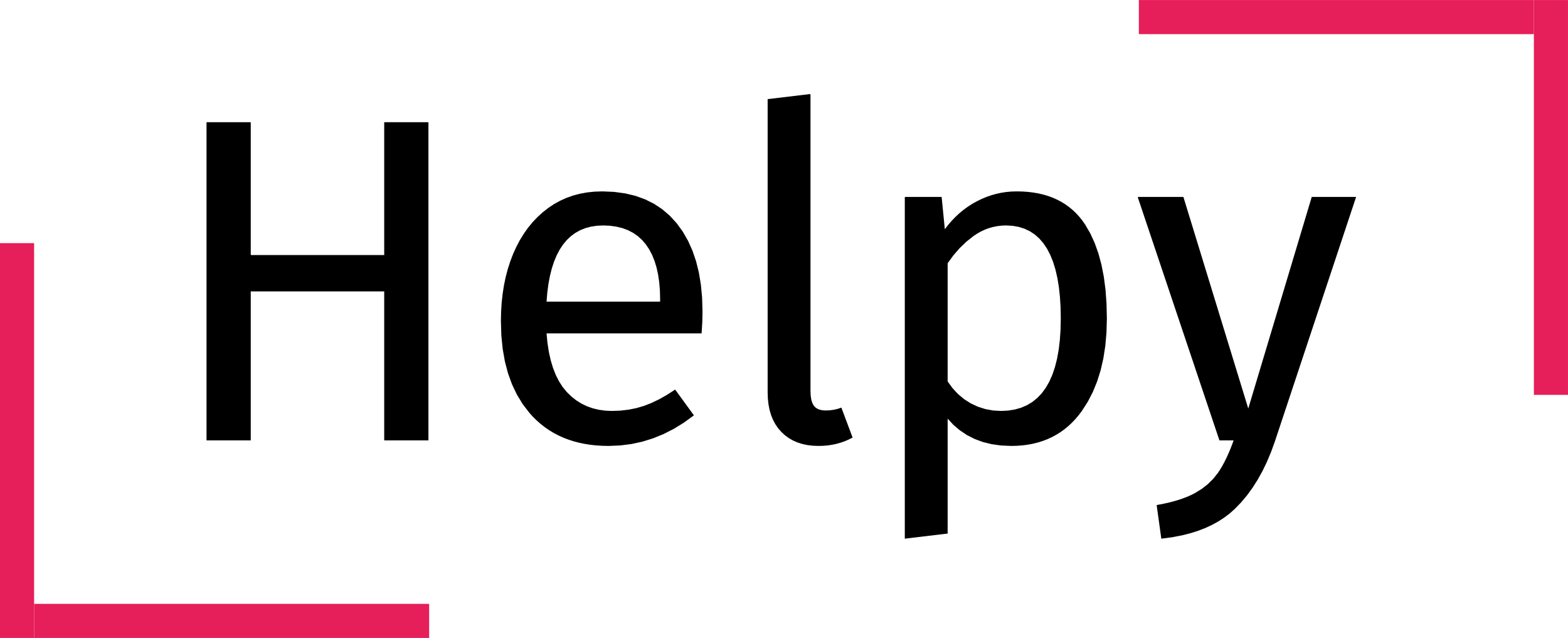
****

**Modèle Logique de Données - MVP**

**Tables Principales**

USER {

id : INT, PK

email : VARCHAR

password\_hash : VARCHAR

first\_name : VARCHAR

last\_name : VARCHAR

birth\_date : DATE

address : VARCHAR

gps\_coordinates : POINT

phone : VARCHAR

profile\_picture : VARCHAR

registration\_date : DATETIME

account\_verified : BOOLEAN

interface\_preferences : VARCHAR

two\_factor\_authentication : BOOLEAN

help\_points : INT

bool reduced\_mobility

string activity\_level "sedentary/moderate/active"

string emergency\_contact\_name

string emergency\_contact\_phone

status : VARCHAR

}

SKILL {

id : INT, PK

name : VARCHAR

description : VARCHAR

category : VARCHAR

}

USER\_SKILL {

user\_id : INT, FK → USER(id), PK

skill\_id : INT, FK → SKILL(id), PK

level : INT

}

NOTIFICATION\_PREFERENCES {

user\_id : INT, FK → USER(id), PK

message\_notif : BOOLEAN

activity\_notif : BOOLEAN

help\_notif : BOOLEAN

forum\_notif : BOOLEAN

email\_notif : BOOLEAN

sms\_notif : BOOLEAN

push\_notif : BOOLEAN

quiet\_hours\_start : TIME

quiet\_hours\_end : TIME

}

TRUST\_CIRCLE {

user\_id : INT, FK → USER(id), PK

contact\_id : INT, FK → USER(id), PK

date\_added : DATE

access\_level : VARCHAR

}

HELP\_REQUEST {

id : INT, PK

creator\_id : INT, FK → USER(id)

title : VARCHAR

description : TEXT

creation\_date : DATETIME

needed\_date : DATETIME

estimated\_duration : INT

location : VARCHAR

gps\_coordinates : POINT

category : VARCHAR

recurring : BOOLEAN

frequency : VARCHAR

status : VARCHAR

points\_offered : INT

}

HELP\_OFFER {

id : INT, PK

request\_id : INT, FK → HELP\_REQUEST(id)

helper\_id : INT, FK → USER(id)

offer\_date : DATETIME

message : TEXT

status : VARCHAR

}

SERVICE\_COMPLETED {

id : INT, PK

request\_id : INT, FK → HELP\_REQUEST(id)

helper\_id : INT, FK → USER(id)

completion\_date : DATETIME

actual\_duration : INT

creator\_comment : TEXT

helper\_comment : TEXT

creator\_rating : INT

helper\_rating : INT

points\_exchanged : INT

}

ACTIVITY {

id : INT, PK

creator\_id : INT, FK → USER(id)

title : VARCHAR

description : TEXT

start\_date : DATETIME

end\_date : DATETIME

location : VARCHAR

gps\_coordinates : POINT

max\_spots : INT

category : VARCHAR

recurring : BOOLEAN

frequency : VARCHAR

reduced\_mobility\_access : BOOLEAN

difficulty\_level : VARCHAR

cost : FLOAT

status : VARCHAR

weather\_requirements : VARCHAR

transport\_options : VARCHAR

}

ACTIVITY\_REGISTRATION {

activity\_id : INT, FK → ACTIVITY(id), PK

user\_id : INT, FK → USER(id), PK

registration\_date : DATETIME

status : VARCHAR

attendance\_confirmed : BOOLEAN

}

**Santé & Bien-être simplifié**

MEDICATION\_REMINDER {

int id PK

int user\_id FK

string medication\_name

string dosage

time morning\_reminder\_time

time noon\_reminder\_time

time evening\_reminder\_time

time night\_reminder\_time

string days\_of\_week "Mon,Tue,Wed,Thu,Fri,Sat,Sun"

string instructions

bool active

datetime start\_date

datetime end\_date

}

HEALTH\_INDICATOR {

int id PK

int user\_id FK

date recording\_date

int step\_count

int sleep\_duration\_minutes

int sleep\_quality "1-5"

float weight

string mood "good/average/bad"

text notes

}

TRUSTED\_CONTACT {

int id PK

int user\_id FK

string last\_name

string first\_name

string email

string phone

string relationship "family/friend/caregiver"

bool share\_medications

bool share\_health\_indicators

bool share\_wellness\_activities

bool emergency\_alerts

}

CONNECTED\_HEALTH\_DEVICE {

int id PK

int user\_id FK

string type "watch/blood pressure monitor/scale/others"

string brand

string model

string device\_id

datetime connection\_date

bool active

}

EXERCISE\_PROGRAM {

int id PK

string name

string category "balance/strength/flexibility/cardio"

string difficulty\_level "beginner/intermediate/advanced"

bool adapted\_for\_reduced\_mobility

int duration\_minutes

text description

string video\_link

string image

}

COGNITIVE\_EXERCISE {

int id PK

string name

string category "memory/attention/logic/language"

string difficulty\_level "beginner/intermediate/advanced"

int duration\_minutes

text description

string image

}

NUTRITIONAL\_ADVICE {

int id PK

string title

text description

string category "hydration/proteins/calcium/fiber/etc"

season "spring/summer/fall/winter/year-round"

string image

}

USER\_ACTIVITY {

int id PK

int user\_id FK

date completion\_date

int exercise\_program\_id FK "NULL if not a physical exercise"

int cognitive\_exercise\_id FK "NULL if not a cognitive exercise"

int duration\_minutes

int perceived\_difficulty\_level "1-5"

int enjoyment\_level "1-5"

text comment

}

WELLNESS\_GOAL {

int id PK

int user\_id FK

string title

string category "physical activity/cognitive/nutrition/sleep"

int target\_value

string unit "steps/minutes/sessions/etc"

string frequency "daily/weekly/monthly"

date start\_date

date end\_date

bool active

}

GOAL\_PROGRESS {

int id PK

int goal\_id FK

date recording\_date

int achieved\_value

bool goal\_achieved

}

WELLNESS\_BADGE {

int id PK

string name

string description

string category "physical/cognitive/nutrition/global"

string image

int level "1-3"

}

USER\_BADGE {

int user\_id FK

int badge\_id FK

date date\_obtained

}

USER ||--o{ MEDICATION\_REMINDER : "configures"

USER ||--o{ HEALTH\_INDICATOR : "records"

USER ||--o{ TRUSTED\_CONTACT : "designates"

USER ||--o{ CONNECTED\_HEALTH\_DEVICE : "connects"

USER ||--o{ USER\_ACTIVITY : "performs"

EXERCISE\_PROGRAM ||--o{ USER\_ACTIVITY : "is performed in"

COGNITIVE\_EXERCISE ||--o{ USER\_ACTIVITY : "is performed in"

USER ||--o{ WELLNESS\_GOAL : "defines"

WELLNESS\_GOAL ||--o{ GOAL\_PROGRESS : "measures"

WELLNESS\_BADGE ||--o{ USER\_BADGE : "is obtained by"

USER ||--o{ USER\_BADGE : "obtains"

**Forum**

FORUM\_CATEGORY {

id : INT, PK

name : VARCHAR

description : VARCHAR

parent\_category\_id : INT, FK → FORUM\_CATEGORY(id)

}

FORUM\_TOPIC {

id : INT, PK

category\_id : INT, FK → FORUM\_CATEGORY(id)

author\_id : INT, FK → USER(id)

title : VARCHAR

creation\_date : DATETIME

pinned : BOOLEAN

status : VARCHAR

views : INT

}

FORUM\_MESSAGE {

id : INT, PK

topic\_id : INT, FK → FORUM\_TOPIC(id)

author\_id : INT, FK → USER(id)

content : TEXT

creation\_date : DATETIME

modification\_date : DATETIME

solution\_message : BOOLEAN

}

**Ressources et Services**

RESOURCE {

id : INT, PK

title : VARCHAR

content : TEXT

type : VARCHAR

category : VARCHAR

creation\_date : DATETIME

update\_date : DATETIME

author\_id : INT, FK → USER(id)

admin\_validated : BOOLEAN

}

LOCAL\_SERVICE {

id : INT, PK

name : VARCHAR

category : VARCHAR

address : VARCHAR

gps\_coordinates : POINT

phone : VARCHAR

website : VARCHAR

description : TEXT

hours : VARCHAR

senior\_friendly : BOOLEAN

}

SERVICE\_RATING {

service\_id : INT, FK → LOCAL\_SERVICE(id), PK

user\_id : INT, FK → USER(id), PK

rating : INT

comment : TEXT

rating\_date : DATETIME

}

**Communication**

CONVERSATION {

id : INT, PK

type : VARCHAR

creation\_date : DATETIME

title : VARCHAR

}

CONVERSATION\_PARTICIPANT {

conversation\_id : INT, FK → CONVERSATION(id), PK

user\_id : INT, FK → USER(id), PK

date\_added : DATETIME

administrator : BOOLEAN

last\_access : DATETIME

}

MESSAGE {

id : INT, PK

conversation\_id : INT, FK → CONVERSATION(id)

sender\_id : INT, FK → USER(id)

content : TEXT

send\_date : DATETIME

type : VARCHAR

read : BOOLEAN

}

VIDEO\_CALL {

id : INT, PK

conversation\_id : INT, FK → CONVERSATION(id)

initiator\_id : INT, FK → USER(id)

start\_date : DATETIME

end\_date : DATETIME

status : VARCHAR

}

NOTIFICATION {

id : INT, PK

user\_id : INT, FK → USER(id)

type : VARCHAR

content : TEXT

creation\_date : DATETIME

read : BOOLEAN

action\_link : VARCHAR

}

**Projets Collaboratifs**

COLLABORATIVE\_PROJECT {

id : INT, PK

title : VARCHAR

description : TEXT

creator\_id : INT, FK → USER(id)

creation\_date : DATETIME

status : VARCHAR

category : VARCHAR

}

PROJECT\_MEMBER {

project\_id : INT, FK → COLLABORATIVE\_PROJECT(id), PK

user\_id : INT, FK → USER(id), PK

role : VARCHAR

join\_date : DATETIME

}

PROJECT\_TASK {

id : INT, PK

project\_id : INT, FK → COLLABORATIVE\_PROJECT(id)

title : VARCHAR

description : TEXT

creation\_date : DATETIME

due\_date : DATETIME

status : VARCHAR

assignee\_id : INT, FK → USER(id)

}

**Services municipaux**

MUNICIPAL\_EVENT {

id : INT, PK

title : VARCHAR

description : TEXT

start\_date : DATETIME

end\_date : DATETIME

location : VARCHAR

gps\_coordinates : POINT

organizer : VARCHAR

contact : VARCHAR

official\_link : VARCHAR

}

URBAN\_ISSUE\_REPORT {

id : INT, PK

user\_id : INT, FK → USER(id)

category : VARCHAR

description : TEXT

address : VARCHAR

gps\_coordinates : POINT

report\_date : DATETIME

status : VARCHAR

city\_reference : VARCHAR

}

**Statistiques et Badges**

USER\_STATISTICS {

user\_id : INT, FK → USER(id), PK

services\_provided : INT

services\_received : INT

activities\_participated : INT

activities\_organized : INT

forum\_messages : INT

total\_help\_points : INT

network\_size : INT

}

BADGE {

id : INT, PK

name : VARCHAR

description : VARCHAR

icon : VARCHAR

category : VARCHAR

level : INT

}

USER\_BADGE {

user\_id : INT, FK → USER(id), PK

badge\_id : INT, FK → BADGE(id), PK

achievement\_date : DATETIME

}

**Données Hors Ligne et Journalisation**

OFFLINE\_USER {

user\_id : INT, FK → USER(id), PK

cached\_data : JSON

last\_sync : DATETIME

}

ACTIVITY\_LOG {

id : INT, PK

user\_id : INT, FK → USER(id)

action\_type : VARCHAR

description : TEXT

action\_date : DATETIME

ip\_address : VARCHAR

device : VARCHAR

}

USER\_DEVICE {

id : INT, PK

user\_id : INT, FK → USER(id)

device\_type : VARCHAR

device\_name : VARCHAR

operating\_system : VARCHAR

notification\_token : VARCHAR

last\_connection : DATETIME

}

**Enquêtes de Satisfaction**

SATISFACTION\_SURVEY {

id : INT, PK

title : VARCHAR

description : TEXT

start\_date : DATETIME

end\_date : DATETIME

active : BOOLEAN

}

SURVEY\_RESPONSE {

survey\_id : INT, FK → SATISFACTION\_SURVEY(id), PK

user\_id : INT, FK → USER(id), PK

responses : JSON

response\_date : DATETIME

}