

COMP3150 PROJECT - FINAL RELATIONAL SCHEMA

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CREATE TABLE Province (

provinceName	VARCHAR(50)	NOT NULL,
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provinceCode	CHAR(2)	NOT NULL,
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PRIMARY KEY (provinceCode),

UNIQUE (provinceName)

);

CREATE TABLE CasesByProvince (

provinceCode	CHAR(2)	NOT NULL,
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reportedDate	DATE	NOT NULL,
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confirmedPositive	INT	CHECK (confirmedPositive >= 0),
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resolved	INT	CHECK (resolved >= 0),
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deaths	INT	CHECK (deaths >= 0),
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totalCases	INT	CHECK (totalCases >= 0),
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hospitalizedPatients	INT	CHECK (hospitalizedPatients >= 0),
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icuPatients	INT	CHECK (icuPatients >= 0),
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icuPatientsPositive	INT	CHECK (icuPatientsPositive >= 0),
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icuPatientsNegative	INT	CHECK (icuPatientsNegative >= 0),
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icuOnVentilator	INT	CHECK (icuOnVentilator >= 0),
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PRIMARY KEY (provinceCode, reportedDate),

FOREIGN KEY (provinceCode) **REFERENCES** Province(provinceCode)

);

CREATE TABLE IcuByHealthRegion (

provinceCode	CHAR(2)	NOT NULL,
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regionName	VARCHAR(20)	NOT NULL,
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reportedDate	DATE	NOT NULL,
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icuCurrent	INT	CHECK (icuCurrent >= 0),
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icuCurrentVented	INT	CHECK (icuCurrentVented >= 0),
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hospitalizations	INT	CHECK (hospitalizations >= 0),
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PRIMARY KEY (provinceCode, regionName, reportedDate),

FOREIGN KEY (provinceCode) **REFERENCES** Province(provinceCode)

);

CREATE TABLE IDHealthUnitByRegion (

unitID	INT	NOT NULL,
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provinceCode	CHAR(2)	NOT NULL,
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unitName	VARCHAR(50)	NOT NULL,
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regionName	VARCHAR(10)	NOT NULL,
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PRIMARY KEY (unitID),

FOREIGN KEY (provinceCode) **REFERENCES** Province(provinceCode)

);

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CREATE TABLE VaccinationByUnitAndAge (
unitID                      INT                      NOT NULL,
reportedDate                DATE                    NOT NULL,
ageGroup                    VARCHAR(10)             NOT NULL,
firstDose                   INT                     CHECK (firstDose >= 0),
secondDose                  INT                     CHECK (secondDose >= 0),
thirdDose                   INT                     CHECK (thirdDose >= 0),
PRIMARY KEY (unitID, reportedDate, ageGroup),
FOREIGN KEY (unitID) REFERENCES IDHealthUnitByRegion (unitID)
);

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CREATE TABLE CasesByAge (
provinceCode                CHAR(2)                 NOT NULL,
reportedDate                DATE                    NOT NULL,
ageGroup                    VARCHAR(20)             NOT NULL,
percentPositive              DECIMAL(5, 4),
PRIMARY KEY (provinceCode, reportedDate, ageGroup),
FOREIGN KEY (provinceCode) REFERENCES Province(provinceCode)
);

```