**self-directed-freelancer-schema**  
  
erDiagram

%% Core Entities

freelancer\_profiles {

UUID profile\_id PK "User profile"

UUID user\_id "Links to external user"

VARCHAR full\_name "User's full name"

DECIMAL current\_hourly\_rate "User's current rate"

DECIMAL monthly\_revenue "Monthly revenue"

}

freelancer\_skills {

UUID skill\_id PK "Unique skill ID"

VARCHAR skill\_name "Name of the skill"

business\_domain business\_domain "Business domain, e.g., 'web\_development'"

INTEGER market\_demand "1-10 demand score"

DECIMAL average\_hourly\_rate "Avg market rate"

}

business\_ai\_avatars {

UUID avatar\_id PK "AI mentor ID"

VARCHAR avatar\_name "Avatar's display name"

avatar\_role primary\_role "e.g., 'business\_mentor'"

INTEGER expertise\_level "1-10 expertise score"

}

%% Curriculum Structure

business\_curricula {

UUID curriculum\_id PK "Main curriculum ID"

VARCHAR title "Curriculum title"

INTEGER total\_duration\_weeks "Program length"

DECIMAL revenue\_potential "1-10 score"

}

business\_modules {

UUID module\_id PK "Module ID"

UUID curriculum\_id FK "Parent curriculum"

VARCHAR title "Module title"

INTEGER module\_number "Order in curriculum"

JSONB business\_applications "Real-world scenarios"

}

business\_components {

UUID component\_id PK "Component ID"

UUID module\_id FK "Parent module"

VARCHAR title "Component title"

INTEGER estimated\_duration\_minutes "Component duration"

}

business\_topics {

UUID topic\_id PK "Topic ID"

UUID component\_id FK "Parent component"

VARCHAR title "Topic title"

INTEGER estimated\_duration\_minutes "Bite-sized duration"

}

business\_learning\_units {

UUID unit\_id PK "Learning unit ID"

UUID topic\_id FK "Parent topic"

VARCHAR title "Unit title"

UUID skill\_being\_developed FK "Skill reinforced"

monetization\_readiness monetization\_readiness "Monetization status"

}

%% Content, Assessments, and Progress

business\_content {

UUID content\_id PK "Content ID"

UUID unit\_id FK "Associated learning unit"

content\_format format "e.g., 'case\_study'"

JSONB business\_applications "Client use cases"

DECIMAL revenue\_attribution "Revenue from this content"

}

business\_assessments {

UUID assessment\_id PK "Assessment ID"

UUID unit\_id FK "Parent unit"

assessment\_type assessment\_type "e.g., 'client\_simulation'"

INTEGER estimated\_duration\_minutes "Short duration"

}

client\_projects {

UUID project\_id PK "Project ID"

UUID user\_id FK "User who completed it"

UUID[] skills\_applied FK "Skills used in project"

DECIMAL total\_revenue "Total project revenue"

}

freelancer\_progress {

UUID progress\_id PK "Progress tracking ID"

UUID user\_id FK "Associated user"

UUID unit\_id FK "Associated unit"

progress\_status status "e.g., 'revenue\_generated'"

DECIMAL revenue\_generated "Revenue from learning unit"

}

freelancer\_skill\_progress {

UUID skill\_progress\_id PK "Skill progress ID"

UUID user\_id FK "Associated user"

UUID skill\_id FK "Skill being developed"

monetization\_status monetization\_status "e.g., 'generating\_revenue'"

DECIMAL revenue\_from\_skill "Total revenue"

}

business\_learning\_sessions {

UUID session\_id PK "Session ID"

UUID user\_id FK "User who attended"

TIMESTAMPTZ started\_at "Session start time"

INTEGER duration\_minutes "Actual duration"

INTEGER interruptions\_count "Number of interruptions"

}

revenue\_attribution {

UUID attribution\_id PK "Attribution ID"

UUID user\_id FK "User who earned revenue"

UUID client\_project\_id FK "Related client project"

DECIMAL revenue\_amount "Revenue amount"

UUID[] attributed\_skills "Skills that led to revenue"

}

%% Analytics & Intelligence

business\_content\_embeddings {

UUID embedding\_id PK "Embedding ID"

UUID content\_id FK "Content source"

vector content\_vector "Vector for search"

vector business\_context\_vector "Business context vector"

}

market\_insights {

UUID insight\_id PK "Insight entry"

business\_domain business\_domain "Business domain of insight"

JSONB skill\_demand\_trends "Trending skills and demand changes"

}

business\_milestones {

UUID milestone\_id PK "Milestone ID"

UUID user\_id FK "Associated user"

VARCHAR milestone\_category "e.g., 'revenue', 'client'"

DECIMAL target\_value "Target value, e.g., $10,000"

}

client\_project\_simulations {

UUID simulation\_id PK "Simulation ID"

UUID assessment\_id FK "Parent assessment"

TEXT project\_brief "Simulation brief"

INTEGER estimated\_completion\_hours "Estimated hours"

}

%% Defining relationships

freelancer\_profiles ||--o{ business\_learning\_sessions : attends

freelancer\_profiles ||--o{ freelancer\_progress : tracks\_progress\_in

freelancer\_profiles ||--o{ freelancer\_skill\_progress : develops

freelancer\_profiles ||--o{ client\_projects : manages

freelancer\_profiles ||--o{ revenue\_attribution : tracks

freelancer\_profiles ||--o{ business\_milestones : achieves

business\_curricula ||--o{ business\_modules : contains

business\_modules ||--o{ business\_components : contains

business\_components ||--o{ business\_topics : contains

business\_topics ||--o{ business\_learning\_units : contains

business\_learning\_units ||--o{ business\_content : has

business\_learning\_units ||--o{ business\_assessments : tests

business\_learning\_units }|--o{ freelancer\_progress : is\_tracked\_in

freelancer\_skills ||--o{ business\_learning\_units : reinforces

freelancer\_skills ||--o{ freelancer\_skill\_progress : is\_developed\_by

freelancer\_skills ||--o{ client\_projects : is\_used\_in

business\_content ||--o{ business\_content\_embeddings : is\_embedded\_for

business\_ai\_avatars ||--o{ business\_content : provides\_guidance\_on

business\_assessments ||--o{ client\_project\_simulations : provides\_simulation\_for

client\_projects ||--o{ revenue\_attribution : attributes\_revenue