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DOMAIN: Healthcare Access Management System

TITLE: "CureConnect: Empowering Health, Connecting Lives"

A Group Project Submitted for undergraduate DBMS PROJECT (BCA481) 2023-2024

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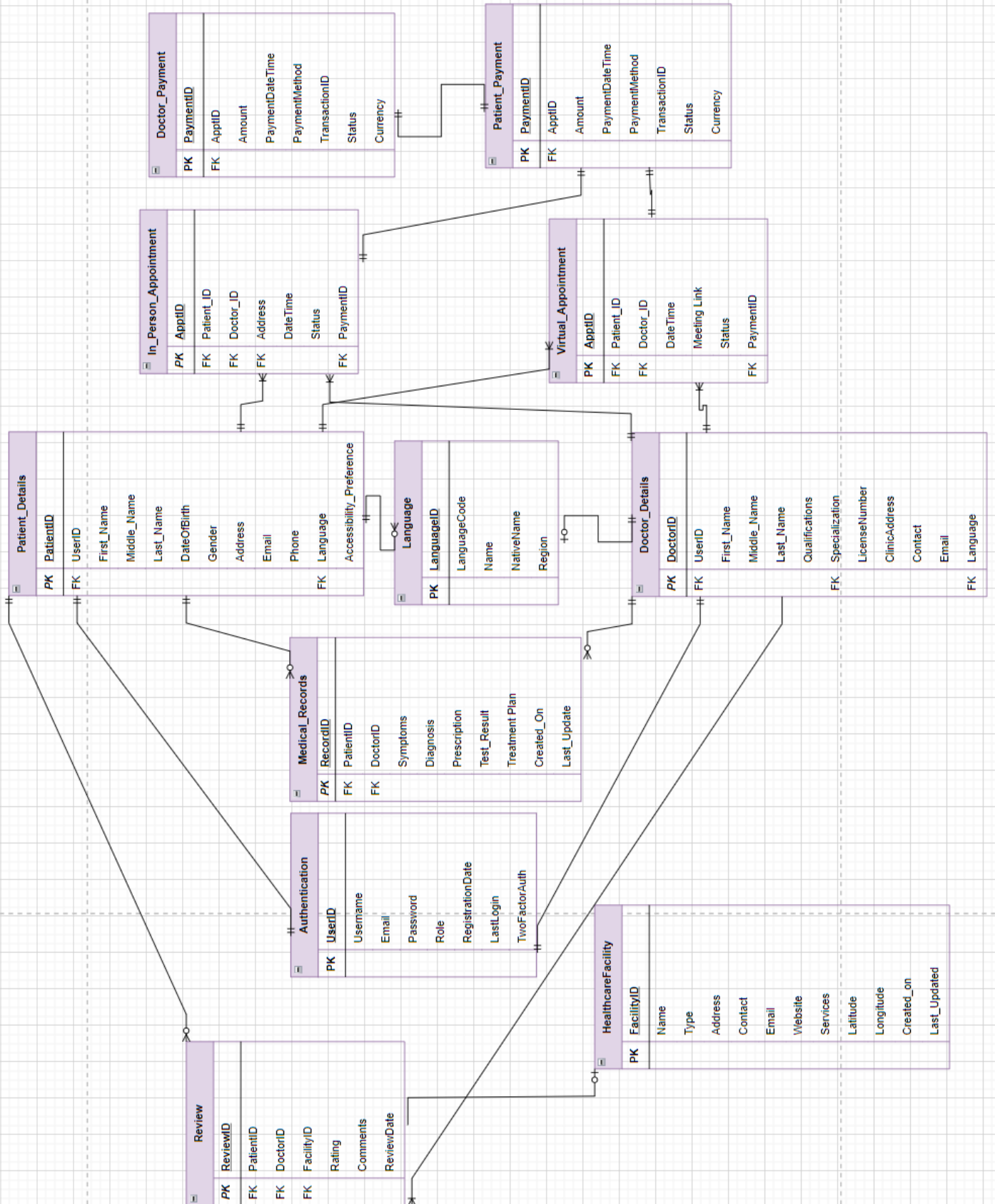
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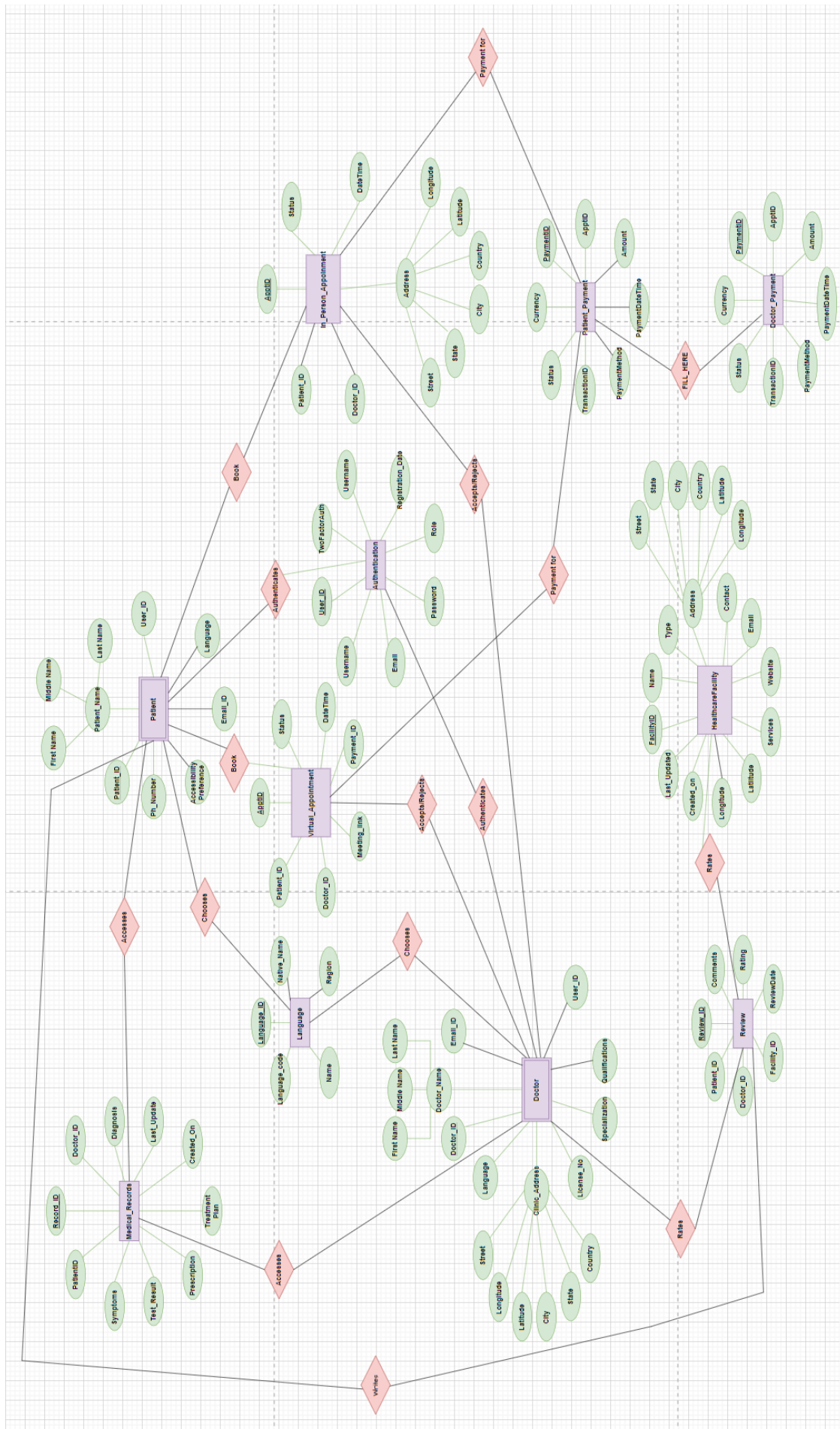**Department of Computer Science**

CHRIST (Deemed to be University), Bengaluru, India

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2.ER DIAGRAM

3. <u>DATA DICTIONARY</u>

	Authentication		
	Attribute	**Domain Constraints**	**Description**
PK	**UserID**	**Integer, Auto-increment, Not Null.**	**Unique identifier for each user.**
	Username	String, Unique, Not Null.	Unique username for login.
	Email	String (Email format), Unique, Not Null.	The email address associated with the user's
	Password	String, Not Null.	User's password for authentication.
	Role	Enum('Patient', 'Doctor', 'Admin'), Not Null.	Indicates the role or level of access the user has within the system.
	RegistrationDate	DateTime, Not Null.	The date and time when the user registered or created the account.
	LastLogin	DateTime.	The timestamp of the user's last login.
	TwoFactorAuth	Boolean (True/False), Not Null.	Indicates whether two-factor authentication is enabled for the user.

	Patient_Details		
	Attribute	**Domain Constraints**	**Description**
PK	**PatientID**	**Integer, Auto-increment, Not Null.**	**Unique identifier for each patient.**
FK	UserID	Integer, Foreign Key (References Authentication.UserID), Not Null.	Unique identifier for each user
	First_Name	String, Not Null.	The first name of the user.
	Middle_Name	String.	The middle name of the user.
	Last_Name	String, Not Null.	The last name of the user.
	DateOfBirth	Date, Not Null.	The date of birth of the user.
	Gender	Enum('Male', 'Female', 'Other'), Not Null.	The gender of the user (Male, Female, Other).
	Address	String, Not Null.	The physical address of the user.
	Email	String (Email format), Unique, Not Null.	The email of the user.
	Phone	String	The contact phone number of the user.
FK	Language	Integer, Foreign Key (References Language.LanguageID).	Indicating the preferred language of the patient.
	Accessibility_Preference	String	Accessibility requirements of the patient.

	Doctor_Details		
	Attribute	**Domain Constraints**	**Description**
PK	**DoctorID**	**Integer, Auto-increment, Not Null.**	**Unique identifier for each doctor.**
FK	UserID	Integer, Foreign Key (References	Unique identifier for each user
	First_Name	String, Not Null.	The first name of the user.
	Middle_Name	String.	The middle name of the user.
	Last_Name	String, Not Null.	The last name of the user.
	Qualifications	String.	Educational qualifications and degrees obtained by the doctor.
FK	Specialization	String, Not Null.	The medical field or specialization of the doctor (e.g., Cardiology, Dermatology).
	LicenseNumber	String, Unique, Not Null.	The doctor's professional license number.
	ClinicAddress	String, Not Null.	The address of the doctor's clinic or practice.
	Contact	String, Not Null.	Contact number for the doctor's clinic or practice.
	Email	String (Email format), Unique, Not Null.	Contact email for the doctor.
FK	Language	String.	The language(s) in which the doctor can communicate.

	HealthcareFacility		
	Attribute	**Domain Constraints**	**Description**
PK	**FacilityID**	**Integer, Unique, Not Null.**	**Unique identifier for each healthcare facility.**
	Name	String, Not Null.	The name of the healthcare facility.
	Type	String, Not Null.	Specifies the type of facility (e.g., hospital, clinic, diagnostic center).
	Address	String, Not Null.	The physical address of the healthcare facility.
	Contact	String, Not Null.	Contact number for the healthcare facility.
	Email	String (with email format validation), Not Null.	Contact email for the healthcare facility.
	Website	String (with URL format validation), Nullable.	The website URL of the healthcare facility.
	Services	Text, Nullable.	Describes the range of medical services offered by the facility.
	Latitude	Decimal, Nullable.	Geographic latitude of the facility location.
	Longitude	Decimal, Nullable.	Geographic longitude of the facility location.
	Created_on	DateTime, Not Null.	Timestamp indicating when the healthcare facility record was created.
	Last_Updated	DateTime, Not Null.	Timestamp indicating when the healthcare facility record was last updated.

Virtual_Appointment			
	Attribute	**Domain Constraints**	**Description**
PK	**ApptID**	**Integer, Auto-increment, Not Null.**	**Unique identifier for each virtual appointment.**
FK	Patient_ID	Integer, Foreign Key (References Authentication.UserID), Not Null.	Identifies the user who schedules the virtual appointment.
FK	Doctor_ID	Integer, Foreign Key (References Doctor.DoctorID), Not Null.	Identifies the doctor with whom the virtual appointment is scheduled.
	DateTime	DateTime, Not Null.	Represents the date and time of the scheduled virtual appointment.
	Meeting Link	String.	The link or information required to access the virtual meeting platform (e.g., Zoom link, video conference details).
	Status	String, Not Null.	Indicates the status of the virtual appointment (e.g., scheduled, canceled, completed).
FK	PaymentID	Integer, Foreign Key (References Payment.PaymentID).	Identifies the payment associated with the virtual appointment.

Language			
	Attribute	**Domain Constraints**	**Description**
PK	**LanguageID**	**Integer, Unique, Not Null.**	**Unique identifier for each language.**
	LanguageCode	String (with standardized format validation), Not Null.	A standardized code representing the language (e.g., ISO 639-1 code).
	Name	String, Not Null.	The full name of the language.
	NativeName	String, Not Null.	The language name in its native script.
	Region	String, Nullable.	The region or country where the language is primarily spoken.

InPerson_Appointment

	Attribute	Domain Constraints	Description
PK	**ApptID**	**Integer, Auto-increment, Not Null.**	**Unique identifier for each appointment.**
FK	Patient_ID	Integer, Foreign Key (References Authentication.UserID), Not Null.	Identifies the user who schedules the appointment.
FK	Doctor_ID	Integer, Foreign Key (References Doctor.DoctorID), Not Null.	Identifies the doctor with whom the appointment is scheduled.
	DateTime	DateTime, Not Null.	Represents the date and time of the scheduled appointment.
FK	Address	String, Foreign Key (References Doctor_Details.ClinicAddre Not Null.	The clinic's address where the appointment will take place.
	Status	String, Not Null.	Indicates the status of the appointment (e.g., scheduled, canceled, completed).
FK	PaymentID	Integer, Foreign Key (References Payment.PaymentID).	Identifies the payment associated with the appointment.

Review

	Attribute	Domain Constraints	Description
PK	**ReviewID**	**Integer, Unique, Not Null.**	**Unique identifier for each review record.**
FK	PatientID	Integer, Foreign Key (References Authentication.UserID), Not Null	Identifies the user who wrote the review.
FK	DoctorID	Integer, Foreign Key (References Doctor.DoctorID)	Identifies the doctor being reviewed.
FK	FacilityID	Integer, Foreign Key (References HealthcareFacility.FacilityID	Identifies the healthcare facility being reviewed.
	Rating	Decimal (or Integer, depending on the rating system), Not Null.	Numeric or qualitative rating given by the user to the doctor.
	Comments	Text, Nullable.	Text field for any comments or detailed feedback provided by the user.
	ReviewDate	DateTime, Not Null.	Timestamp indicating when the review was submitted.

Medical_Records			
	Attribute	**Domain Constraints**	**Description**
PK	**RecordID**		**Unique identifier for each medical record.**
FK	PatientID	Integer, Foreign Key (References Authentication.UserID), Not Null	Identifies the patient associated with the medical record.
FK	Doctor	String, Not Null..	Identifies the doctor responsible for the medical record.
	Symptoms	Text, Nullable.	Describes the symptoms reported by the patient.
	Diagnosis	Text, Nullable.	Specifies the medical diagnosis provided by the doctor.
	Prescription	Text, Nullable.	Includes details of prescribed medications, dosage, and instructions.
	Test_Result	Text, Nullable.	Contains results from diagnostic tests or procedures.
	Treatment Plan	Text, Nullable.	Outlines the treatment plan recommended by the doctor.
	Created_On	DateTime, Not Null.	Timestamp indicating when the medical record was created.
	Last_Update	DateTime, Not Null.	Timestamp indicating when the medical record was last updated.

Doctor_Payment			
	Attribute	**Domain Constraints**	**Description**
PK	**PaymentID**	**Integer, Unique, Not Null.**	**Unique identifier for each doctor payment transaction.**
FK	ApptID	Integer, Foreign Key to Virtual_Appointment.ApptID Not Null.	Identifies the appointment for which the payment is made.
	Amount	Decimal, Not Null.	The amount paid to the doctor for the appointment.
	PaymentDateTime	DateTime, Not Null.	Timestamp indicating when the payment was made.
	PaymentMethod	String, Not Null.	Specifies the method used for the payment to the doctor (e.g., bank transfer, digital wallet).
	TransactionID	String, Unique, Not Null.	Unique identifier for the transaction provided by the payment gateway.
	Status	String, Not Null.	Indicates the status of the payment (e.g., successful, pending, failed).
	Currency	String, Not Null.	Specifies the currency in which the payment is made (e.g., USD, INR).

Patient_Payment			
	Attribute	**Domain Constraints**	**Description**
PK	**PaymentID**	**Integer, Unique, Not Null.**	**Unique identifier for each patient payment transaction.**
FK	ApptID	Integer, Foreign Key to Virtual_Appointment.ApptID Not Null.	Identifies the appointment for which the payment is made.
	Amount	Decimal, Not Null.	The amount paid by the patient for the appointment.
	PaymentDateTime	DateTime, Not Null.	The amount paid by the patient for the appointment.
	PaymentMethod	String, Not Null.	Specifies the method used for the payment (e.g., credit card, digital wallet).
	TransactionID	String, Unique, Not Null.	Unique identifier for the transaction provided by the payment gateway.
	Status	String, Not Null.	Indicates the status of the payment (e.g., successful, pending, failed).
	Currency	String, Not Null.	Specifies the currency in which the payment is made (e.g., USD, INR).