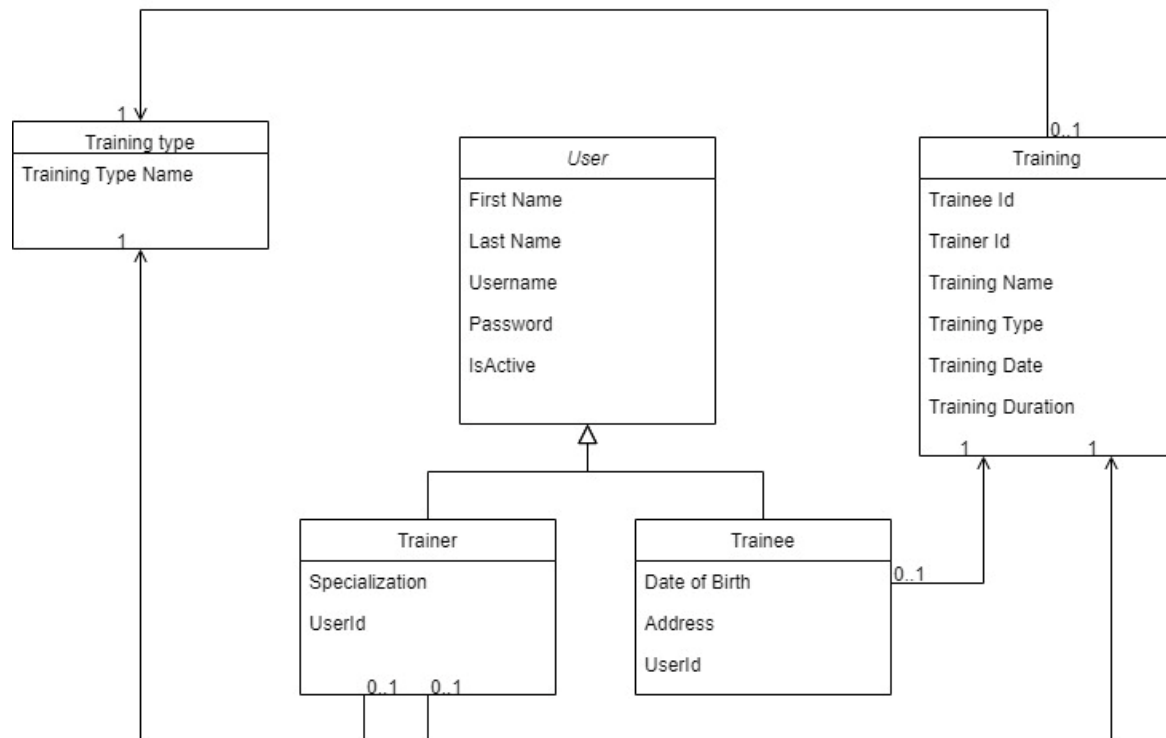# Spring core task

Create a Spring-based module, which handles gym CRM system.

Based on follow objects description:

1. Implement three service classes Trainee Service, Trainer Service, Training Service
2. Trainee Service class should support possibility to create/update/delete/select Trainee profile.
3. Trainer Service class should support possibility to create/update/select Trainer profile.
4. Training Service class should support possibility to create/select Training profile.

Notes:

1. Configure spring application context based on the Spring annotation or on Java based approach.
2. Implement DAO objects for each of the domain model entities (Trainer, Trainee, Training). They should store in and retrieve data from a common in-memory storage - java map. Each entity should be stored under a separate namespace, so you could list particular entity types.
3. Storage should be implemented as a separate spring bean. Implement the ability to initialize storage with some prepared data from the file during the application start (use spring bean post-processing features). Path to the concrete file should be set using

property placeholder and external property file. In other words, **Every** storage **(java.util.Map)** should be implemented as a separate spring bean

4. DAO with storage bean should be inserted into services beans using auto wiring. Services beans should be injected into the facade using constructor-based injections. The rest of the injections should be done in a setter-based way.
5. Cover code with unit tests.
6. Code should contain proper logging.
7. For Trainee and Trainer create profile functionality implement username and password calculation by follow rules:
   - Username going to be calculated from Trainer/Trainee first name and last name by concatenation by using dot as a separator (eg. John.Smith)
   - In the case that already exists Trainer or Trainee with the same pair of first and last name as a suffix to the username should be added a serial number.
   - Password should be generated as a random 10 chars length string.