

HEAVEN LAND

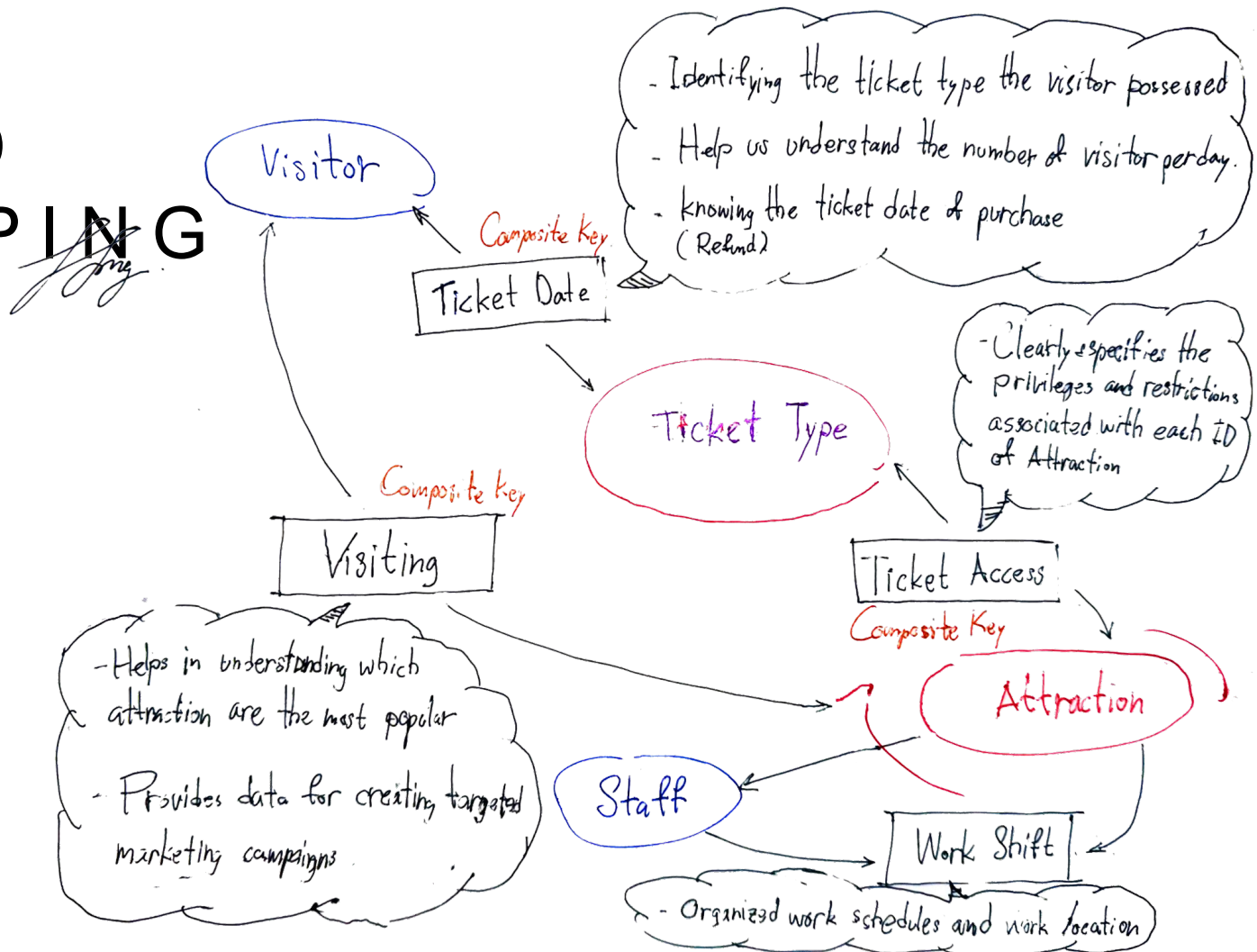
AMUSEMENT PARK PROJECT

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Al Helal

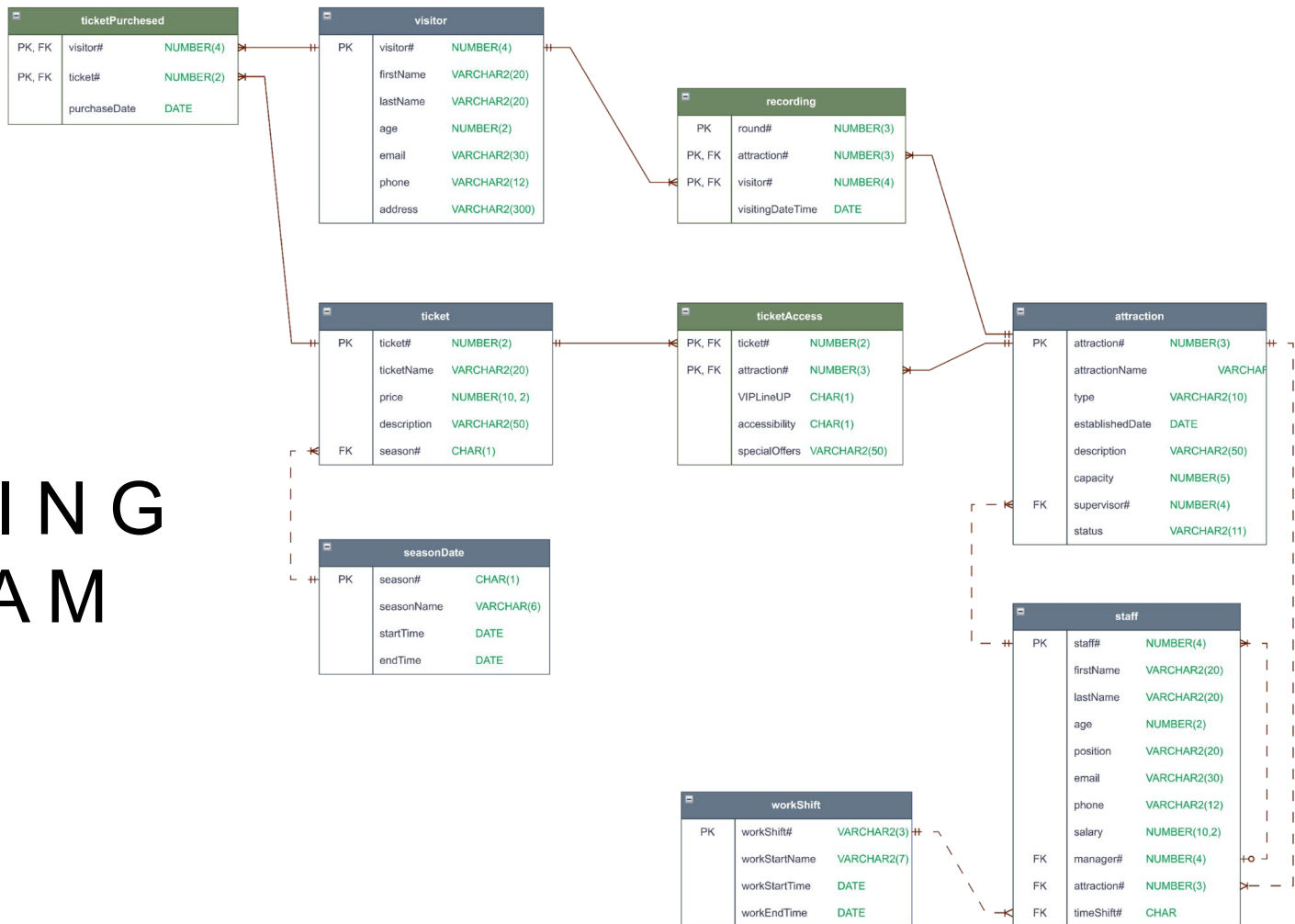
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MIND MAPPING



ER DRAFTING DIAGRAM



INTRODUCE

This amusement park captures the complex interactions between visitors, tickets, attractions, staff, and seasons, providing a comprehensive framework for data integrity and operational efficiency.

This database system includes the following key tables: **Visitor**, **Ticket**, **SeasonDate**, **Attraction**, **Staff**, **WorkShift**, **TicketPurchased**, **Recording**, and **TicketAccess**.

The system plays a specific role in keeping track of visitors, managing attractions, recording ticket sales and access, and storing information about staff and work schedules.

B U S I N E S S R U L E S

UNIQUE IDENTIFICATION

Each visitor is uniquely identified by a [VISITOR#](#).

Each ticket is uniquely identified by a [TICKET#](#).

Each season date is uniquely identified by a [SEASON#](#).

Each attraction is uniquely identified by an [ATTRACTION#](#).

Each staff member is uniquely identified by a [STAFF#](#).

Each work shift is uniquely identified by a [WORKSHIFT#](#).

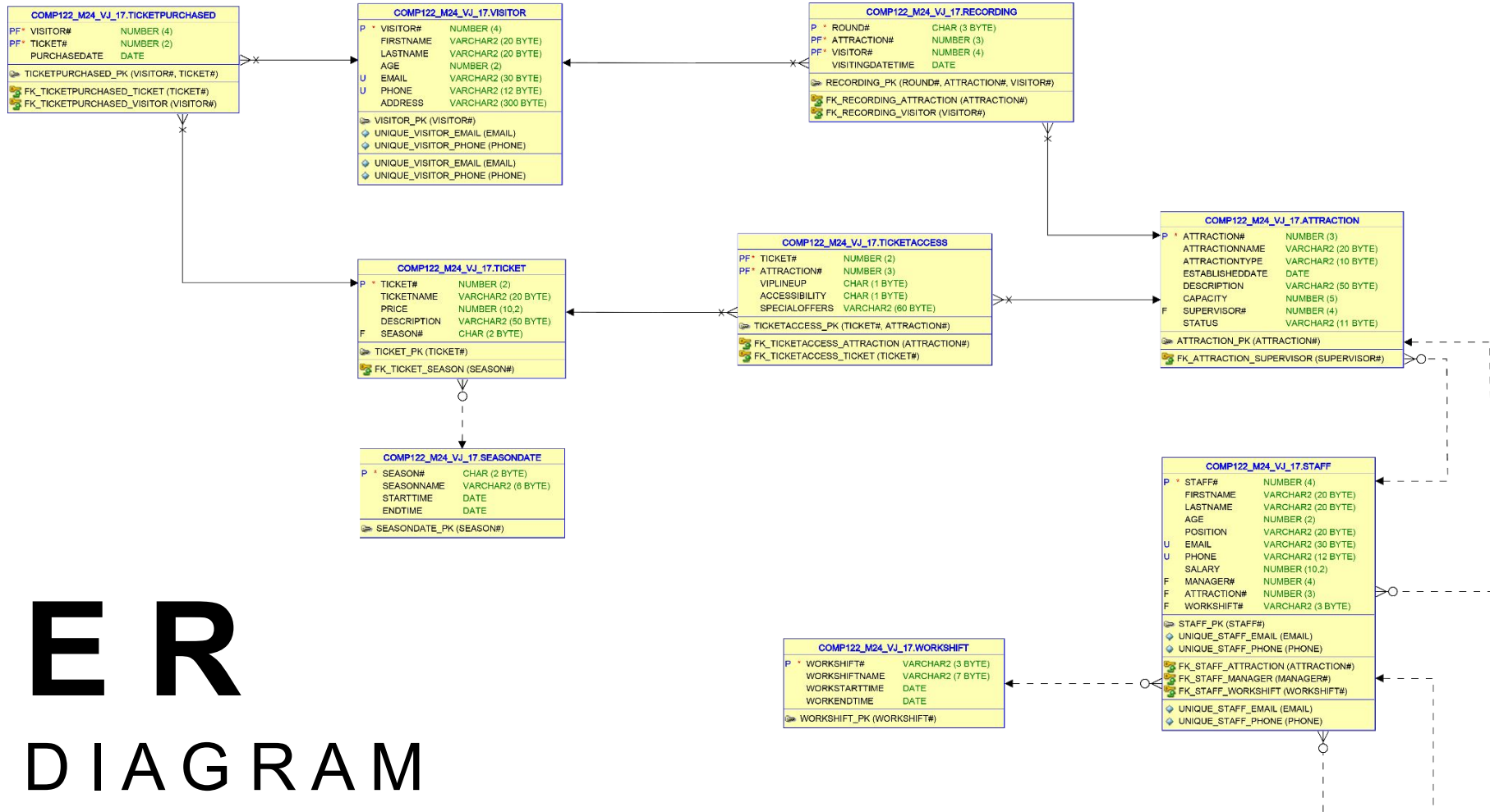
COMPOSITE KEY

Each ticket purchase is uniquely identified by a combination of **VISITOR#** and **TICKET#**.

Each recording is uniquely identified by a combination of **ROUND#**, **VISITOR#**, and **ATTRACTION#**.

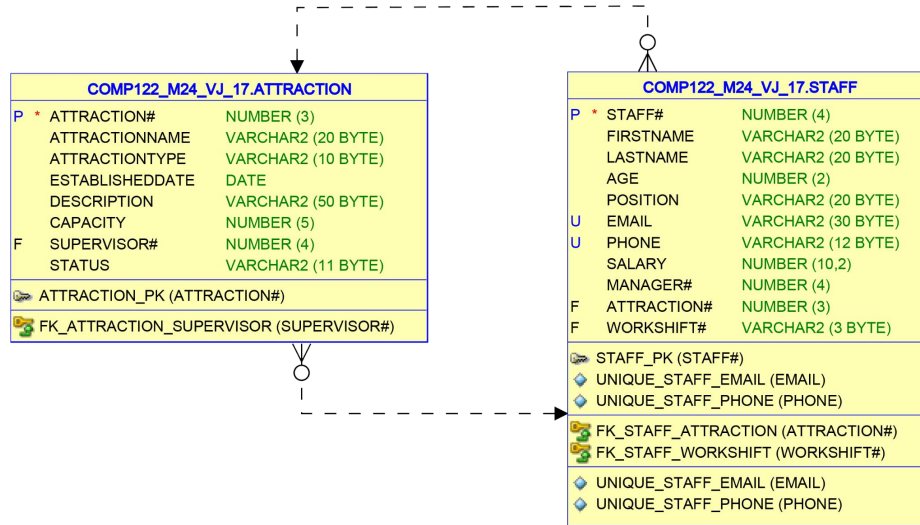
Each ticket access instance is uniquely identified by a combination of **TICKET#** and **ATTRACTION#**.

RELATIONSHIPS



ER DIAGRAM

ATTRACTION - STAFF



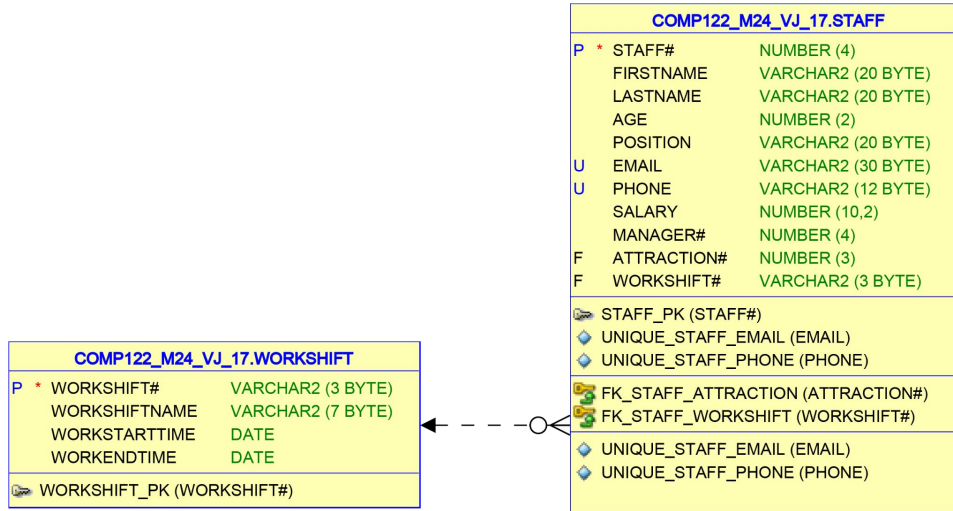
Each attraction is managed by one supervisor, but a supervisor can manage multiple attractions.

This is a one-to-many relationship from **STAFF** to **ATTRACTION**.

Each staff member can be assigned to exactly one work shift, but each work shift can have multiple staff members assigned to it.

This is a many-to-one relationship from **STAFF** to **WORKSHIFT**.

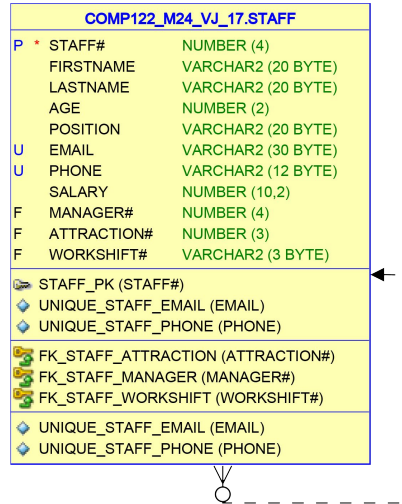
WORKSHIFT - STAFF



Each staff member can be assigned to exactly one work shift, but each work shift can have multiple staff members assigned to it.

This is a many-to-one relationship from **STAFF** to **WORKSHIFT**

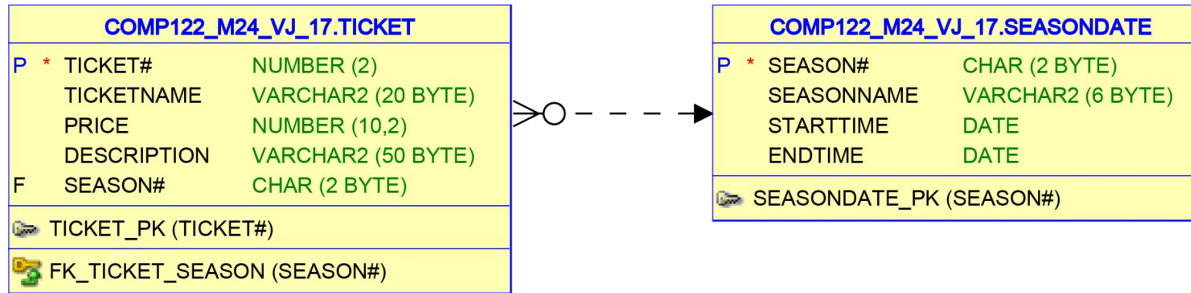
STAFF



Each staff member has one manager, but a manager can oversee multiple staff members.

This is a many-to-one relationship within the **STAFF** table.

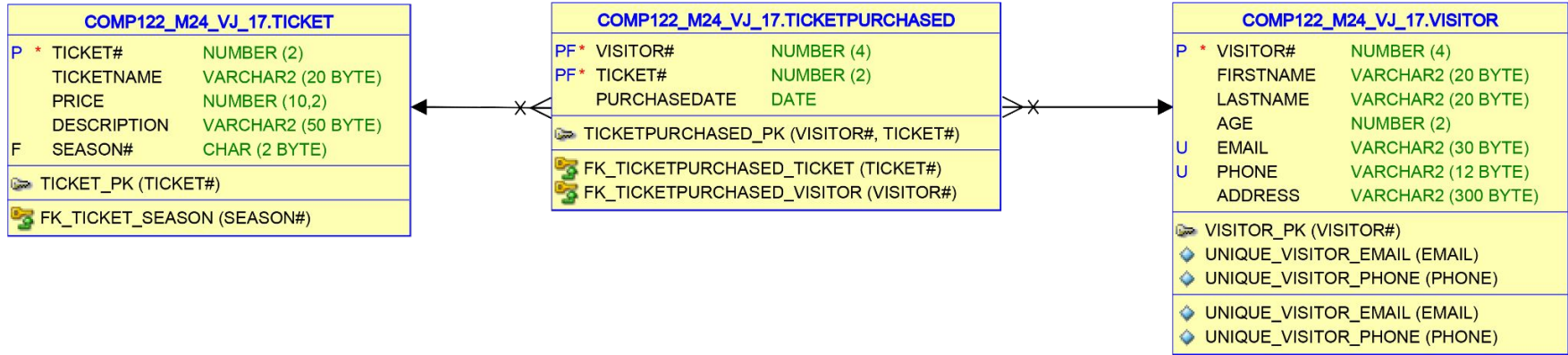
TICKET - SEASONDATE



Each ticket is associated with one season, but a season can have multiple tickets available.

This represents a many-to-one relationship from **TICKET** to **SEASONDATE**.

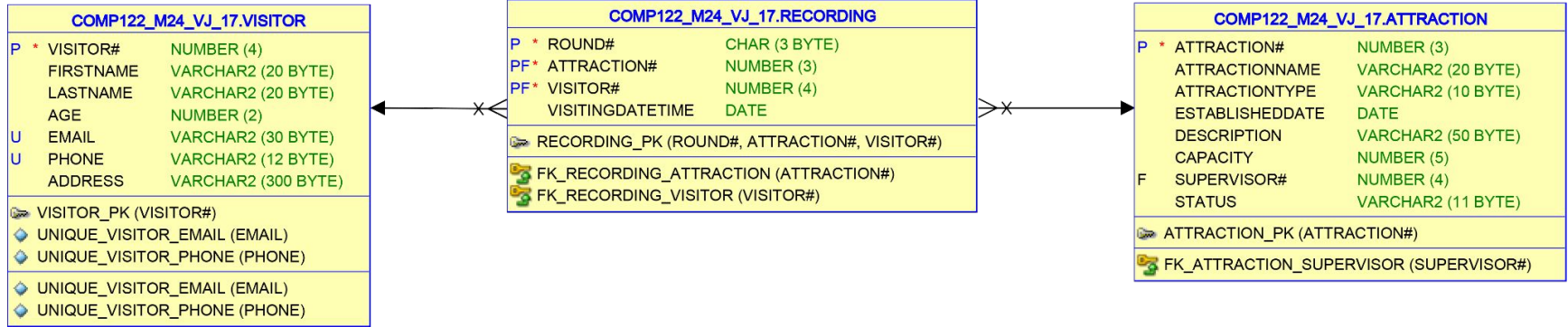
TICKET - TICKETPURCHASED - VISITOR



The **TICKETPURCHASED** table serves as a junction table between **VISITOR** and **TICKET**, capturing each instance of a ticket being purchased by a visitor.

It uses a composite primary key consisting of **VISITOR#** and **TICKET#**, indicating that a particular visitor can purchase multiple tickets, and a ticket can be purchased by multiple visitors.

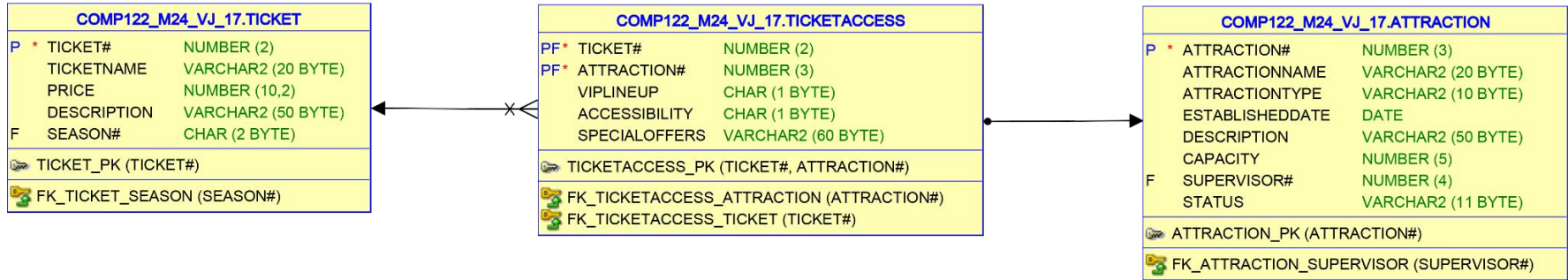
VISITOR - RECORDING - ATTRACTION



The **RECORDING** table serves as a junction table between **VISITOR** and **ATTRACTION**, capturing each instance of a visitor attending an attraction.

It uses a composite primary key consisting of **ROUND#**, **ATTRACTION#**, and **VISITOR#**, indicating that a particular visitor can visit multiple attractions, and an attraction can be visited by multiple visitors during different rounds.

TICKET - TICKETACCESS - ATTRACTION



The **TICKETACCESS** table functions as a junction table between **TICKET** and **ATTRACTION**, documenting the access permissions granted by each ticket to specific attractions.

It uses a composite primary key consisting of **TICKET#** and **ATTRACTION#**, signifying that a single ticket can provide access to multiple attractions, and each attraction can be accessed by holders of different tickets.

REFERENCE

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