**Now give me full project database Tables without SQL**

Based on the complete Dhatree pregnancy tracker project discussion, here's the full database structure organized by microservices with all table names, columns, data types, and relationships:

**Complete Dhatree Database Structure**

**1. User Service Schema**

**users**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY, DEFAULT uuid\_generate\_v4() | User identifier |
| email | VARCHAR(255) | UNIQUE, NOT NULL | User email |
| password\_hash | VARCHAR(255) | NULLABLE | Encrypted password |
| auth\_provider | VARCHAR(50) | DEFAULT 'local' | local/google |
| google\_id | VARCHAR(100) | UNIQUE | Google OAuth ID |
| user\_type | VARCHAR(20) | NOT NULL | mother/husband/doctor |
| email\_verified | BOOLEAN | DEFAULT FALSE | Email verification |
| is\_active | BOOLEAN | DEFAULT TRUE | Account status |
| account\_status | VARCHAR(20) | DEFAULT 'pending' | pending/active/suspended |
| last\_login | TIMESTAMPTZ |  | Last login time |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**user\_profiles**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Profile identifier |
| user\_id | UUID | FK → [users.id](http://users.id) | User reference |
| first\_name | VARCHAR(100) | NOT NULL | First name |
| last\_name | VARCHAR(100) | NOT NULL | Last name |
| phone | VARCHAR(20) |  | Phone number |
| date\_of\_birth | DATE |  | Birth date |
| profile\_image\_url | VARCHAR(500) |  | Profile picture |
| address | TEXT |  | Home address |
| emergency\_contact\_name | VARCHAR(100) |  | Emergency contact |
| emergency\_contact\_phone | VARCHAR(20) |  | Emergency phone |
| blood\_group | VARCHAR(10) |  | Blood type (mothers) |
| height | DECIMAL(5,2) |  | Height cm (mothers) |
| pre\_pregnancy\_weight | DECIMAL(5,2) |  | Weight kg (mothers) |
| relationship\_to\_mother | VARCHAR(50) |  | Relationship (husbands) |
| specialization | VARCHAR(100) |  | Medical specialty (doctors) |
| qualification | VARCHAR(200) |  | Qualifications (doctors) |
| experience\_years | INTEGER |  | Experience (doctors) |
| license\_number | VARCHAR(100) |  | License (doctors) |
| hospital\_affiliation | VARCHAR(200) |  | Hospital (doctors) |
| consultation\_fee | DECIMAL(10,2) |  | Fee (doctors) |
| google\_profile\_data | JSONB |  | OAuth profile data |
| preferences | JSONB |  | User preferences |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**auth\_tokens**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Token identifier |
| user\_id | UUID | FK → [users.id](http://users.id) | User reference |
| token\_type | VARCHAR(50) | NOT NULL | access/refresh/reset\_password |
| token\_hash | VARCHAR(255) | NOT NULL | Encrypted token |
| expires\_at | TIMESTAMPTZ | NOT NULL | Expiration time |
| is\_revoked | BOOLEAN | DEFAULT FALSE | Revocation status |
| used\_at | TIMESTAMPTZ |  | Usage timestamp |
| metadata | JSONB |  | Additional data |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**password\_reset\_tokens**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Reset token identifier |
| user\_id | UUID | FK → [users.id](http://users.id) | User reference |
| token | VARCHAR(255) | UNIQUE, NOT NULL | Reset token |
| expires\_at | TIMESTAMPTZ | NOT NULL | Expiration |
| is\_used | BOOLEAN | DEFAULT FALSE | Usage status |
| used\_at | TIMESTAMPTZ |  | Usage time |
| ip\_address | INET |  | Request IP |
| user\_agent | TEXT |  | Browser info |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**oauth\_connections**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Connection identifier |
| user\_id | UUID | FK → [users.id](http://users.id) | User reference |
| provider | VARCHAR(50) | NOT NULL | OAuth provider |
| provider\_user\_id | VARCHAR(100) | NOT NULL | Provider ID |
| access\_token\_encrypted | TEXT |  | Encrypted token |
| refresh\_token\_encrypted | TEXT |  | Encrypted refresh |
| token\_expires\_at | TIMESTAMPTZ |  | Token expiry |
| profile\_data | JSONB |  | Provider profile |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| connected\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| last\_used\_at | TIMESTAMPTZ |  | Last usage |

**family\_connections**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Connection identifier |
| mother\_id | UUID | FK → [users.id](http://users.id) | Mother reference |
| partner\_id | UUID | FK → [users.id](http://users.id) | Partner reference |
| relationship\_type | VARCHAR(50) | NOT NULL | Relationship type |
| connection\_status | VARCHAR(20) | DEFAULT 'pending' | Status |
| requested\_by | UUID | NOT NULL | Requester |
| requested\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| accepted\_at | TIMESTAMPTZ |  | Acceptance time |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**doctor\_patient\_relationships**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Relationship identifier |
| doctor\_id | UUID | FK → [users.id](http://users.id) | Doctor reference |
| patient\_id | UUID | FK → [users.id](http://users.id) | Patient reference |
| relationship\_type | VARCHAR(50) | DEFAULT 'primary\_care' | Care type |
| status | VARCHAR(20) | DEFAULT 'active' | Status |
| started\_at | TIMESTAMPTZ | DEFAULT NOW() | Start date |
| ended\_at | TIMESTAMPTZ |  | End date |
| notes | TEXT |  | Notes |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**user\_permissions**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Permission identifier |
| user\_type | VARCHAR(20) | NOT NULL | mother/husband/doctor |
| permission\_name | VARCHAR(100) | NOT NULL | Permission name |
| is\_granted | BOOLEAN | DEFAULT TRUE | Grant status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**user\_activity\_log**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Log identifier |
| user\_id | UUID | FK → [users.id](http://users.id) | User reference |
| activity\_type | VARCHAR(50) | NOT NULL | Activity type |
| auth\_provider | VARCHAR(50) |  | Auth method |
| ip\_address | INET |  | IP address |
| user\_agent | TEXT |  | Browser info |
| device\_info | JSONB |  | Device data |
| success | BOOLEAN | DEFAULT TRUE | Success flag |
| failure\_reason | VARCHAR(200) |  | Error reason |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**2. Pregnancy Service Schema**

**pregnancies**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Pregnancy identifier |
| user\_id | UUID | NOT NULL | Mother reference |
| last\_menstrual\_period | DATE | NOT NULL | LMP date |
| due\_date | DATE | NOT NULL | Due date |
| current\_week | INTEGER |  | Current week |
| current\_day | INTEGER |  | Current day |
| pregnancy\_status | VARCHAR(50) | DEFAULT 'active' | Status |
| is\_first\_pregnancy | BOOLEAN | DEFAULT TRUE | First pregnancy |
| baby\_gender | VARCHAR(10) |  | Baby gender |
| multiple\_pregnancy | BOOLEAN | DEFAULT FALSE | Twins/triplets |
| high\_risk\_pregnancy | BOOLEAN | DEFAULT FALSE | High risk |
| pre\_pregnancy\_bmi | DECIMAL(4,2) |  | BMI before |
| target\_weight\_gain\_min | DECIMAL(4,1) |  | Min weight gain |
| target\_weight\_gain\_max | DECIMAL(4,1) |  | Max weight gain |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**weight\_tracking**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Weight record identifier |
| pregnancy\_id | UUID | FK → [pregnancies.id](http://pregnancies.id) | Pregnancy reference |
| user\_id | UUID | NOT NULL | User reference |
| recorded\_date | DATE | NOT NULL | Recording date |
| current\_weight | DECIMAL(5,2) | NOT NULL | Current weight kg |
| weight\_gain\_total | DECIMAL(5,2) |  | Total gain |
| weight\_gain\_this\_week | DECIMAL(4,2) |  | Weekly gain |
| pregnancy\_week | INTEGER |  | Week number |
| bmi\_current | DECIMAL(4,2) |  | Current BMI |
| weight\_status | VARCHAR(20) |  | Status category |
| expected\_weight\_min | DECIMAL(5,2) |  | Expected min |
| expected\_weight\_max | DECIMAL(5,2) |  | Expected max |
| notes | TEXT |  | Notes |
| recorded\_by | VARCHAR(20) | DEFAULT 'self' | Who recorded |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**weight\_gain\_guidelines**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Guideline identifier |
| bmi\_category | VARCHAR(20) | NOT NULL | BMI category |
| bmi\_range\_min | DECIMAL(4,2) | NOT NULL | Min BMI |
| bmi\_range\_max | DECIMAL(4,2) | NOT NULL | Max BMI |
| total\_weight\_gain\_min | DECIMAL(4,1) | NOT NULL | Min total gain |
| total\_weight\_gain\_max | DECIMAL(4,1) | NOT NULL | Max total gain |
| first\_trimester\_gain | DECIMAL(3,1) |  | First tri gain |
| second\_third\_trimester\_weekly | DECIMAL(3,2) |  | Weekly gain 2nd/3rd |
| twins\_total\_gain\_min | DECIMAL(4,1) |  | Twins min |
| twins\_total\_gain\_max | DECIMAL(4,1) |  | Twins max |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**weekly\_updates**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Update identifier |
| week\_number | INTEGER | NOT NULL, UNIQUE | Week number |
| baby\_size | VARCHAR(100) |  | Baby size |
| baby\_development | TEXT |  | Development info |
| mother\_changes | TEXT |  | Body changes |
| tips\_advice | TEXT |  | Weekly tips |
| common\_symptoms | TEXT[] |  | Symptoms array |
| important\_notes | TEXT |  | Important notes |
| medical\_checkups | TEXT[] |  | Checkup recommendations |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**diet\_recommendations**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Recommendation identifier |
| week\_number | INTEGER |  | Target week |
| trimester | INTEGER |  | Trimester |
| food\_category | VARCHAR(100) |  | Food category |
| recommended\_foods | TEXT[] |  | Recommended foods |
| foods\_to\_avoid | TEXT[] |  | Foods to avoid |
| nutritional\_notes | TEXT |  | Nutrition info |
| calories\_suggestion | INTEGER |  | Daily calories |
| portion\_sizes | JSONB |  | Portion guidelines |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**health\_metrics**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Metric identifier |
| pregnancy\_id | UUID | FK → [pregnancies.id](http://pregnancies.id) | Pregnancy reference |
| recorded\_date | DATE | NOT NULL | Recording date |
| weight | DECIMAL(5,2) |  | Weight |
| blood\_pressure\_systolic | INTEGER |  | Systolic BP |
| blood\_pressure\_diastolic | INTEGER |  | Diastolic BP |
| heart\_rate | INTEGER |  | Heart rate |
| baby\_movement\_count | INTEGER |  | Baby movements |
| symptoms | TEXT[] |  | Symptoms |
| mood\_rating | INTEGER | CHECK (1-5) | Mood scale |
| energy\_level | INTEGER | CHECK (1-5) | Energy scale |
| sleep\_hours | DECIMAL(3,1) |  | Sleep hours |
| water\_intake | DECIMAL(4,1) |  | Water liters |
| notes | TEXT |  | Notes |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**pregnancy\_calculators**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Calculator identifier |
| pregnancy\_id | UUID | FK → [pregnancies.id](http://pregnancies.id) | Pregnancy reference |
| calculator\_type | VARCHAR(50) |  | Calculation type |
| input\_data | JSONB | NOT NULL | Input parameters |
| result | JSONB | NOT NULL | Results |
| recommendations | TEXT[] |  | Recommendations |
| warnings | TEXT[] |  | Warnings |
| calculated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**3. AI Service Schema**

**diary\_entries**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Entry identifier |
| user\_id | UUID | NOT NULL | User reference |
| pregnancy\_id | UUID | NOT NULL | Pregnancy reference |
| entry\_date | DATE | NOT NULL | Entry date |
| title | VARCHAR(200) |  | Entry title |
| content | TEXT | NOT NULL | Diary content |
| mood | VARCHAR(50) |  | Mood state |
| energy\_level | INTEGER | CHECK (1-5) | Energy level |
| weight\_mentioned | DECIMAL(5,2) |  | Weight mentioned |
| weight\_concerns | TEXT[] |  | Weight concerns |
| tags | TEXT[] |  | Tags |
| is\_private | BOOLEAN | DEFAULT TRUE | Privacy |
| word\_count | INTEGER |  | Word count |
| ai\_analyzed | BOOLEAN | DEFAULT FALSE | AI analysis |
| sentiment\_score | DECIMAL(3,2) |  | Sentiment |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**questionnaires**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Questionnaire identifier |
| title | VARCHAR(200) | NOT NULL | Title |
| description | TEXT |  | Description |
| category | VARCHAR(50) |  | Category |
| target\_week\_start | INTEGER |  | Start week |
| target\_week\_end | INTEGER |  | End week |
| target\_user\_type | VARCHAR(20) |  | Target user |
| questions | JSONB | NOT NULL | Questions |
| scoring\_criteria | JSONB |  | Scoring |
| max\_score | INTEGER |  | Max score |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**questionnaire\_responses**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Response identifier |
| user\_id | UUID | NOT NULL | User reference |
| pregnancy\_id | UUID | NOT NULL | Pregnancy reference |
| questionnaire\_id | UUID | FK → [questionnaires.id](http://questionnaires.id) | Questionnaire reference |
| responses | JSONB | NOT NULL | User responses |
| score | INTEGER |  | Score |
| completion\_date | TIMESTAMPTZ | NOT NULL | Completion time |
| time\_taken | INTEGER |  | Time seconds |
| ai\_analysis | TEXT |  | AI analysis |
| recommendations | TEXT[] |  | Recommendations |
| risk\_level | VARCHAR(20) |  | Risk level |
| follow\_up\_required | BOOLEAN | DEFAULT FALSE | Follow-up |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**weight\_ai\_insights**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Insight identifier |
| user\_id | UUID | NOT NULL | User reference |
| pregnancy\_id | UUID | NOT NULL | Pregnancy reference |
| insight\_type | VARCHAR(50) |  | Insight type |
| current\_weight | DECIMAL(5,2) |  | Current weight |
| weight\_trend | VARCHAR(30) |  | Trend analysis |
| recommendation\_text | TEXT | NOT NULL | Recommendation |
| action\_items | TEXT[] |  | Action items |
| severity | VARCHAR(20) |  | Severity |
| confidence\_score | DECIMAL(3,2) |  | Confidence |
| is\_read | BOOLEAN | DEFAULT FALSE | Read status |
| is\_dismissed | BOOLEAN | DEFAULT FALSE | Dismissed |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**ai\_predictions**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Prediction identifier |
| user\_id | UUID | NOT NULL | User reference |
| pregnancy\_id | UUID | NOT NULL | Pregnancy reference |
| prediction\_type | VARCHAR(100) |  | Prediction type |
| prediction\_data | JSONB | NOT NULL | Prediction data |
| confidence\_score | DECIMAL(3,2) |  | Confidence |
| model\_version | VARCHAR(20) |  | Model version |
| generated\_at | TIMESTAMPTZ | NOT NULL | Generation time |
| expires\_at | TIMESTAMPTZ |  | Expiry |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**4. Healthcare Service Schema**

**user\_current\_location**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Location identifier |
| user\_id | UUID | NOT NULL | User reference |
| latitude | DECIMAL(10,8) | NOT NULL | GPS latitude |
| longitude | DECIMAL(11,8) | NOT NULL | GPS longitude |
| accuracy | INTEGER |  | GPS accuracy meters |
| location\_source | VARCHAR(20) | DEFAULT 'gps' | Source type |
| formatted\_address | TEXT |  | Address |
| city | VARCHAR(100) |  | City |
| area | VARCHAR(100) |  | Area |
| is\_active\_session | BOOLEAN | DEFAULT TRUE | Active session |
| location\_timestamp | TIMESTAMPTZ | DEFAULT NOW() |  |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**hospitals\_map\_data**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Hospital identifier |
| google\_place\_id | VARCHAR(200) | UNIQUE | Google Place ID |
| name | VARCHAR(200) | NOT NULL | Hospital name |
| latitude | DECIMAL(10,8) | NOT NULL | GPS latitude |
| longitude | DECIMAL(11,8) | NOT NULL | GPS longitude |
| formatted\_address | TEXT | NOT NULL | Address |
| phone\_number | VARCHAR(20) |  | Phone |
| website | VARCHAR(300) |  | Website |
| google\_rating | DECIMAL(2,1) |  | Rating |
| user\_ratings\_total | INTEGER |  | Total ratings |
| price\_level | INTEGER |  | Price level |
| opening\_hours | JSONB |  | Hours |
| has\_emergency | BOOLEAN | DEFAULT FALSE | Emergency |
| has\_maternity | BOOLEAN | DEFAULT FALSE | Maternity |
| services | TEXT[] |  | Services |
| photos | JSONB |  | Photos |
| reviews\_sample | JSONB |  | Reviews |
| business\_status | VARCHAR(50) |  | Status |
| last\_updated | TIMESTAMPTZ | DEFAULT NOW() |  |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**diagnostic\_centers\_map\_data**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Center identifier |
| google\_place\_id | VARCHAR(200) | UNIQUE | Google Place ID |
| name | VARCHAR(200) | NOT NULL | Center name |
| latitude | DECIMAL(10,8) | NOT NULL | GPS latitude |
| longitude | DECIMAL(11,8) | NOT NULL | GPS longitude |
| formatted\_address | TEXT | NOT NULL | Address |
| phone\_number | VARCHAR(20) |  | Phone |
| website | VARCHAR(300) |  | Website |
| google\_rating | DECIMAL(2,1) |  | Rating |
| user\_ratings\_total | INTEGER |  | Total ratings |
| opening\_hours | JSONB |  | Hours |
| services\_offered | TEXT[] |  | Services |
| has\_pathology | BOOLEAN | DEFAULT FALSE | Pathology |
| has\_radiology | BOOLEAN | DEFAULT FALSE | Radiology |
| has\_cardiology | BOOLEAN | DEFAULT FALSE | Cardiology |
| has\_home\_collection | BOOLEAN | DEFAULT FALSE | Home collection |
| photos | JSONB |  | Photos |
| business\_status | VARCHAR(50) |  | Status |
| last\_updated | TIMESTAMPTZ | DEFAULT NOW() |  |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**pharmacies\_map\_data**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Pharmacy identifier |
| google\_place\_id | VARCHAR(200) | UNIQUE | Google Place ID |
| name | VARCHAR(200) | NOT NULL | Pharmacy name |
| latitude | DECIMAL(10,8) | NOT NULL | GPS latitude |
| longitude | DECIMAL(11,8) | NOT NULL | GPS longitude |
| formatted\_address | TEXT | NOT NULL | Address |
| phone\_number | VARCHAR(20) |  | Phone |
| website | VARCHAR(300) |  | Website |
| google\_rating | DECIMAL(2,1) |  | Rating |
| user\_ratings\_total | INTEGER |  | Total ratings |
| opening\_hours | JSONB |  | Hours |
| has\_24\_hours | BOOLEAN | DEFAULT FALSE | 24-hour |
| has\_delivery | BOOLEAN | DEFAULT FALSE | Delivery |
| accepts\_prescription | BOOLEAN | DEFAULT TRUE | Prescription |
| pharmacy\_chain | VARCHAR(100) |  | Chain name |
| photos | JSONB |  | Photos |
| business\_status | VARCHAR(50) |  | Status |
| last\_updated | TIMESTAMPTZ | DEFAULT NOW() |  |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**blood\_banks\_map\_data**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Blood bank identifier |
| google\_place\_id | VARCHAR(200) | UNIQUE | Google Place ID |
| name | VARCHAR(200) | NOT NULL | Bank name |
| latitude | DECIMAL(10,8) | NOT NULL | GPS latitude |
| longitude | DECIMAL(11,8) | NOT NULL | GPS longitude |
| formatted\_address | TEXT | NOT NULL | Address |
| phone\_number | VARCHAR(20) |  | Phone |
| emergency\_phone | VARCHAR(20) |  | Emergency |
| website | VARCHAR(300) |  | Website |
| google\_rating | DECIMAL(2,1) |  | Rating |
| user\_ratings\_total | INTEGER |  | Total ratings |
| opening\_hours | JSONB |  | Hours |
| has\_24\_hours | BOOLEAN | DEFAULT FALSE | 24-hour |
| available\_blood\_types | TEXT[] |  | Blood types |
| accepts\_donations | BOOLEAN | DEFAULT TRUE | Donations |
| bank\_type | VARCHAR(50) |  | Type |
| photos | JSONB |  | Photos |
| business\_status | VARCHAR(50) |  | Status |
| license\_number | VARCHAR(100) |  | License |
| last\_updated | TIMESTAMPTZ | DEFAULT NOW() |  |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**blood\_inventory**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Inventory identifier |
| blood\_bank\_id | UUID | FK → blood\_banks\_map\_data.id | Bank reference |
| blood\_type | VARCHAR(10) | NOT NULL | Blood type |
| component\_type | VARCHAR(50) | DEFAULT 'whole\_blood' | Component |
| units\_available | INTEGER | NOT NULL, CHECK >= 0 | Available units |
| units\_reserved | INTEGER | DEFAULT 0 | Reserved |
| minimum\_stock | INTEGER | DEFAULT 5 | Min stock |
| expiry\_date | DATE |  | Expiry |
| collection\_date | DATE |  | Collection |
| last\_updated | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_by | VARCHAR(100) |  | Who updated |
| is\_available | BOOLEAN | DEFAULT TRUE | Status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**appointments**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Appointment identifier |
| user\_id | UUID | NOT NULL | Patient reference |
| pregnancy\_id | UUID | NOT NULL | Pregnancy reference |
| doctor\_id | UUID |  | Doctor reference |
| hospital\_id | UUID |  | Hospital reference |
| appointment\_date | DATE | NOT NULL | Date |
| appointment\_time | TIME | NOT NULL | Time |
| appointment\_type | VARCHAR(50) |  | Type |
| status | VARCHAR(50) | DEFAULT 'scheduled' | Status |
| booking\_source | VARCHAR(50) | DEFAULT 'app' | Source |
| consultation\_fee | DECIMAL(10,2) |  | Fee |
| notes | TEXT |  | Notes |
| symptoms | TEXT |  | Symptoms |
| prescription | TEXT |  | Prescription |
| test\_recommendations | TEXT[] |  | Tests |
| next\_appointment\_recommended | DATE |  | Next appointment |
| reminder\_sent | BOOLEAN | DEFAULT FALSE | Reminder |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**user\_favorite\_healthcare**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Favorite identifier |
| user\_id | UUID | NOT NULL | User reference |
| facility\_type | VARCHAR(50) | NOT NULL | Facility type |
| google\_place\_id | VARCHAR(200) | NOT NULL | Place ID |
| custom\_name | VARCHAR(200) |  | Custom name |
| notes | TEXT |  | Notes |
| is\_primary | BOOLEAN | DEFAULT FALSE | Primary |
| last\_visited | TIMESTAMPTZ |  | Last visit |
| added\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**5. Community Service Schema**

**forums**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Forum identifier |
| name | VARCHAR(150) | NOT NULL | Forum name |
| description | TEXT |  | Description |
| category | VARCHAR(50) |  | Category |
| target\_user\_type | VARCHAR(20) |  | Target user |
| is\_private | BOOLEAN | DEFAULT FALSE | Privacy |
| created\_by | UUID | NOT NULL | Creator |
| member\_count | INTEGER | DEFAULT 0 | Members |
| post\_count | INTEGER | DEFAULT 0 | Posts |
| rules | TEXT |  | Rules |
| tags | TEXT[] |  | Tags |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**posts**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Post identifier |
| forum\_id | UUID | FK → [forums.id](http://forums.id) | Forum reference |
| user\_id | UUID | NOT NULL | Author |
| title | VARCHAR(200) | NOT NULL | Title |
| content | TEXT | NOT NULL | Content |
| post\_type | VARCHAR(50) | DEFAULT 'discussion' | Type |
| current\_week | INTEGER |  | Pregnancy week |
| weight\_gain\_shared | DECIMAL(4,2) |  | Weight gain |
| weight\_concerns | TEXT[] |  | Concerns |
| seeking\_advice\_about | VARCHAR(50) |  | Advice topic |
| tags | TEXT[] |  | Tags |
| is\_pinned | BOOLEAN | DEFAULT FALSE | Pinned |
| is\_locked | BOOLEAN | DEFAULT FALSE | Locked |
| like\_count | INTEGER | DEFAULT 0 | Likes |
| comment\_count | INTEGER | DEFAULT 0 | Comments |
| view\_count | INTEGER | DEFAULT 0 | Views |
| last\_activity | TIMESTAMPTZ | DEFAULT NOW() | Last activity |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**comments**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Comment identifier |
| post\_id | UUID | FK → [posts.id](http://posts.id) | Post reference |
| user\_id | UUID | NOT NULL | Author |
| parent\_comment\_id | UUID | FK → [comments.id](http://comments.id) | Parent |
| content | TEXT | NOT NULL | Content |
| like\_count | INTEGER | DEFAULT 0 | Likes |
| is\_edited | BOOLEAN | DEFAULT FALSE | Edited |
| edited\_at | TIMESTAMPTZ |  | Edit time |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**private\_messages**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Message identifier |
| sender\_id | UUID | NOT NULL | Sender |
| receiver\_id | UUID | NOT NULL | Receiver |
| message | TEXT | NOT NULL | Message |
| is\_read | BOOLEAN | DEFAULT FALSE | Read status |
| read\_at | TIMESTAMPTZ |  | Read time |
| message\_type | VARCHAR(20) | DEFAULT 'text' | Type |
| attachment\_url | VARCHAR(500) |  | Attachment |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**6. Notification Service Schema**

**notifications**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Notification identifier |
| user\_id | UUID | NOT NULL | User reference |
| template\_id | UUID |  | Template reference |
| title | VARCHAR(200) | NOT NULL | Title |
| message | TEXT | NOT NULL | Message |
| type | VARCHAR(50) | NOT NULL | Type |
| category | VARCHAR(50) |  | Category |
| priority | VARCHAR(20) | DEFAULT 'medium' | Priority |
| data | JSONB |  | Data |
| is\_read | BOOLEAN | DEFAULT FALSE | Read |
| sent\_at | TIMESTAMPTZ |  | Sent time |
| read\_at | TIMESTAMPTZ |  | Read time |
| expires\_at | TIMESTAMPTZ |  | Expiry |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**reminders**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Reminder identifier |
| user\_id | UUID | NOT NULL | User reference |
| pregnancy\_id | UUID | NOT NULL | Pregnancy reference |
| reminder\_type | VARCHAR(100) | NOT NULL | Type |
| title | VARCHAR(200) | NOT NULL | Title |
| description | TEXT |  | Description |
| scheduled\_for | TIMESTAMPTZ | NOT NULL | Schedule |
| repeat\_pattern | VARCHAR(50) |  | Repeat |
| repeat\_until | TIMESTAMPTZ |  | Until |
| snooze\_count | INTEGER | DEFAULT 0 | Snoozes |
| max\_snooze | INTEGER | DEFAULT 3 | Max snooze |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| is\_sent | BOOLEAN | DEFAULT FALSE | Sent |
| sent\_at | TIMESTAMPTZ |  | Sent time |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

**device\_tokens**

| Column Name | Data Type | Constraints | Description |
| --- | --- | --- | --- |
| id | UUID | PRIMARY KEY | Token identifier |
| user\_id | UUID | NOT NULL | User reference |
| device\_token | VARCHAR(500) | NOT NULL | Token |
| device\_type | VARCHAR(50) | NOT NULL | ios/android/web |
| device\_info | JSONB |  | Device data |
| is\_active | BOOLEAN | DEFAULT TRUE | Status |
| last\_used\_at | TIMESTAMPTZ |  | Last used |
| created\_at | TIMESTAMPTZ | DEFAULT NOW() |  |
| updated\_at | TIMESTAMPTZ | DEFAULT NOW() |  |

This complete database structure supports all features of your Dhatree pregnancy tracker application including user management, pregnancy tracking, AI services, healthcare location services, community features, and notifications across all microservices.