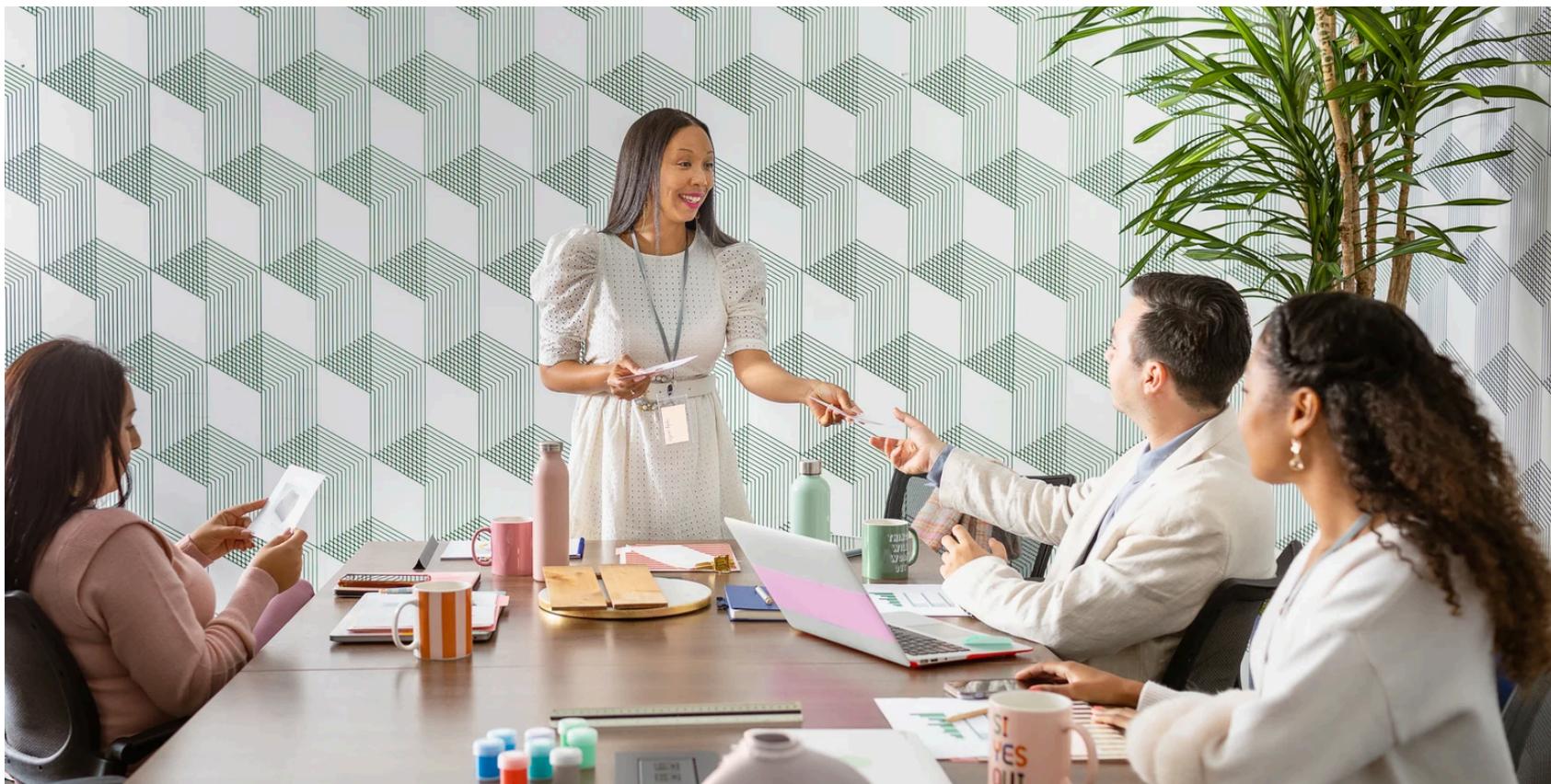


LIMITATIONS OF THIS PROCESS:

- 1** No real-time inventory tracking.
- 2** No automated shipping tracking.
- 3** Most steps require customer service staff.



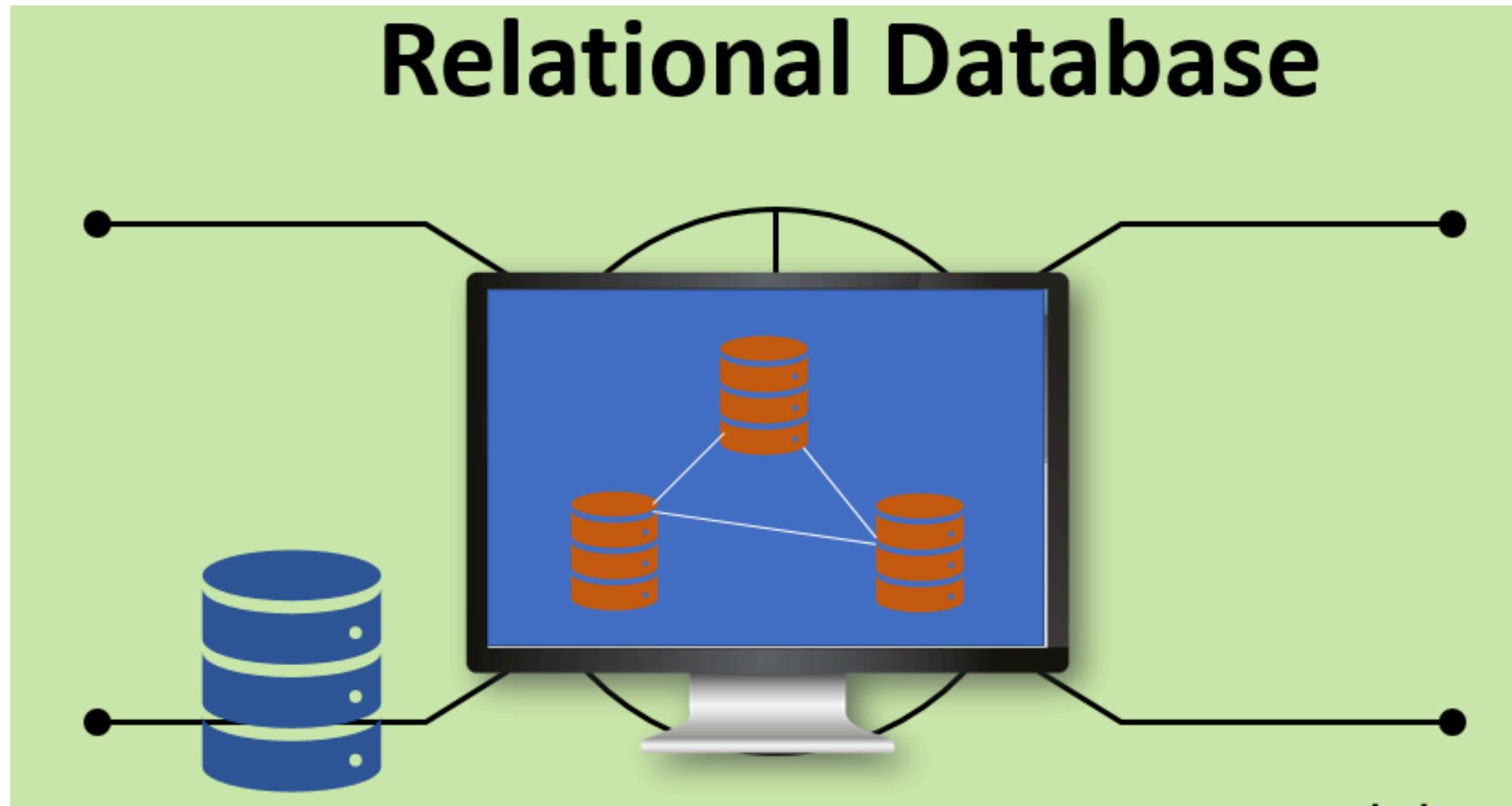
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MEETING FOR SOLUTION

The meeting concluded that the main problem lies in inventory management. To address this, we need to build a relational database to streamline stock tracking





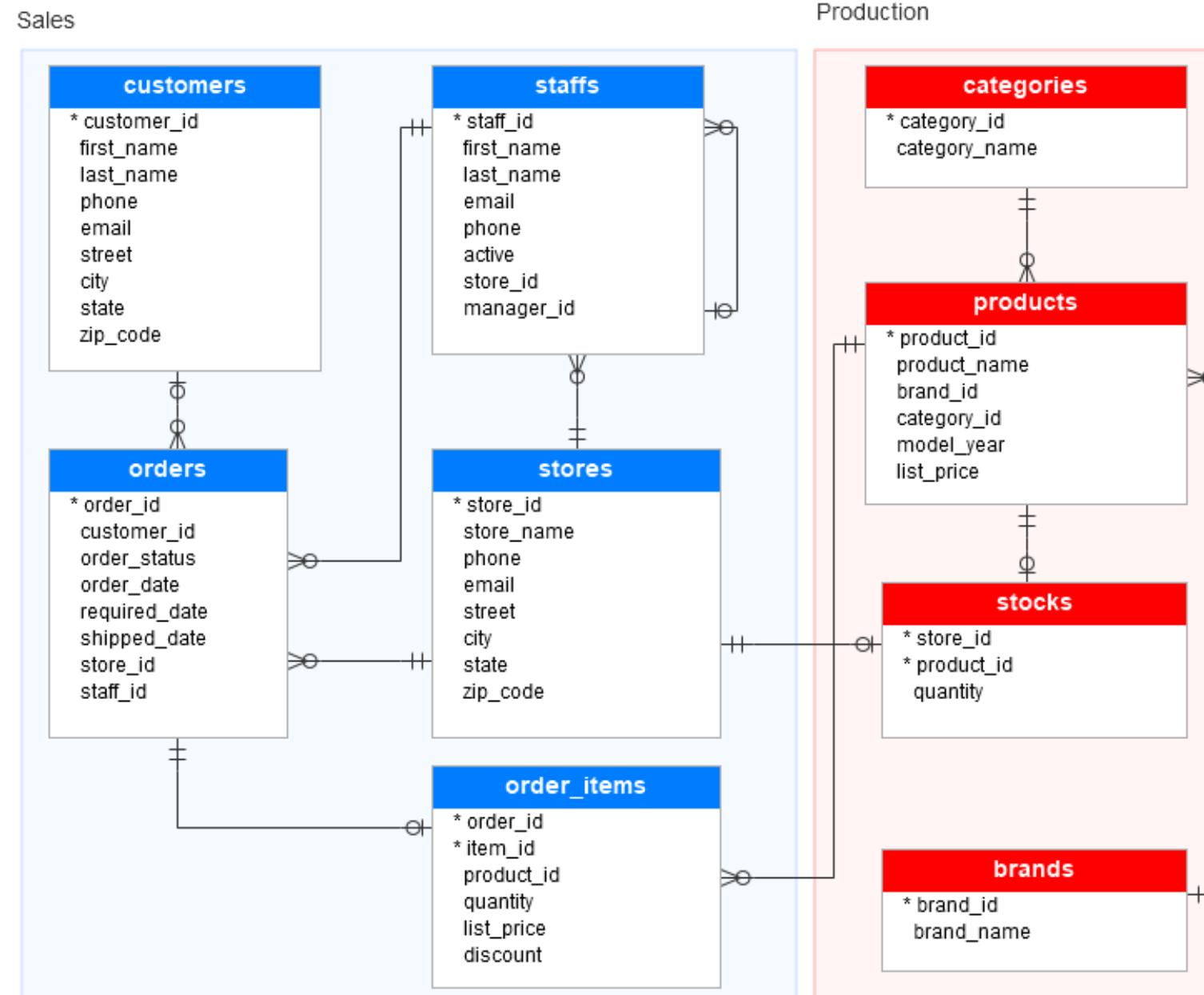
WHAT IS RELATIONAL DATABASE?

A relational database is a type of database that stores data in tables, which are linked to each other using relationships.

These tables consist of rows (records) and columns (attributes). Each table has a primary key, a unique identifier for each record, and foreign keys that establish connections between different tables.



OUR DATA MODEL



The **data model** represents a **relational database schema** for a bike shop that handles both **sales** and **production** processes.

- The **Sales (blue)** manages **customers, orders, stores, and staff**, ensuring order tracking and store management.
- The **Production (red)** focuses on **products, categories, brands, and stock levels**, linking inventory to stores.

This model ensures efficient data organization, enabling smooth order processing, inventory management, and customer tracking.



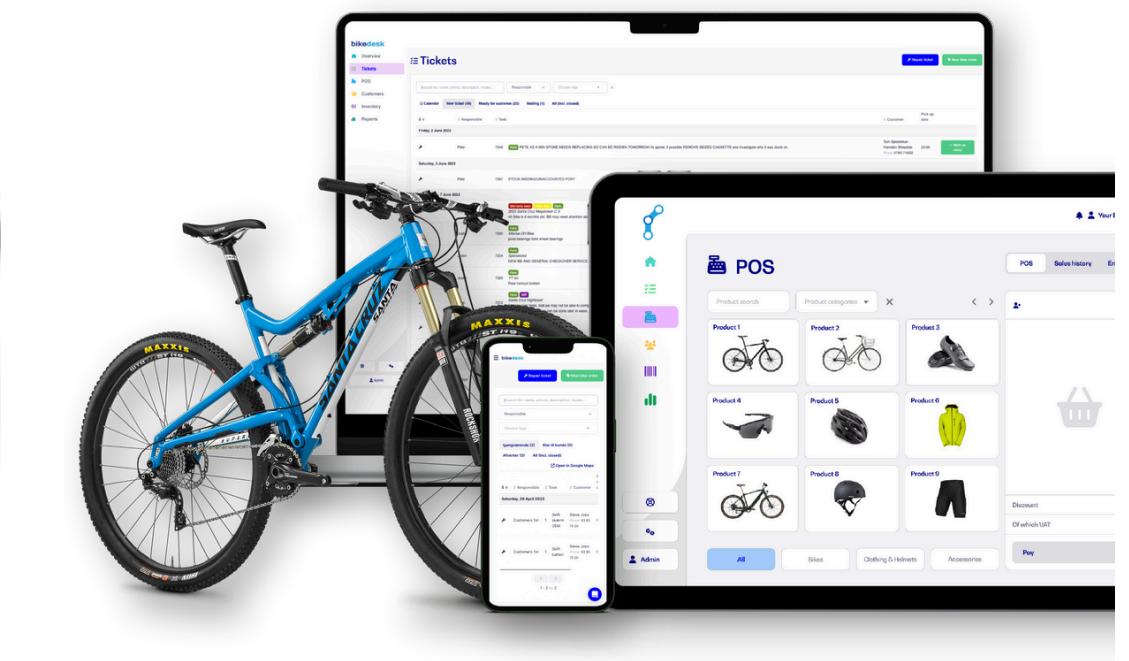
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Customer Management (CRM)



Order Management

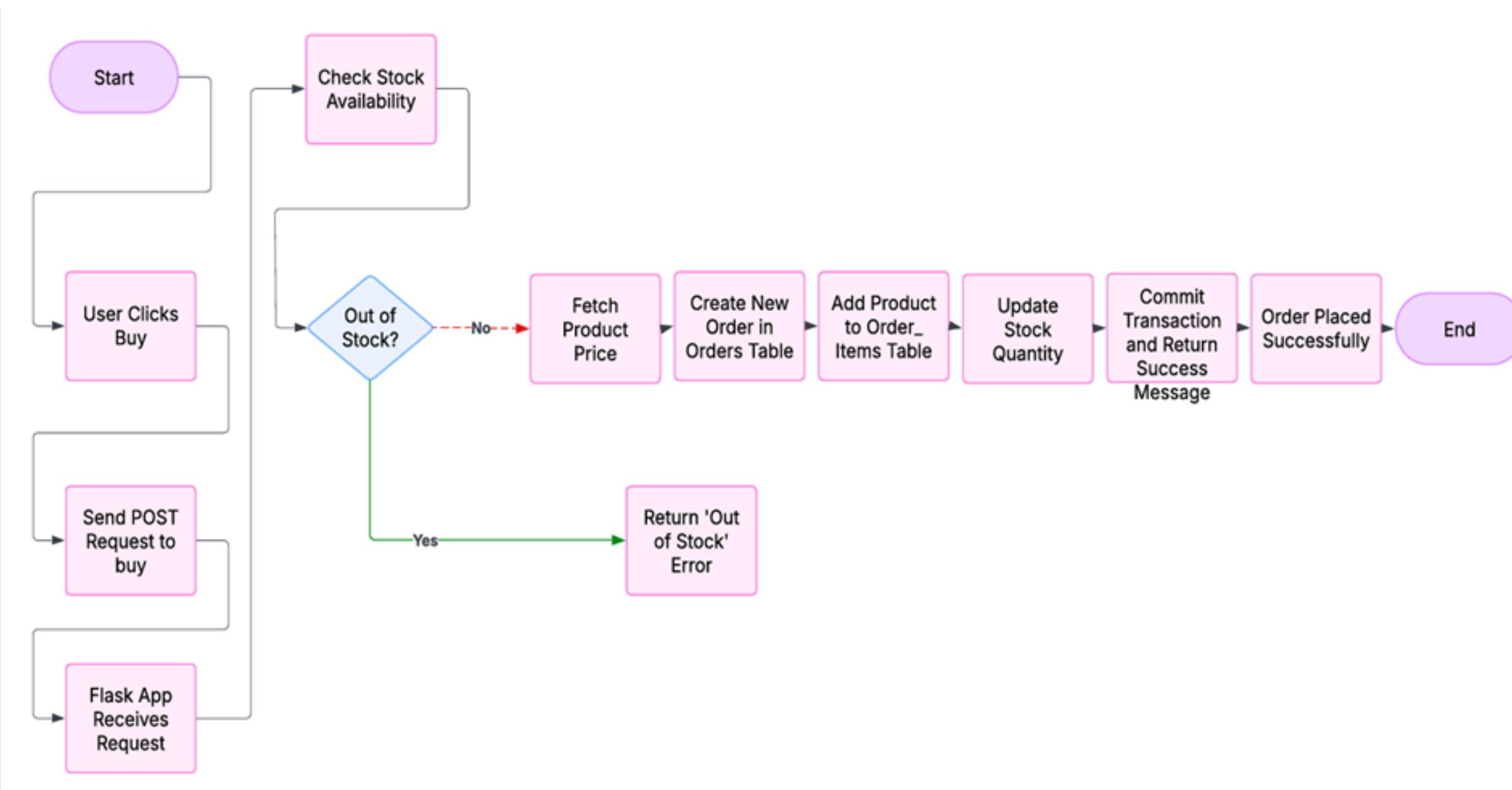


Easier Integration with
Other Systems

HOW RDMS CAN HELP US?



DATA PIPELINE



ONLINE BIKE SHOP DEMO



- ◆ Explore our online bike shop demo
 - ◆ Scan the QR code to access the GitHub repository
<https://s.pro.vn/EDJt>
 - ◆ My local web:
<http://127.0.0.1:5000>
- Get started now!

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**WE HOPE TO SEE
YOU SOON!**

