

# Microsoft Corporation Database Management

This Partnership Agreement to create a Database Management for Microsoft Corporation is made and entered into on Tuesday of June, 2021 by and between the following Parties:

Name	-and-	Name
Tan Ae Le		Lam Hao Cheng
CEO		Database Design Leader

## Background

- A. The Partners wish to associate themselves as partners in business.
- B. This Agreement sets out the terms and conditions that govern the Partners within the Partnership.

**IN CONSIDERATION OF** and as a condition of the Partners entering into this Agreement and other valuable consideration, the receipt and sufficiency of which consideration is acknowledged, the Parties to this Agreement agree to the following:

## Article I

## Scenario and Scope of Project

An influx and growth of the need to store company data has led to a poorly designed database. Due to this, Microsoft Corporation requires a team of database developers to help fix the issues and problems that are affecting the company as a whole. The following are the Business Problems Microsoft is experiencing.

A data cluster consisting of multiple servers working together gives multiple levels of back up. Since if it is a single server database, if the server goes down, so does the company. This will lead the company to defeat as best-laid plans could very quickly go to waste. From short term costs like productivity and revenue losses to more enduring consequences like compromised data

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and loss of brand reputation, system downtime has the potential to inflict significant damage to the company.

Since the company currently runs on a single server database, there are chances at which the database might be down suddenly. This can happen mainly because of data clusters since the amount of data needed to carry is increasing. The more clients we have, the more stress that is being exerted towards the database. This could lead to unorganized and scattered data information that affects the company's reputation and possibly lead to compromised data. Single server database also means that if the company loses this

Furthermore, in relation to the database's small capacity of storage for the data, the company has been facing constant data freezing and paralysis. Thus, when the employees insert data into the database system, it becomes inoperable leading to the employees not being able to insert anymore data. As a result, the employees have expressed dissatisfaction with the database system and the way it constantly freezes. This also relates to the database retrieval methods that take a long time to process. Again, this has led to employees reduced work efficiency and slowed working times.

Finally, due to constant freezing and low-retrieval time in the poorly designed database system, there has been an increase in overwritten data and wrongly placed information. As a result, personal data on suppliers and customers has been overwritten and lost beyond retrieval. This has been a great loss to the trust between people connected to the company and the information that the company has access to. Thus, there is a need to correct the issue of user personal information compromise.

Therefore, after the User and the CEO of the Microsoft Corporation have expressed such issues to the database team, it is necessary to come up with solutions that will avoid further problems from arising in the Microsoft Corporation and the people involved with the company. Therefore, with constant surveillance and cooperation between the Database team and the company, there will be a chance for a more updated and relevant database management system.

## Article II

## User Requirements of Project

Firstly, Microsoft wishes to establish and maintain management accountability to owners by allocating rights and obligations amongst Board members, managers, and shareholders in a fair and equitable manner. This will be achieved through the business rules that have to be abided by.

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The second goal is to provide a framework for management and the heads to be able to define the clear goals and understand the written business rules and plan in a clear manner.

Furthermore, Microsoft's goal is to strengthen and protect our corporate integrity and ethical business practises culture. The fairness in the business is a required matter and any issues faced by the staff should be dealt with.

Lastly, resource efficiency and holding people accountable for their stewardship of such resources is encouraged. This is to ensure that there is no wastage of resources and ensure that everyone has access to the resources that they require at any given time.

## Article III

## User Queries in Project

i)

One of our workers, Mahometus Bademus from Kentucky, wanted to move to New Jersey with his family. Instead of resigning, he found out that there is an empty position in the New Jersey branch. that person requested to be transferred to a different workstation in the state.. Afterwards, he received a promotion to become the manager of the new workstation. This means he gets a pay raise, and then. So update his information and show that he has been updated to manager and show his new salary and City.

ii)

After request from the higher-ups, Microsoft Corporation is required to show the amount of deliveries that they have made since 2020. The required locations of the customers are also needed. The latest date of delivery should be May 2021. It is also required that the data be arranged in Descending order. The data is to be grouped according to state in order to note the amount of people from each state.

iii)

Due to an increase in sales and need for technology products at Microsoft Corporation, the most loyal and highly paid product customers are asking for a complimentary gift. As such, the Microsoft Corporation needs to sort the top 3 customers from Illinois in terms of the amount of products they have bought and the product price that they have purchased. Make sure to include their Names too!

iv)

After increasing the amount of employees that are in each branch, the Staff table is being reorganized in order to identify the Managers easily. Sort the table according to Manager ID, Manager Name, Main Branch, Salary and Age of each of the Managers.

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## Article IV

## Business Rules to be met

### Product:

- All products will have their own product ID and model number.

### Model:

- Different types of model will have different model numbers and names.
- All models will have their own model type.

### Person:

- Every person will have a different ID to allow the system to recognize the employee.
- Name, address, phone number, date of birth of the employee must be included.

### Courier:

- Each courier have their own ID to differentiate the courier
- The name, type and phone number of the contractor must be included.

### Sales:

- Order ID must be included for every sale.
- Date of the order must be recorded.
- Mode of purchase must be stated
- Customers can choose to pick up at a retail store or to be delivered to their house.
- Status must be given about the availability of the stock and remark must be given to notify the customer about their purchases.

### Staff:

- Every staff member has their own ID for identification.
- Their salary must be stated clearly.

### Delivery:

- Departure date and arrival date must be recorded.
- Status of the delivery must be shown to the customer.

### Branch:

- The ID and the address of the branch must be recorded clearly.
- Each branch has 1 manager present.

### Supplier:

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- Every supplier has their unique ID
- Supplier's phone number and address are to be stated

Stock:

- Stock ID must be recorded clearly to prevent confusion.
- The quantity of the stock must be recorded to increase inventory and stock management efficiently.

**Tan Ae Le - CEO**



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*Signature*

**Lam Hao Cheng - Database Leader**



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*Signature*

**Chong Kin Tze - User**



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*Signature*

**Kwan Jia Chi - Database Designer**



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*Signature*

**Project Manager - Masuma Shariff**



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*Signature*