

Entites :

- User (PK: user\_id) — first\_name, last\_name, email, password\_hash, name, locale, time\_zone, preferences\_json, created\_at, status,
- Role (PK: role\_id) — name
- Permission (PK: perm\_id) — name, description
- UserRole (PK: user\_id, role\_id) — user\_id (FK), role\_id (FK)
- RolePermission (PK: role\_id, perm\_id) — role\_id (FK), perm\_id (FK) (F14)
- PracticePlan (PK: plan\_id) — user\_id (FK), type (7-day), generated\_at, valid\_from, valid\_to (F5)
- PlanItem (PK: plan\_item\_id) — plan\_id (FK), day\_index (1..7), content\_id (FK), notes (F5)
- Content (PK: content\_id) — title, type (audio/video), duration\_min, difficulty, language, source (API/local), created\_at, is\_active (F7, F17)
- Category (PK: category\_id) — name
- ContentCategory (PK: content\_id, category\_id) — content\_id (FK), category\_id (FK) (F18)
- Tag (PK: tag\_id) — name
- ContentTag (PK: content\_id, tag\_id) — content\_id (FK), tag\_id (FK) (F17)
- Session (PK: session\_id) — user\_id (FK), content\_id (FK), started\_at, completed\_at, duration\_sec, device (F7, F26)
- RatingReview (PK: review\_id) — user\_id (FK), content\_id (FK), rating (1–5), comment, created\_at (F11, F21)
- ModerationItem (PK: mod\_id) — target\_type (review/content), target\_id, status, moderator\_user\_id (FK), reason, decided\_at (F12, F21)
- Favorite (PK: user\_id, content\_id) — created\_at (F25)
- Challenge (PK: challenge\_id) — title, description, is\_daily, active\_from, active\_to (F19)
- ChallengeItem (PK: challenge\_item\_id) — challenge\_id (FK), day\_index, content\_id (FK), extra\_exercise\_id (FK, nullable) (F19)
- UserChallenge (PK: user\_chal\_id) — user\_id (FK), challenge\_id (FK), joined\_at, progress\_days, completed\_at (F19)
- Streak (PK: streak\_id) — user\_id (FK), type (daily\_challenge/general\_practice), current\_count, longest\_count, updated\_at (F20, F24)
- Badge (PK: badge\_id) — name, rule\_json
- UserBadge (PK: user\_id, badge\_id) — awarded\_at (F20)

- MoodCheckIn (PK: mood\_id) — user\_id (FK), date, mood\_score (1–10), emotion\_tags, notes (F22)
- SleepScore (PK: sleep\_id) — user\_id (FK), provider, date, score\_0\_100, details\_json (F23)
- WeeklyProgressSummary (PK: summary\_id) — user\_id (FK), week\_start\_date, mood\_trend\_json, total\_time\_spent\_min, streak\_at\_week (F24)
- ScheduledPractice (PK: sched\_id) — user\_id (FK), recurrence\_rule (RRULE), local\_time, timezone (F13, F15)

#### Relationship (cardinalities)

- User M—N Role via UserRole ; Role M—N Permission via RolePermission
- PracticePlan 1—N PlanItem → PlanItem N—1 Content
- Content M—N Category via ContentCategory
- Content M—N Tag via ContentTag
- User 1—N Session
- User 1—N RatingReview ; Content 1—N RatingReview
- RatingReview 0—1 ModerationItem
- User M—N Content via Favorite
- Challenge 1—N ChallengeItem
- User M—N Challenge via UserChallenge
- User 1—N Streak, MoodCheckIn, SleepScore, WeeklyProgressSummary,