2024-01-13 - Handout – Design Tinder

What is Tinder?

Tinder is an online dating and geosocial networking mobile application launched in 2012. On Tinder, users "swipe right" to like or "swipe left" to dislike other users' profiles, which include their photos, a short bio, and some of their interests.

Tinder uses a "double opt-in" system, also called "matching", where two users must like each other before they can exchange messages.

Your task is to design a system like Tinder which meets the following functional and non-functional requirements.

Functional requirements

1. Profile:
    a. Users should be able to create their profile using the mobile app
    b. Users should be able to upload up to 5 images
    c. Users should be able to add a small profile description
2. Matches
    a. Users should be shown match recommendations (one at a time) according to their preferences like gender, age, distance
    b. A user should be recommended another user only once
    c. Users' matches should be stored for a long period of time (1 or 2 years)
    d. Max search radius that users can set is 50 miles
3. Chat
    a. Once matched two users should be able to chat.

Non-functional requirements

1. 50M profiles
2. 20B matches
3. 2B swipes per day
4. Low latency match loading
5. Full text search – we should be able to search through the whole profile to provide better recommendations