Dating app Database

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***Abstract*—This project presents the design and development of a database for a dating application, following a structured 10-step process. Key entities are identified, and relationships between them are established to optimize the application's functionality. The goal is to create an efficient and scalable database.**

I. Introduction

This technical report outlines the design and development process of a database for a dating application. The goal is to create an efficient database that ensure data integrity. Following a structured 10-step approach, the database design focuses on scalability, reliability, and ease of use. Additionally, this report covers the business model of the application, as well as the processes and information required to support its functionality.

II. business model

The dating application is designed to help individuals connect based on shared interests, preferences, and location. It facilitates user registration, profile creation, and matching through algorithms that analyze compatibility. Users can browse profiles, send messages, and establish connections. The platform aims to promote meaningful relationships by providing an intuitive and efficient interface for interaction. The app focuses on creating a safe and engaging environment where users can meet, chat, and build connections.

III. processes and information required in the application

Registration: Capture of name, age, gender, photos, preferences and location.
Search: Algorithm that connects users based on interests and compatibility.
Interactions: Likes, messages, matches between users,profile and activity management.
Security: User verification and reporting mechanisms.

IV. steps to ER draw

A. Define components:

Match
User Profile
Chats

B. Define entities:

e1 = Match
e2 =User
e3 = message
e4 = profile
e5 = preference

C. Define attributes per entities:

Match:id_match(pk), id_user1(fk), id_user2(fk), date
User: id(pk), name, email, password, age, location, gender, likes
Message: id_msg(pk), id_writer(fk), id_match(fk), content, date
profile: id_profile(pk), id_user(fk), biografy, height, zodiacs, what_looking_for, body_caracteristics, photo
preferences: id_preferences(pk), id_user(fk), min_age, max_age, min_height, max_ height,location, gender_prefer, likes_prefer

D. Define relationships:

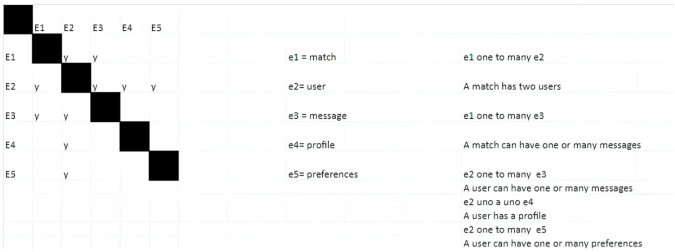

Fig. 1. relationship table

E. Define Relationships Types:

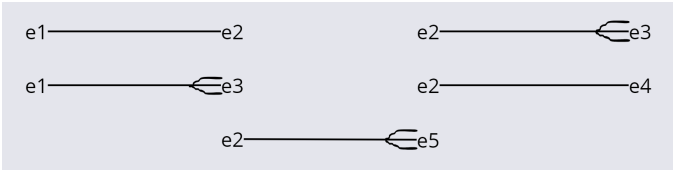

Fig. 2. relationship types

F. First ER draw

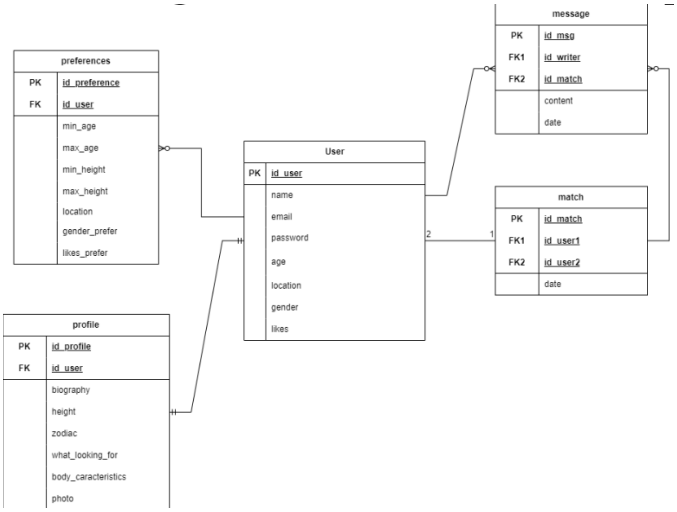

Fig. 3. ER draw

G. Get data structure E-R-M

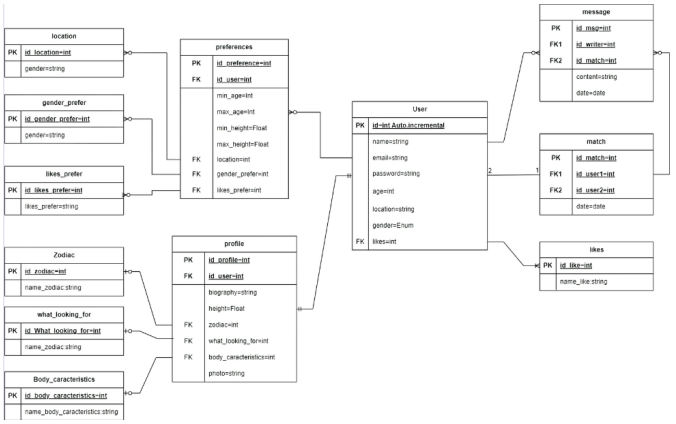

Fig. 4. data structure ER

H. Final design

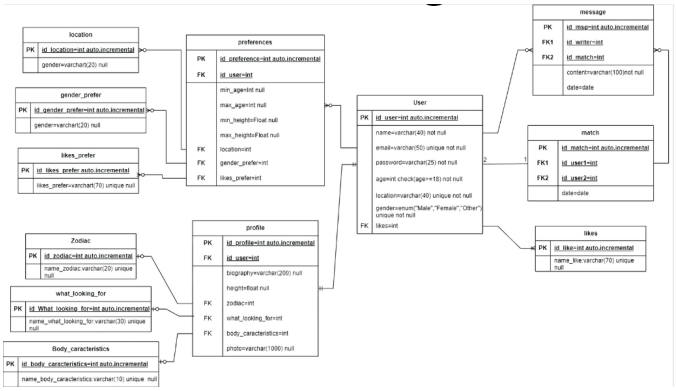

Fig. 5. final ER draw