Database Design Document

# Introduction

This document is going to list out the physical aspect of the database.

# Assumption and Constraints

List assumptions and constraints as identified during your design process.

CONSTRAINT employee\_pk PRIMARY KEY (id)

CONSTRAINT "Customer\_pk" PRIMARY KEY (id)

CONSTRAINT "Invoice\_pk" PRIMARY KEY (id),

CONSTRAINT product\_pk PRIMARY KEY (id)

CONSTRAINT shipping\_pk PRIMARY KEY (id)

CONSTRAINT customer\_fk FOREIGN KEY (customer\_id) REFERENCES public."Customer" (id)

CONSTRAINT product\_fk FOREIGN KEY (product\_id) REFERENCES public.product (id)

CONSTRAINT shipping\_fk FOREIGN KEY (shipping\_id) REFERENCES public.shipping (id)

CONSTRAINT employee\_fk FOREIGN KEY (employee\_id)

# Identified Issues

Identify any issues you have identified and list possible work arounds

# Personnel

Identify who is working on the project, responsibilities, etc. Example jobs below. It is possible to be more than one of these.

* Analyst Akhond Sarah Mesbah,Nathan Macdonnell
* Architect Akhond Sarah Mesbah
* Quality Assurance Akhond Sarah Mesbah
* Documentation Specialist Akhond Sarah Mesbah

# Entities

Database Name: \_ThinkTriangle\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Revision: 2.0\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_03/08/2020\_\_\_\_\_\_\_\_\_\_\_

Author: \_\_Akhond Sarah Mesbah\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| Entity Name | Entity Type | Relates to |
| Invoice | Table | product |
| Product | Table | Customer & shipping |
| Shipping | Table |  |
| Customer | Table | employee |
| Employees | Table |  |
|  |  |  |
|  |  |  |
|  |  |  |
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Notes:

A customer can have many invoice which goes for products and shpiing details as well

An employee can have many customers

An invoice can have one customer,

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# Entity Details

## Fields form – <Entity Name >

Database Name: \_\_ ThinkTriangle \_\_\_\_\_\_\_\_ Revision: \_\_2.0\_\_\_\_\_\_\_\_\_\_\_

Entity Name: \_\_\_\_ Customer \_\_\_\_\_\_\_\_ Date: \_\_\_03/08/2020\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Author: \_ Akhond Sarah Mesbah \_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data type | Field Properties | Relates to |
| id | serial | Primary key |  |
| customer\_name | Varchar(50) | Not null |  |
| customer\_phone\_number | Integer | Not null |  |
| customer\_address | Vachar(100) | Not null |  |
| employee\_id | serial | Not null | employee |
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Notes:

\_\_The employee id field is a foreign key which references the employee table\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Database Name: ThinkTriangle Revision: 2.0

Entity Name: Employee Date 03/08/2020\_\_

Author: Akhond Sarah Mesbah

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data type | Field Properties | Relates to |
| id | serial | Primary key |  |
| username | Varchar(50) | Not null |  |
| password | Varchar(50) | Not null |  |
| name | Vachar(50) | Not null |  |
| email | Vachar(100) | Not null |  |
| job | Vachar(50) |  |  |

Notes:

Employee table, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Database Name: ThinkTriangle Revision: 2.0

Entity Name: Product Date: 03/08/2020\_\_

Author: Nathan MacDonnell, Akhond Sarah Mesbah

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| --- | --- | --- | --- |
| Field Name | Data type | Field Properties | Relates to |
| id | serial | Primary key |  |
| description | Varchar(100) | Not null |  |
| quantity | Decimal(100) | Not null |  |
| unit\_price | Vachar(50) | Not null |  |
| discount | Decimal(100) | Not null |  |
| product\_name | Varchar(50) | Not null |  |
| payment\_terms | Integer |  |  |
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Database Name: ThinkTriangle Revision: 2.0

Entity Name: Shipping Date: 03/08/2020\_\_

Author: Nathan MacDonnell,Akhond Sarah Mesbah

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data type | Field Properties | Relates to |
| id | serial | Primary key |  |
| shipping\_date | Date | Not null |  |
| shipping\_address | Varchar(100) | Not null |  |
| shipping\_method | Vachar(30) |  |  |
| shipping\_terms | Integer |  |  |
| delivery\_Date | Date | Not null |  |
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Database Name: ThinkTriangle Revision: 2.0

Entity Name: Invoice Date: 03/08/2020\_\_

Author: Nathan MacDonnell

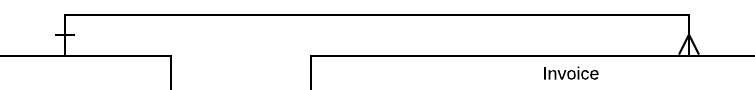
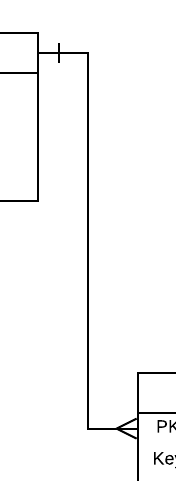
|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data type | Field Properties | Relates to |
| id | serial | Primary key |  |
| Issue\_date | Date | Not null |  |
| Due\_Date | Date | Not null |  |
| Line total | Decimal(100) | Not null |  |
| Product id | serial | Not null | product |
| Customer\_id | serial | Not null | Customer |
| Shipping id | serial | Not null | Shipping |
| Subtotal | Decimal(100) | Not null |  |
| total | Decimal(100) | Not null |  |
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Notes:

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# BASIC ERD



Customer

Customer

id

customer\_name

customer\_phone\_number

customer\_address

employee\_id

Employees

id

username

password

name

email

job

Product

id

description

quantity

unit\_price

discount

product\_name

payment\_terms

Shipping

Id

Shipping date

Shipping method

Shipping address

Shipping terms

Delivery date

Invoice

id

Issue\_date

Due\_Date

Line total

Product id

Customer\_id

Shipping id

Subtotal

total

# 8 PHYSICAL ERD

