EECS 341 Course Project

System Design

And

Data Model

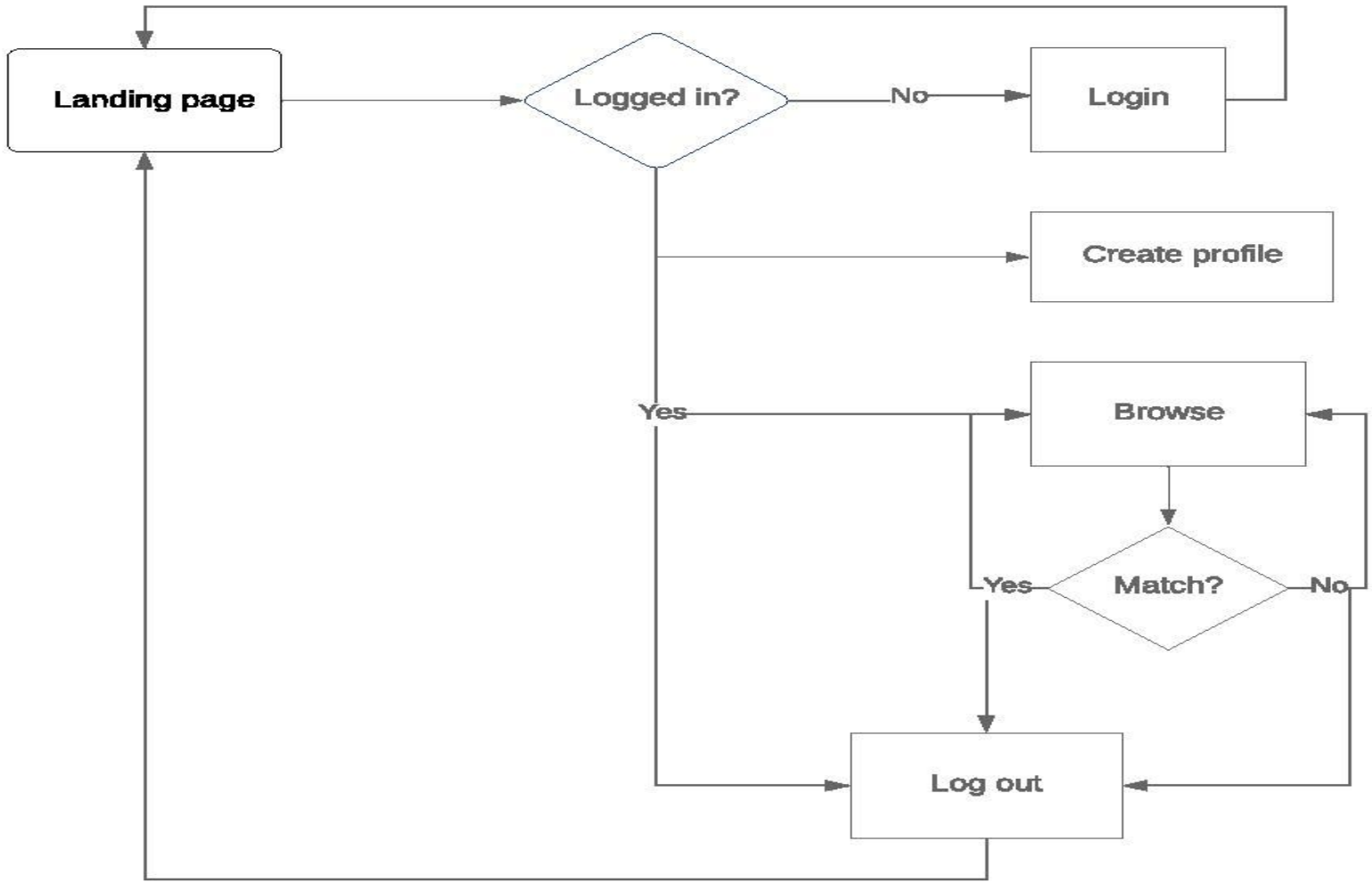
System Design: Overview

- My project is a dating website called “Hi, Stranger”
- Tech stack: web app with Java server and MySQL database backend
- Scope:
- Users can 1) create and revise his/her profile 2) match/unmatch other users. 3) see how many people have matched him/her.
- Administrators can 1) view total users. 2) create/delete emulated historical users 3) update/read the profile of emulated historical users.
- Analytics: Upon user requests to potential partners, we will first honor users’ requirements to age, gender, etc., and then recommend partners based on similar opinions on historical/emulated historical users through analytic algorithms.
- Note: 1) For this memo, customers log in by providing an unique id only. We do not want to store passwords, because any mishandling may endanger the user’s accounts on other websites. 2) Our emulated historical users serve as example users with analytic purposes.

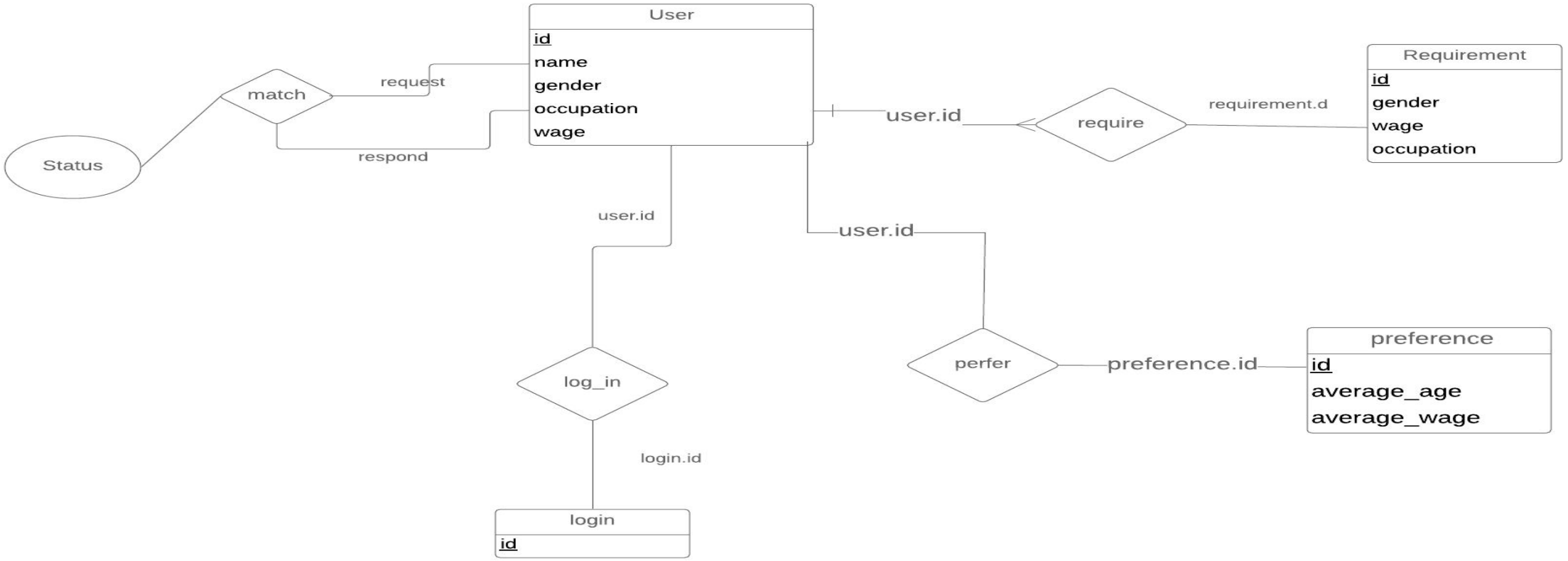
System Design: Reach Goals

- In this slide are some additional features to the core of our website that we will implement if time allows.
- User will log in by providing both user id and password, combined with three security questions.
- User can choose to display his/her profile or not.
- We will provide a questionnaire to users when they create their profile in order to recommend more suitable potential users in match page.
- We provide the opportunity to link accounts to Facebook. With this information, we can find overlaps between two matched users' social networks.
- Users will be able to chat with each other after match.

System design: process flowchart



Data Model: E-R



Data Model: relational

user(id,name,gender,occupation,wage)

requirement(id,gender,wage,occupation)

login(id)

log_in(user.id,login.id)

require(user.id,requirement.id)

match(user_id, status, user_id)

prefer(user.id, preference.id)

preference(id, average_wage, average_age)