

**WILD\_CARDS**  
SOLUTIONS & ANALYTICS

# Data Management, Enhancement & Scalability

**PREPARED FOR**  
**LEGENDARY SPORTS &**  
**TRADING CARDS LLC**  
**MARCH 13, 2021**

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# About WILD\_CARDS

Our original team comprised of C.J. Duran, Hasib Azami, Hitesh Sharma & Wafa Totah all studied together at Saint Mary's College of California where they each received a Master's of Science in Business Analytics. We have had experience working with Data for a combined 16 years and our talents complement one another. Our expertise is well versed in, but not limited to, Python, SQL, R, Excel, Tableau and Google Cloud Based Solutions.

## Our Team

**C.J. DURAN**

**FOUNDERS**

**HASIB AZAMI**

**HITESH SHARMA**

**WAFA TOTAH**

**SENIOR  
PARTNERS**

**PROFESSOR IVAN VEGA**

# Executive Summary

Our proposal to Legendary Sports & Trading Cards LLC outlines our plan to migrate and improve your current data management system to a more robust solution for your growing needs. Our team will provide extensive care in designing the perfect fit for your business. As you have seen tremendous growth in your industry, it is critical to appropriately maintain all your data. This upgrade with us will allow for you to better predict sales trends, manage inventory & material and monitor client trends from your historical data. Our trained implementation specialists will work with your team to ensure that your data is properly set-up and stored that works best for you.



# Overview of Project Details



## OVERVIEW OF TIMELINE & MILESTONES

### ● **PHASE 1: REVIEW CURRENT DATA**

- APPROXIMATELY 1 MONTH TO COMPLETE
- MEET WITH TEAM & REVIEW DATA OPERATIONS

### ● **PHASE 2: TRANSITION/SET-UP**

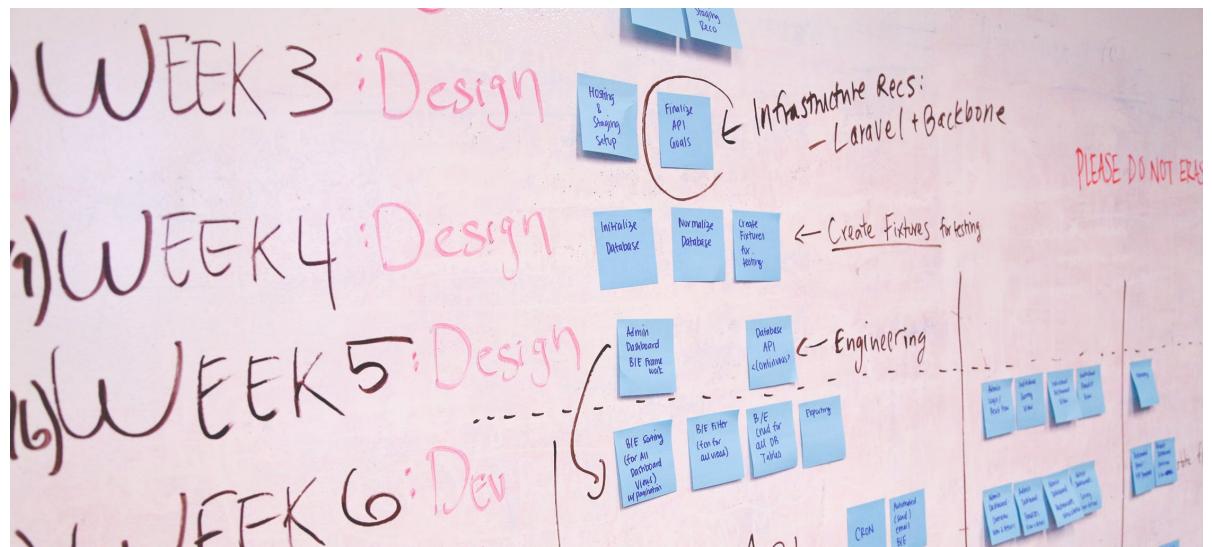
- APPROXIMATELY 1 - 1.5 MONTHS TO COMPLETE
- CLEAN, MIGRATE, ORGANIZE, DESIGN DATABASE

### ● **PHASE 3: IMPLEMENTATION/TRAINING**

- APPROXIMATELY 1 - 1.5 MONTHS\* TO COMPLETE
- ACTIVELY USE NEW DATABASE & TRAIN TEAM

\*THIS PROCESS CAN BE ONGOING IF ADDITIONAL TEAM TRAINING OR DATA REFINEMENTS ARE NEEDED/REQUESTED

# Project Details



Our initial assessment is that this project will take a minimum of three months to implement. Our initial phase of the project will take about a month. During this time we will spend time dedicated to observing the current processes and evaluating how data is currently gathered, managed and interpreted by your organization. The second phase (approximately 1 - 1.5 months to complete), will be the transition/set-up phase. This will consist of setting-up the new technical components needed to transition your data (data server, programs, etc). In addition, during phase two, we will begin the conversion of your data to the respective tables in the database. We will work closely with your team members to ensure that the data is correctly placed and are related accordingly. Finally, our final phase will be our roll-out/conversion phase. This is where we switch over to their new database and begin to work out any bugs or issues that may arise. During this phase, we will be working with your team members to help train them on the system and how to navigate it. This final phase may take longer as the time to train may run longer and questions will be ongoing.

# Database Solutions



**IDENTIFY THE DATA ELEMENTS**



**SUBDIVIDE ELEMENT INTO USEFUL COMPONENTS**



**IDENTIFY THE TABLES AND ASSIGN COLUMNS**



**IDENTIFY THE PRIMARY AND FOREIGN KEYS**



**REVIEW WHETHER THE DATA STRUCTURE IS NORMALIZED**



**IDENTIFY THE INDEXES**



# Budget



## COST ASSOCIATED WITH HOURS ON THE PROJECT

TIMELINE

**3 MONTHS**

DESIGNERS ON PROJECT

**4 DESIGNERS**

HOURS ON PROJECT

5 hrs per day/25 hrs per week/100 hrs per month

**300 HOURS**

COST PER HOUR

**\$100**

**TOTAL COST**

**\$30,000**



# Budget



## COST ASSOCIATED WITH IMPLEMENTING

SOFTWARE COST

**MySQL: \$1500**

SPACE COST

**100 TB: \$300 /per month**

ADMINISTRATION COST

**\$1500**

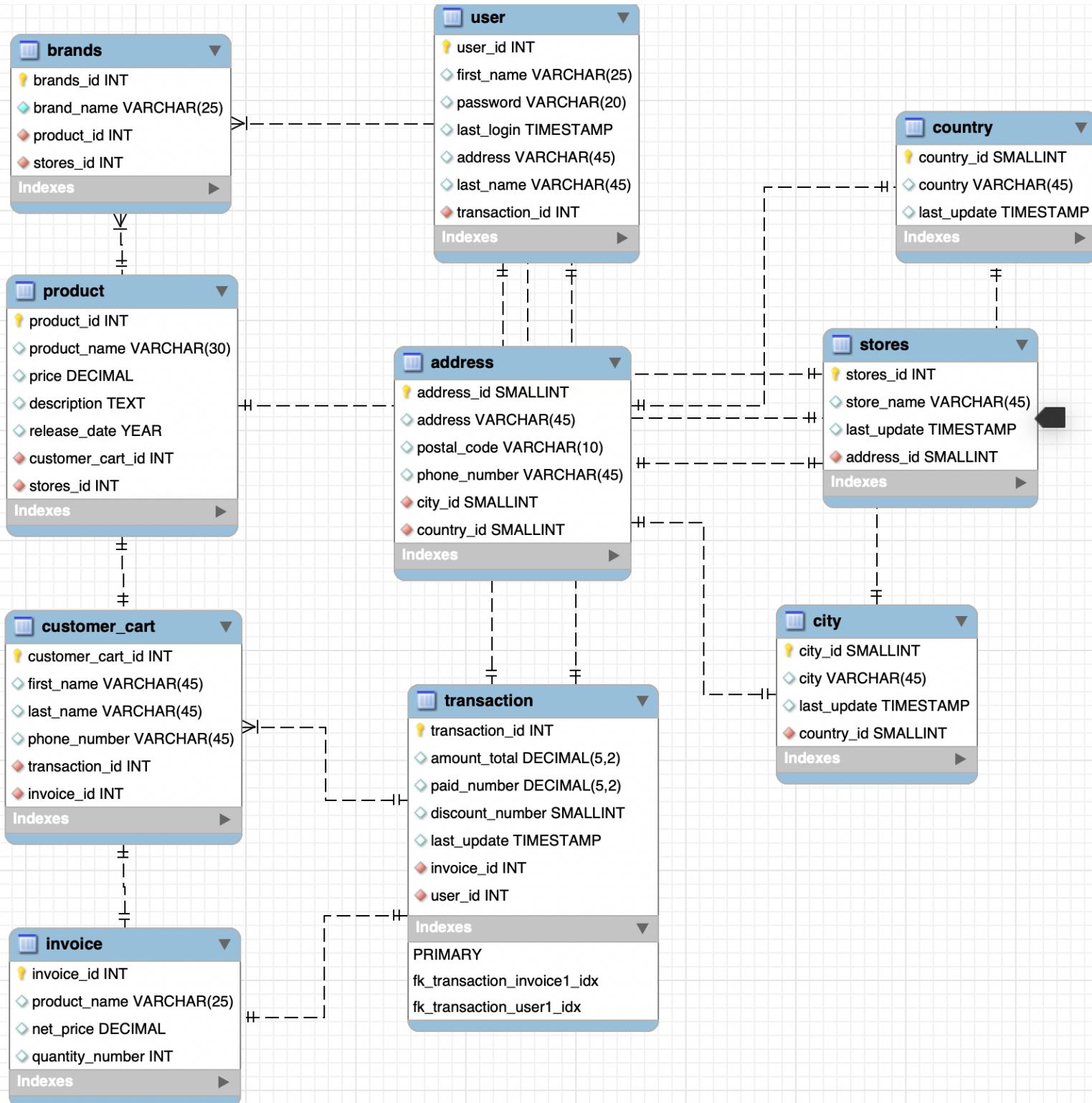
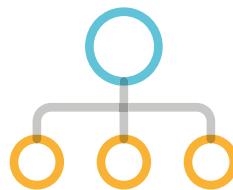
TOTAL COST

**\$3,300**

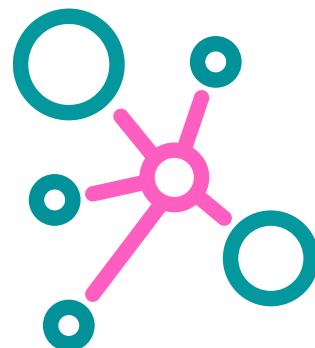
**NET COST**

**\$33,300**

# ERR Diagram



# Relational Schema



- **Brands** (brand\_id, brands\_name)
- **User** (user\_id, first\_name, last\_name, password, last\_login, address)
- **Country** (country\_id, country, last\_update)
- **Product** (product\_id, product\_name, price, description, release\_date)
- **Address** (address\_id, address, postal\_code, phone\_number)
- **Stores** (stores\_id, store\_name, last\_update)
- **Customer\_cart** (customer\_cart, first\_name, last\_name, phone\_number)
- **Transaction** (transaction\_id, amount\_total, paid\_number, discount\_number, last\_update)
- **City** (city\_id, city, last\_update)
- **Invoice** (invoice\_id, product\_name, net\_price, quantity\_number)

# Table Relationships



1

For the brands table, there is a many to many relationship between the stores and product table and foreign keys

2

For the user table, we have a one to many relationship and transaction\_id is the foreign key

3

For the product table, we have a many to many relationship which is not common

4

For the address table, we have a many to many relationship

5

For the city table, we have a one to many relationship with country\_id being foreign key

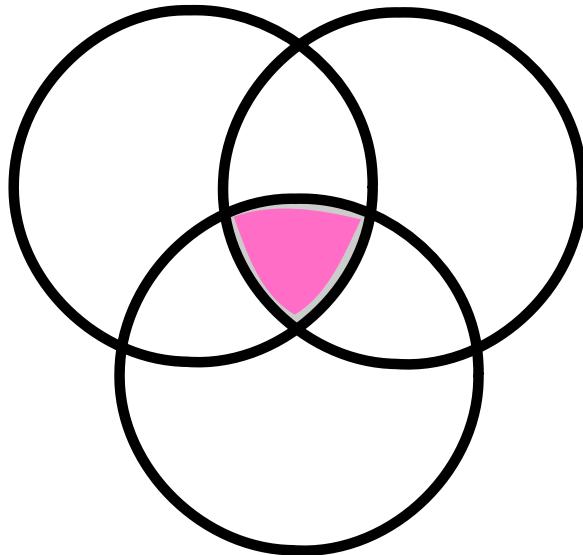


# Sample Data Table



- Once the data tables are set - move forward to the databases we can help implement, retrieve and extract information within their own database.
- Raw data - Sales - Cash/Card
- Raw data - inventory - In stock/ Out of Stock
- Raw data - Recurring Clients/Memberships - Total Spent
- Raw Data - Rarity of Cards - Volume

# Table Interactions



- The Wild Cards have agreed to help propose a solid foundation for a Trading Card Company for handling their data. To help ecorporate the most efficient way to maintain the data there needs to be a robust system to help collect, maintain and secure the given data.
- In the backend the sales, inventory and clientele information will be arriving as the raw data. With the system in place the data tables will go as followed. The data will be broken up into different data tables to help keep everything clean and isolated. Sales, Inventory, Clients etc will all be separated, initially everything will be received as the raw data.

# Wrap-Up & Review



We would like to say "**THANK YOU**" from all of us here at **WILD\_CARDS - Solutions & Analytics** for giving us the time to present. Detailed below is the wrap-up of the project and what you would expect to receive with our plan.

## Details:

- Approximately 3-3.5 months to complete
- Cost will be \$33,300
- Utilize MySQL and 100 TB of memory
- Relational Schema include: Brands, User, Country, Product, Address, Stores, Customer\_cart, Transaction, City, Invoice