Cordell Event Planning and Booking: Final Phase
Fall 2021, CNIT 27200, Group 5, 10 December 2021

Jack Mahedy

Karteikay Dhuper

Ryan Melenchuk

Amel Vejzovic

Table of Attendance:

Name of Attendees	Date/Time	Duration of Meeting	Method of Collaboration	Agenda for Meeting
Ryan, Jack	12/8/2021 @ 11:00am	1 hour	Online	Assigned who is doing which statements
Ryan, Amel, Jack, Karty	12/9/2021 @ 1:30pm	1 hours 30 min	Online	Compiled and performed a quality check for all statements
Ryan, Amel, Karty	12/9/2021 @ 3:00pm	1 hour	Online	Worked on the enterprise integration plan

Contribution Chart:

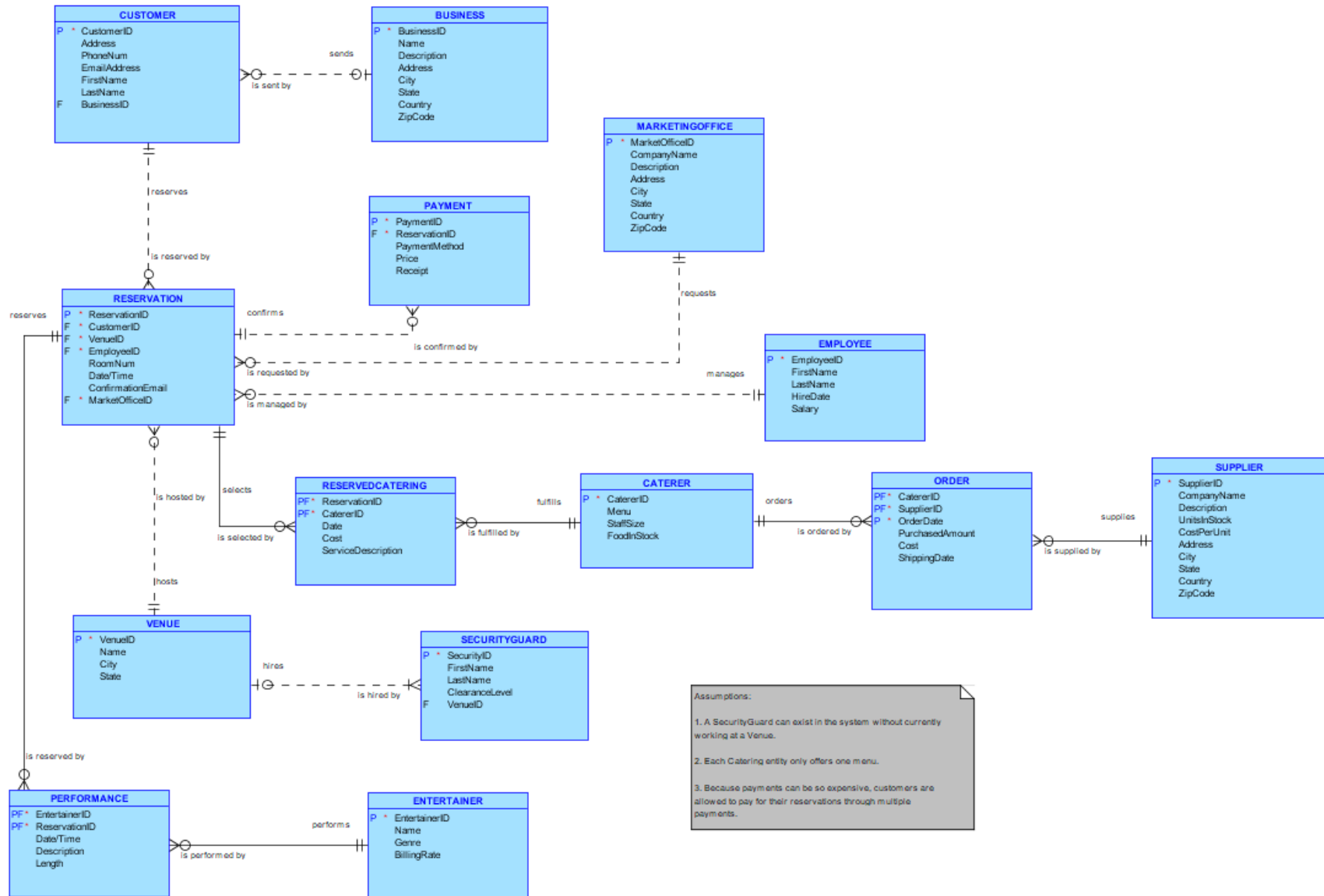|	Jack	Karteikay	Ryan	Amel
Updated the Table of Attendance	X			
Updated Contribution Chart	X			
Uploaded logical and physical ERD	X			
Enterprise Integration Plan		X	X	X
Reflections	X	X	X	X
SQL Statements 1-8			X	
SQL Statements 9-16	X			
SQL Statements 17-23				X
SQL Statements 24-30		X		
Quality Check 1-30	X	X	X	X
Compiler			X	

Group 5:

Jack: I updated and uploaded the table of attendance, contribution chart, and ERDs. I created a reflection, worked on statements 9-16, and performed a quality check on all statements with the entire group.

Karteikay: I contributed to the enterprise integration plan, worked on my reflection, and created statements 24-30. I also performed the quality check on all statements with the entire group.
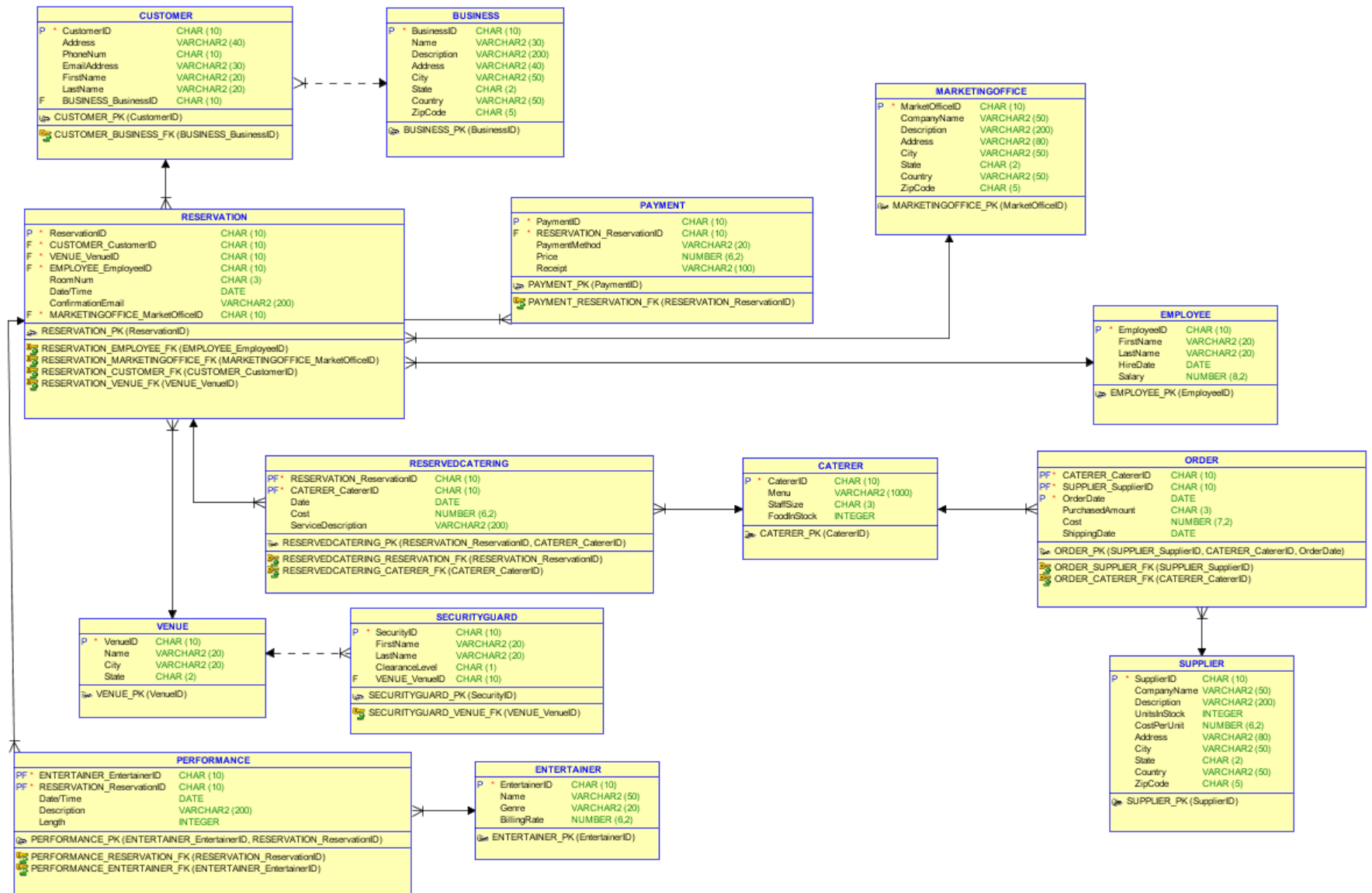
Ryan: I worked on the enterprise integration plan, reflection, statements 1-8, quality check for all statements, and compiled sql statements into the main document as well as the necessary documents for the final submission.

Amel: I added to the enterprise integration plan. I worked on the reflection, statements 17-23, and quality check for all statements.

Logical ERD:

CUSTOMER
- P * CustomerID
- Address
- PhoneNum
- EmailAddress
- FirstName
- LastName
- F BusinessID

BUSINESS
- P * BusinessID
- Name
- Description
- Address
- City
- State
- Country
- ZipCode

MARKETINGOFFICE
- P * MarketOfficeID
- CompanyName
- Description
- Address
- City
- State
- Country
- ZipCode

PAYMENT
- P * PaymentID
- F * ReservationID
- PaymentMethod
- Price
- Receipt

RESERVATION
- P * ReservationID
- F * CustomerID
- F * VenueID
- F * EmployeeID
- RoomNum
- Date/Time
- ConfirmationEmail
- F * MarketOfficeID

EMPLOYEE
- P * EmployeeID
- FirstName
- LastName
- HireDate
- Salary

RESERVEDCATERING
- PF * ReservationID
- PF * CatererID
- Date
- Cost
- ServiceDescription

CATERER
- P * CatererID
- Menu
- StaffSize
- FoodInStock

ORDER
- PF * CatererID
- PF * SupplierID
- P * OrderDate
- PurchasedAmount
- Cost
- ShippingDate

SUPPLIER
- P * SupplierID
- CompanyName
- Description
- UnitsInStock
- CostPerUnit
- Address
- City
- State
- Country
- ZipCode

VENUE
- P * VenueID
- Name
- City
- State

SECURITYGUARD
- P * SecurityID
- FirstName
- LastName
- ClearanceLevel
- F VenueID

PERFORMANCE
- PF * EntertainerID
- PF * ReservationID
- Date/Time
- Description
- Length

ENTERTAINER
- P * EntertainerID
- Name
- Genre
- BillingRate

Relationships:
- sends / is sent by (CUSTOMER — BUSINESS)
- reserves / is reserved by (CUSTOMER — RESERVATION)
- confirms / is confirmed by (PAYMENT — RESERVATION)
- requests / is requested by (MARKETINGOFFICE — RESERVATION)
- manages / is managed by (EMPLOYEE — RESERVATION)
- selects / is selected by (RESERVATION — RESERVEDCATERING)
- fulfills / is fulfilled by (RESERVEDCATERING — CATERER)
- orders / is ordered by (CATERER — ORDER)
- supplies / is supplied by (ORDER — SUPPLIER)
- hosts / is hosted by (RESERVATION — VENUE)
- hires / is hired by (VENUE — SECURITYGUARD)
- reserves / is reserved by (RESERVATION — PERFORMANCE)
- performs / is performed by (PERFORMANCE — ENTERTAINER)

Assumptions:

1. A SecurityGuard can exist in the system without currently working at a Venue.

2. Each Catering entity only offers one menu.

3. Because payments can be so expensive, customers are allowed to pay for their reservations through multiple payments.

Physical ERD:

CUSTOMER

P	* CustomerID	CHAR (10)
	Address	VARCHAR2 (40)
	PhoneNum	CHAR (10)
	EmailAddress	VARCHAR2 (30)
	FirstName	VARCHAR2 (20)
	LastName	VARCHAR2 (20)
F	BUSINESS_BusinessID	CHAR (10)

CUSTOMER_PK (CustomerID)

CUSTOMER_BUSINESS_FK (BUSINESS_BusinessID)

BUSINESS

P	* BusinessID	CHAR (10)
	Name	VARCHAR2 (30)
	Description	VARCHAR2 (200)
	Address	VARCHAR2 (40)
	City	VARCHAR2 (50)
	State	CHAR (2)
	Country	VARCHAR2 (50)
	ZipCode	CHAR (5)

BUSINESS_PK (BusinessID)

MARKETINGOFFICE

P	* MarketOfficeID	CHAR (10)
	CompanyName	VARCHAR2 (50)
	Description	VARCHAR2 (200)
	Address	VARCHAR2 (80)
	City	VARCHAR2 (50)
	State	CHAR (2)
	Country	VARCHAR2 (50)
	ZipCode	CHAR (5)

MARKETINGOFFICE_PK (MarketOfficeID)

RESERVATION

P	* ReservationID	CHAR (10)
F	* CUSTOMER_CustomerID	CHAR (10)
F	* VENUE_VenueID	CHAR (10)
F	* EMPLOYEE_EmployeeID	CHAR (10)
	RoomNum	CHAR (3)
	Date/Time	DATE
	ConfirmationEmail	VARCHAR2 (200)
F	* MARKETINGOFFICE_MarketOfficeID	CHAR (10)

RESERVATION_PK (ReservationID)

RESERVATION_EMPLOYEE_FK (EMPLOYEE_EmployeeID)
RESERVATION_MARKETINGOFFICE_FK (MARKETINGOFFICE_MarketOfficeID)
RESERVATION_CUSTOMER_FK (CUSTOMER_CustomerID)
RESERVATION_VENUE_FK (VENUE_VenueID)

PAYMENT

P	* PaymentID	CHAR (10)
F	* RESERVATION_ReservationID	CHAR (10)
	PaymentMethod	VARCHAR2 (20)
	Price	NUMBER (6,2)
	Receipt	VARCHAR2 (100)

PAYMENT_PK (PaymentID)

PAYMENT_RESERVATION_FK (RESERVATION_ReservationID)

EMPLOYEE

P	* EmployeeID	CHAR (10)
	FirstName	VARCHAR2 (20)
	LastName	VARCHAR2 (20)
	HireDate	DATE
	Salary	NUMBER (8,2)

EMPLOYEE_PK (EmployeeID)

RESERVEDCATERING

PF	* RESERVATION_ReservationID	CHAR (10)
PF	* CATERER_CatererID	CHAR (10)
	Date	DATE
	Cost	NUMBER (6,2)
	ServiceDescription	VARCHAR2 (200)

RESERVEDCATERING_PK (RESERVATION_ReservationID, CATERER_CatererID)

RESERVEDCATERING_RESERVATION_FK (RESERVATION_ReservationID)
RESERVEDCATERING_CATERER_FK (CATERER_CatererID)

CATERER

P	* CatererID	CHAR (10)
	Menu	VARCHAR2 (1000)
	StaffSize	CHAR (3)
	FoodInStock	INTEGER

CATERER_PK (CatererID)

ORDER

PF	* CATERER_CatererID	CHAR (10)
PF	* SUPPLIER_SupplierID	CHAR (10)
P	* OrderDate	DATE
	PurchasedAmount	CHAR (3)
	Cost	NUMBER (7,2)
	ShippingDate	DATE

ORDER_PK (SUPPLIER_SupplierID, CATERER_CatererID, OrderDate)

ORDER_SUPPLIER_FK (SUPPLIER_SupplierID)
ORDER_CATERER_FK (CATERER_CatererID)

VENUE

P	* VenueID	CHAR (10)
	Name	VARCHAR2 (20)
	City	VARCHAR2 (20)
	State	CHAR (2)

VENUE_PK (VenueID)

SECURITYGUARD

P	* SecurityID	CHAR (10)
	FirstName	VARCHAR2 (20)
	LastName	VARCHAR2 (20)
	ClearanceLevel	CHAR (1)
F	VENUE_VenueID	CHAR (10)

SECURITYGUARD_PK (SecurityID)

SECURITYGUARD_VENUE_FK (VENUE_VenueID)

SUPPLIER

P	* SupplierID	CHAR (10)
	CompanyName	VARCHAR2 (50)
	Description	VARCHAR2 (200)
	UnitsInStock	INTEGER
	CostPerUnit	NUMBER (6,2)
	Address	VARCHAR2 (80)
	City	VARCHAR2 (50)
	State	CHAR (2)
	Country	VARCHAR2 (50)
	ZipCode	CHAR (5)

SUPPLIER_PK (SupplierID)

PERFORMANCE

PF	* ENTERTAINER_EntertainerID	CHAR (10)
PF	* RESERVATION_ReservationID	CHAR (10)
	Date/Time	DATE
	Description	VARCHAR2 (200)
	Length	INTEGER

PERFORMANCE_PK (ENTERTAINER_EntertainerID, RESERVATION_ReservationID)

PERFORMANCE_RESERVATION_FK (RESERVATION_ReservationID)
PERFORMANCE_ENTERTAINER_FK (ENTERTAINER_EntertainerID)

ENTERTAINER

P	* EntertainerID	CHAR (10)
	Name	VARCHAR2 (50)
	Genre	VARCHAR2 (20)
	BillingRate	NUMBER (6,2)

ENTERTAINER_PK (EntertainerID)

Enterprise Integration Plan:

	DATA *What*	FUNCTION *How*	NETWORK *Where*	PEOPLE *Who*	TIME *When*	MOTIVATION *Why*
Planner	Data about customers, venues, employees, will need to to kept to keep track of information	Business processes like transactions or scheduling an appointment	-Marketing Office -Business Office -Venues	People that we are making the system for (e.g. Venue staff, stakeholders)	-Used 24/7	-Create an effective scheduling system
User	-Room Availability -Venue Availability -Reservation Dates -Venue Costs -Caterer Costs	The working function of the database for our users is to act as a scheduling assistant	The useable network for our database would be through devices connected to our website (via either desktop PCs, laptops, or mobile devices such as smartphones)	The functioning organization of our company would be the company's employees and marketing office employees who receive reports	The database will be up at all times, and the website will be running 24/7 to enable reservations to be made	The working strategy of our database is to consistently receive relevant and meaningful data from the website in order to provide a better experience for our end users

Reflection:

Jack Mahedy:

      Reflecting back on this project, we have really learned a lot from this class. Starting at the beginning of the class when we were reviewing ERDs, I was completely lost. As you explained the concepts more, it was coming back to me and I felt more confident about this class and myself as a student. With the first phase I thought it was going to be tough coming up with at least 13 entities. As you get the first couple entities figured out, you start to think of what a business needs and you are able to figure out the rest. Phase 2 was great DML and DDL practice. The final phase was bringing everything together and testing our query knowledge.

      The knowledge gained from this project can be used in future jobs, future classes, or life in general. A future job might involve creating tables or entries, modifying tables or entries, or querying for data. This class has helped with Oracle SQL, which can be applied to other database management systems such as mySQL. In future classes such as CNIT 372/392, they involve SQL but go further in depth. This project and class has created a great foundation for other SQL related classes. With life in general this project and class has changed the way I think about companies and their database systems. If I am searching on Amazon, I can now apply what I learned from the project to try to figure out the query format.

      Some successes are creating the ERD entities and attributes and converting the ERD to the DDL. We also had good communication as a group and worked well together. Some obstacles were adding all of the records into the database. We had some errors because of the titles of the tables, but were able to fix them with BK's help. The final phase went pretty smooth for us, all of the queries were up to par satisfying the requirements.

Karteikay Dhuper:

      This project was the culmination of everything we've learnt in CNIT 272 this semester. I was able to utilize Entity Relationship Diagrams (ERD), Structured Query Language (SQL), Data Definition Language (DDL), and Data Manipulation Language (DML) to bring a fully functioning database to fruition. Knowledge of these concepts from this course allowed me to not only create entities, attributes, and relationships for our mission critical data but also allowed me to manipulate and query said data. Contents from this course would have a significant impact and implications on projects outside this course. Firstly, SQL is a good skill to have going into the workforce now more than ever since data has become an integral part of doing business in this information age. With knowledge of mySQL we can not only create, but manage, query and manipulate all kinds of data required by companies. Knowing how to create and manage a database is also a useful skill to have for your own personal projects since a lot of mobile applications and other software products rely on a database to store and access data. As far as obstacles are concerned we were able to get through most of our work with limited issues. Most of the issues that we had with mySQL developer we were able to get sorted either amongst ourselves or by meeting with BK our Teaching Assistant. Finding a shared time to consistently

work every week was one of the major challenges that we had but were able to figure it out in the end. I think all in all we worked well as a group. We were able to communicate effectively through Microsoft Teams and GroupMe and actively made an effort to meet during the designated lab times and also outside of class. This allowed us to plan out workload pretty well in the sense that each of us knew what we were supposed to be doing and which queries we were all in charge of.

Ryan Melenchuk:

This project allowed us to apply the knowledge we have gained throughout this course in a relatively real-world scenario. This project could be utilized to act as a sort of skeletal framework / example for a database were we to work on one in the future, especially if it holds relations with several of our tables and attributes, as we would be more readily able to write out queries and and other necessary sql statements which they may need. Overall, the knowledge *itself* that we acquired through doing this project would definitely be the most valuable thing we would have when designing or working on a new database in the future, as even being vaguely familiar with something like querying the oldest date will allow us to more quickly look up what would work were our knowledge to get dusty in the future (which is quite likely since we won't exactly be working on databases 24/7, and the work we *do* do is not likely to require every facet of knowledge which we have acquired this past semester).

I believe we encountered fewer obstacles than most, but we certainly had challenges at times when attempting to find a time to work on the project for everyone. Some days some of us would be too busy to meet, and some days the windows of opportunity for most of us would be overshadowed by just a single one of us having a lab at that exact time. We did, however, have a fair amount of success in delegating tasks overall. I would say that most of the work was relatively equally distributed, and very little was done in a hectic last-minute rush before the deadline. We really got into a rhythm with the second phase where most of us had at least *something* to be working on rather than just sitting around, and while we encountered numerous scheduling conflicts this past week while writing and quality checking our sql statements, we still got everything done without too many problems.

Amel Vejzovic:

This project put together everything we learned in class this semester. We started with creating an ERD based on a case study and built on that with everything we learned in SQL. We created those tables, created data, and were able to manipulate that data. This was the first real SQL class I have taken so I am able to expand on my skills after this class. I have already talked about this project in a job interview that needed SQL experience. Getting familiar with Oracle can also be helpful in the future as well. In terms of obstacles, we really did not have many problems. We did have some problems creating the database from the ERD but we were able to figure them out. I think we as a group did a really good job communicating and working together

to complete this project. The database was simple but did not need to be overly complicated. We created values in order to have unique results for left and right outer joins for example. This stems from us applying the connection of the ERD relationships to the actual values inside of the tables. I also finally feel like I can make something out of an ERD which I always just felt like I was making just to make one. I am able to create an actual database from just a diagram which I think is a good skill to have. Overall, I think this project was a good step in getting me more familiar with SQL. I feel like working on it as a group made it a little more tricky than it had to be but it was the only way to effectively create a database of good size. This could be a potential project I add to my resume to show that I have experience in SQL and Oracle's SQL developer.