

MAPPING TO RELATIONS

PATIENT DETAILS

<u>PATIENT ID</u>	FIRST NAME	LAST NAME	MIDDLE NAME	DOB	CONTACT	GENDER	EMAIL	PASSWORD
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PATIENT ADDRESS

<u>ADDRESS ID</u>	<i>PATIENT ID</i>	ADDRESS LINE 1	ADDRESS LINE 2	CITY	STATE	COUNTRY	ZIP	TYPE
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PATIENT INSURANCE DETAILS

<u>ID</u>	<i>ISSUER ID</i>	<i>PATIENT ID</i>	EXPIRY DATE
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INSURANCE COMPANIES

<u>INSURER ID</u>	NAME	ADDRESS LINE 1	ADDRESS LINE 2	CITY	STATE	COUNTRY	ZIP	EMAIL	PASSWORD	CONTACT
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PROVIDER/DOCTOR DETAILS

<u>PROVIDER ID</u>	FIRST NAME	LAST NAME	MIDDLE NAME	ADDRESS LINE 1	ADDRESS LINE 2	CITY	STATE	COUNTRY	ZIP	CONTACT
				EMAIL	PASSWORD	LICENSE	SPECIALITY			

PATIENT VISIT DETAILS

<u>VISIT ID</u>	<i>PATIENT ID</i>	<i>PROVIDER ID</i>	DATE	TIME	PATIENT NOTES	PROVIDER NOTES	DIAGNOSIS	SYMPTOMS	MEDICATION	TESTS	STATUS
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PATIENT ACCOUNTING DETAILS

<u>CHARGE ID</u>	<i>VISIT ID</i>	TOTAL CHARGES	INSURANCE COVERAGE	PATIENT PAYMENT	BALANCE	STATUS
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LABORATORY DETAILS

<u>LABORATORY ID</u>	NAME	ADDRESS LINE 1	ADDRESS LINE 2	CITY	STATE	COUNTRY	ZIP	EMAIL	PASSWORD	CONTACT
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LAB TESTS

<u>TEST ID</u>	<i>LAB ID</i>	<i>VISIT ID</i>	TEST NAME	DATE	RESULT	STATUS
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PHARMACY DETAILS

<u>PHARMACY ID</u>	NAME	ADDRESS LINE 1	ADDRESS LINE 2	CITY	STATE	COUNTRY	ZIP	EMAIL	PASSWORD	CONTACT
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MEDICATION DETAILS

<u>MEDICATION ID</u>	<i>PHARMACY ID</i>	<i>VISIT ID</i>	DATE	MEDICATION	STATUS
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RELATIONAL SCHEMA:

In the above mapping, the EER from Phase- 2 is mapped to relations. Following are the conventions and coding rules:

1. Foreign keys are mentioned in red color (With the arrows mapped to the corresponding primary key).
2. Primary keys are **bold and underlined**.

CANDIDATE KEYS AND FUNCTIONAL DEPENDENCIES:

RELATION NAME	PRIMARY KEY	FOREIGN KEY(S)	CANDIDATE KEYS	FUNCTIONAL DEPENDENCIES
PATIENT DETAILS	PATIENT ID	-	CONTACT, EMAIL, PASSWORD	PATIENT ID -> FIRST NAME, LAST NAME, MIDDLE NAME, DOB, CONTACT, GENDER, EMAIL, PASSWORD. {CONTACT, EMAIL, PASSWORD} -> PATIENT ID, FIRST NAME, LAST NAME, MIDDLE NAME, DOB, GENDER.
PATIENT INSURANCE DETAILS	ID	ISSUER ID, PATIENT ID	-	ID -> ISSUER ID, PATIENT ID, EXPIRY DATE.
PROVIDER DETAILS	PROVIDER ID	-	CONTACT, EMAIL, PASSWORD	PROVIDER ID -> FIRST NAME, LAST NAME, MIDDLE NAME, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP, CONTACT EMAIL, PASSWORD, LICENSE, SPECIALITY. {CONTACT, EMAIL, PASSWORD} -> PROVIDER ID, FIRST NAME, LAST NAME, MIDDLE NAME, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP, LICENSE, SPECIALITY.

PATIENT VISIT DETAILS	VISIT ID	PATIENT ID, PROVIDER ID	-	VISIT ID -> PATIENT ID, PROVIDER ID, DATE, TIME, PATIENT NOTES, PROVIDER NOTES, DIAGNOSIS, SYMPTOMS, MEDICATION, TESTS, STATUS.
PATIENT ACCOUNT DETAILS	CHARGE ID	VISIT ID	-	CHARGE ID -> VISIT ID, TOTAL CHARGES, INSURANCE COVERAGE, PATIENT PAYMENT, BALANCE, STATUS.
INSURANCE COMPANIES	INSURER ID	-	NAME, EMAIL, CONTACT, PASSWORD	INSURER ID -> NAME, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP, EMAIL, PASSWORD, CONTACT. {NAME, EMAIL, CONTACT, PASSWORD} -> INSURER ID, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP.
LABORATORY DETAILS	LABORATORY ID	-	NAME, EMAIL, CONTACT, PASSWORD	LABORATORY ID -> NAME, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP, EMAIL, PASSWORD, CONTACT. {NAME, EMAIL, CONTACT, PASSWORD} -> LABORATORY ID, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP.
PHARMACY DETAILS	PHARMACY ID	-	NAME, EMAIL, CONTACT, PASSWORD	PHARMACY ID -> NAME, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP, EMAIL, PASSWORD, CONTACT. {NAME, EMAIL, CONTACT, PASSWORD} -> PHARMACY ID, ADDRESS LINE 1, ADDRESS LINE 2, CITY, STATE, COUNTRY, ZIP.

LAB TESTS	TEST ID	LAB ID, VISIT ID	-	TEST ID -> LAB ID, VISIT ID, TEST NAME, DATE, RESULT, STATUS.
MEDICATIONS	MEDICATION ID	PHARMACY ID, VISIT ID	-	PHARMACY ID -> PHARMACY ID, VISIT ID, DATE, MEDICATION, STATUS.

Team Details: Team 4

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