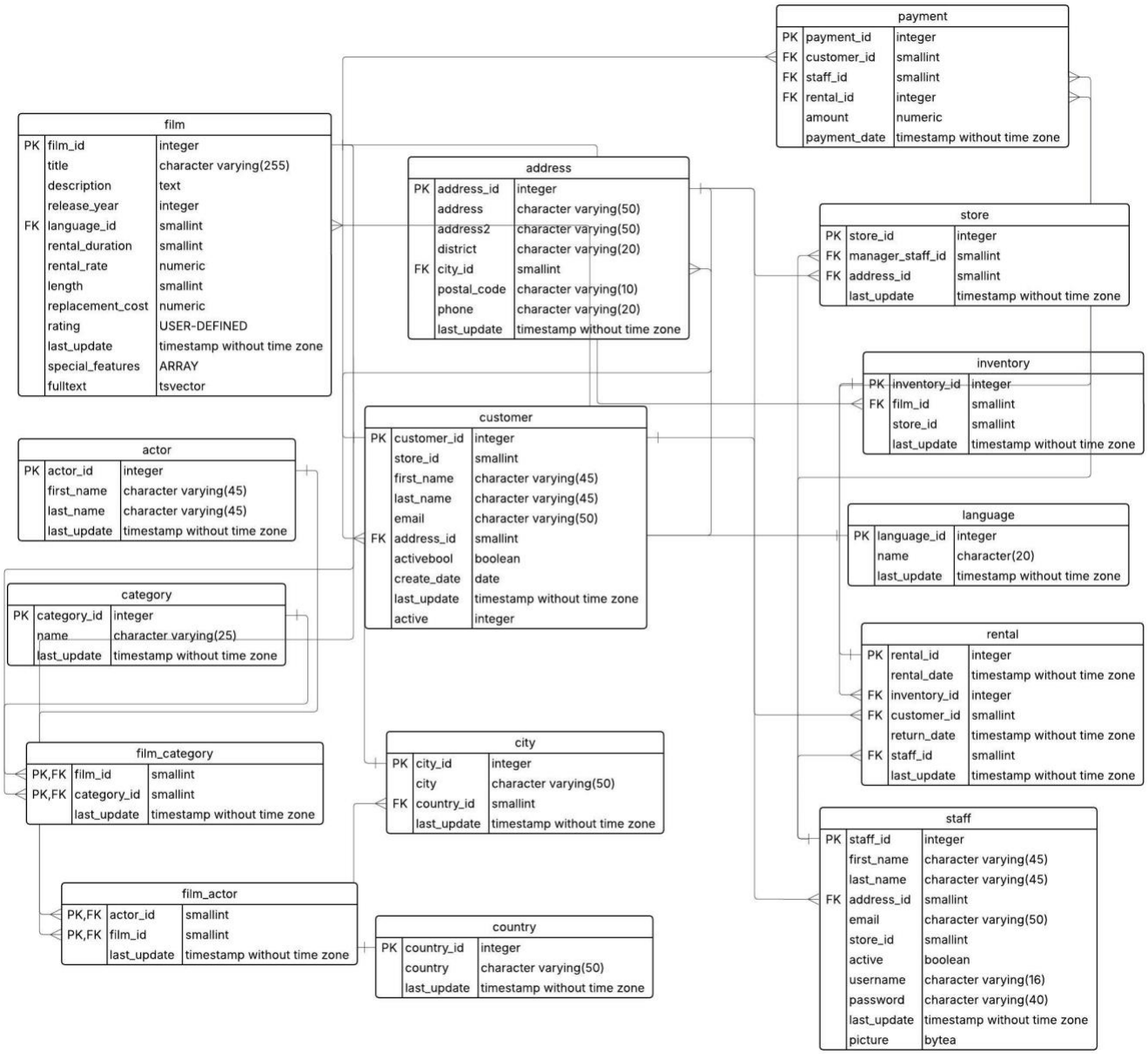
Task 3.2 Data Storage and Structure

ERD



- **Fact Table**

Table Name	Columns	Data Type	Description
Payment Table	payment_id	integer	ID number for payments
	staff_id	smallint	Staff number
	Customer_id	smallint	Customer number
	rental_id	Integer	Account number
	amount	numeric	Total owed
	payment_date	timestamp without time zone	When paid
Rental Table	rental_id	integer	ID for each unique rental
	rental_date	Timestamp without time zone	Date of rental
	inventory_id	integer	Inventory number
	customer_id	smallint	Customer number
	return_date	Timestamp without time zone	Date returned
	staff_id	smallint	Staff number
	last_update	Timestamp without time zone	Date and time last updated

Dimensions Table

Table Name	Column	Data Type	Description
Staff	Staff_id	serial	Staff number
	First_name	Character varying (45)	First name of staff
	Last_name	Character varying (45)	Last name of staff
	Address_id	smallint	Address of staff
	email	Character varying (50)	Email of staff
	Store_id	smallint	Store number
	active	boolean	Active staff
	username	Character varying (16)	Username of staff
	password	Character varying (40)	Password of staff
	Last_update	Timestamp without time zone	Date and time last updated
	picture	bytea	Photo of staff
Customer	Customer_id	serial	Customer number
	Store_id	smallint	Store number
	First_name	Character varying (45)	First name of customer
	Last_name	Character varying (45)	Last name of customer
	email	Character varying (50)	Email of customer
	Address_id	smallint	Address of customer
	activebool	boolean	

	Create_date	date	
	Last_update	Timestamp without time zone	Date and time last updated
	active	integer	Active Customer
Inventory	Inventory_id	serial	Inventory number
	Film_id	smallint	Film number
	Store_id	smallint	Store number
	Last_update	Timestamp without time zone	Date and time last updated
Store	Store_id	serial	Store number
	Manager_staff_id	smallint	Staff manager number
	Address_id	smallint	Store address
	Last_update	Timestamp without time zone	Date and time last updated
City	City_id	serial	City number
	City_id	Character varying (50)	City Name
	Country_id	smallint	Country Number
	Last_update	Timestamp without time zone	Date and time last updated
Country	Country_id	serial	Country Number
	Country_id	Character varying (50)	Country Name

	Last_update	Timestamp without time zone	Date and time last updated
Address	Address_id	serial	Address Id
	Address_id	Character varying (50)	Street name/Number
	Address2	Character varying (50)	If needed
	district	Character varying (20)	District/State/Region/County
	City_id	smallint	City number
	Postal_code	Character varying (10)	Postal code
	phone	Character varying (20)	Phone number
	Last_update	Timestamp without time zone	Date and time last updated
Category	Category_id	serial	Category number
	name	Character varying (25)	Genre
	Last_update	Timestamp without time zone	Date and time last updated
Film	Film_id	serial	Film Number
	title	Character varying (255)	Title of Film
	description	text	Description of Film
	Release_year	year	Year

	Language_id	smallint	Language number
	Rental_duration	smallint	How many days of rental
	Rental_rate	Numeric (4,2)	Cost to rent
	length	smallint	
	Replacement_costs	Numeric (5,2)	Cost to be replaced
	rating	Mpaa_rating	
	Last_update	Timestamp without time zone	Date and time last updated
	Special features	text	Extras like behind the scenes
	fulltext	tsvector	Film feature keywords
Film Category	Film_id	smallint	Film Number
	Category_id	smallint	Category number
	Last_update	Timestamp without time zone	Date and time last updated
Film Actor	Actor_id	smallint	Actor number
	Film_id	smallint	Film Number
	Last_update	Timestamp without time zone	Date and time last updated
Actor	Actor_id	integer	Actor Number
	First_name	Character varying (45)	First Name of Actor
	Last_name	Character varying (45)	Last Name of Actor

	Last_update	Timestamp without time zone	Date and time last updated
Language	Language_id	integer	Language number
	Name	Character (20)	Name of Language
	Last_update	Timestamp without time zone	Date and time last updated