Subscription Box Service Mini World

Ousmane Jalloh 24306596

Cis 344

For my mini world I selected the subscription box service mini world. In this Schema we will have the following entities Customers, Subscription plans, Subscriptions, Payments, and boxes. Below we will attach the attributes for the these entities. During the research phase of we came across this stack overflow page giving examples of what is recommended to record in a database for a subscription service. The link to the stack overflow page is: https://stackoverflow.com/questions/23507200/good-practices-for-designing-monthly-subscription-system-in-database

Customer

We will record our customers basic data such as Name, Address, email, and will assign them a unique customer Id that will serve as a primary key for the table. If the customer cant remember their Customer Id will use their email as a candidate key. This table is important for us to keep track of our customers and all the relevant information pertaining to them.

Customer_Id	Email	First_name	Last_name	Signup_date	Shipping address	Billing address	Status

Subscription Plans

This entity will consist of the plans that we offer, we will assign our subscription plans with a unique plan id that will serve as a primary key. We will record the price of the subscription and the frequency of which each subscription is billed. Lastly we will record how many items are included in each box. The details of this table is meant for us to record all of our active services and allows us to attach a subscription plan to any of our customer subscriptions.

Plan_id	Name	Description	Price	Frequency	Item_in_box

Subscription

This table will link a customer to a specific plan and tracks the status of that subscription. The subscription Id will be the primary key, the customer id, and plan id will be the foreign keys. We will keep track of of the start and end dates because it allows us track how long a subscription been active.

Subscription Id	Customer ID	Plan ID	Start date	End date	Status

Payments

This table will record all payment transactions linked to a subscription. The payment Id will be the primary key, the subscription id will be the foreign key. This table was primarily referenced from the stack overflow webpage.

Payment id	Subscription id	amount	Payment date	Status	

Boxes

Represents each physical box shipped. A new record is created for each billing cycle for an active subscription. The box id will be the primary key and the subscription id will be the foreign key

Box_ID	Subscription ID	Shipment date	Delivery date	Tracking Number	Status

Relationships

The relationships in this schema are:

- A one to many relationship between customer and subscriptions
- A one to many relationship between subscription plans and subscriptions. Where one subscription is chosen from many subscription plans
- A one to many relationships between subscription to boxes. Where one subscription can **generates** many Boxes-+-- over its lifetime
- A one to many relationship between subscription and payments where many payments can be made to one subscription.