Contact Management System

**CMPT 308N-113**

**11161**

**The Data Bros**



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**GitHub:** <https://github.com/ShaneSeeley28/CMPT308N-113_Contact_Management_System_DataBros>

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**Why We Make a Great Team**

Jozef’s Paragraph:

I want to work with Shane because I know he is a student who makes good decisions on essential requirements. I know that he can lead our team to meet project conditions and submit work on time. Shane is a good leader due to his tenacity in doing every task assigned to him. Shane is also a hard worker and I know that he will submit our projects on time and get his work done effectively.

Shane’s Paragraph:

I am excited to work with Jozef because I know we can get our work done on time and answer questions efficiently. We both are passionate about computer science and learning about topics like databases. The reason for me being the team leader is due to my knowledge of SQL and my personality, which will help guide our team to being as effective as possible.

Different Contact Management Systems:

**Cloud-Based Contact Management System “Google Contacts”:**

Advantages: Contacts are accessible from any device with internet access, and data is backed up regularly, which reduces the risk of data loss.

Disadvantages: Requires an internet connection to access data, which can create limitations.

**CRM Systems “Salesforce”:**

Advantages: Automation CRM systems automate specific tasks like email campaigns and customer interactions using stored data.

Disadvantages: CRM systems can be expensive and may not be needed for small businesses.

**Spreadsheet Software “Excel”:**

Advantages: allows for flexibility with data organization and sorting, data can also be integrated with other software using Excel.

Disadvantages: Version control issues collaboration in Excel can be challenging for data entry.

**Why our Software is the right choice and Our Goals.**

We believe that our system will be cost-effective and perfect for small businesses looking for a Contact Management System. We will create a secure SQL database to store customers’ information that users can easily access with a state-of-the-art user interface. Our system will have up-to-date security making it perfect for storing user data. With our Contact Management System users can get the best possible CMS for a price that’s affordable.

**Describe how you created this mini world and how you selected the entities, attributes, relationships, participations, and cardinality**.

To create this mini world, we thought about what would be important for a contact management system to function and what kind of amenities users might want. Because it's acontact-focusedd database the entities are centered around the contacts entity. Attributes belonging to each entity are self-explanatory and are indicative of the table they are assigned to. The entities not directly related to the contacts entity are meant to further elaborate and give insight on information like departments or notes on interactions. Participations are tied together by necessity for the most part.

**Provide a short description of each entity, attribute, relationship, participation, and cardinality.**

Address is an entity that stores an AddressID, the street address, city, state, country, zip code, and the name of the person associated. It is related to the contacts entity and stores the address information of specific contacts. Many contacts can store many addresses. Contacts is an entity with the attributes Fname, Lname, Cellphone, Workphone, FaxNum, Email, Gender, and Birthday. It stores the contact info for a person. It's related to most of the other entities in many ways. User is an entity with the attributes Username, Password, UserID, IsAdmin, Email, Fname, and Lname. It is an entity to store the user’s information and has an attribute to discern whether it's an admin. It’s connected to contacts in a 1: N configuration. Interaction and the Notes entities are meant to keep tabs on interactions made between contacts, such as calls, and to keep notes on the interaction. Interaction has the attributes InteractionID, Date, Itype, AssociatedContact, and Company. It is connected to contacts as many to one contact. Notes have noteID, Ntype, NOTE, Date, and InteractionID. It is connected to Interactions in 1:1 and is meant to keep track of the interactions individually. Relationships is an entity that is connected 1:1 to Contacts. It has the attributes RelationshipID, Fname, Lname, Rtype, Fname2, Lname2. It is an entity meant to keep track of personal relationships between people. Groups are a similar entity that keeps track of group relationships rather than personal relationships. Groupshaves the attributes GroupID, GroupName, Gmembers, Gcompany, and Gtype. It is connected to contacts in M:N. Job, Company, and Department are related entities, describing the jobs of individual contacts, the company they work for, and the department they work in that company. Job has the attributes JobID, Title, JobLocation, CompanyID, and ContactID. It is connected to contacts and company in a 1:1 relationship. Company has CompanyID, CompanyName, CompanyLocation, CompanyType, and Employees and is connected to Job and Department in a 1:1 relationship. Department is connected to Company and Contacts in a 1:1 relationship and has the attributes DepartmentID, Dname, Dlocation, DcompanyID, Demployees, and Dmanagername.

**Provide a short description of keys and relationships.**

Every entity has a key with most having it connected to another entity through a relationship. However, MySQL added extra IDs to each entity for some reason and I don’t know how to work it since MySQL doesn’t like the extra ones being deleted.

**Describe how you implemented these features on your EER model.**

I implemented these features accordingly into my EER model. The way I designed the contact management system meant the ER and EER models are fairly similar.

References:

<https://www.softwareadvice.com/crm/google-contacts-profile/>

<https://www.salesforce.com/crm/what-is-crm/>

<https://whatcms.org/c/Microsoft-Excel>