## JPA workshop - part 2:

- 7. Make sure all classes in the entity package has a default constructor.
  - a. Commit.
- 8. Turn Product, AppUser, OrderItem and ProductOrder into entitites.
  - a. Configure so that OrderItem has an eager @ManyToOne relationship with Product
  - b. Configure so that OrderItem has a lazy @ManyToOne relationship with ProductOrder
  - c. Configure so that ProductOrder has a @OneToMany relationship with OrderItem. Set orphanremoval to true.
    - ProductOrder should also have a @ManyToOne relationship with AppUser.
  - d. Testrun your application.
  - e. Commit
- 9. Create a package called data.
  - a. Create Repository or DAO class (with interface) for Product and define CRUD
    - i. In addition to CRUD add a search method that find products by productname.
    - ii. Integration test your class / interface for code YOU wrote.
    - iii. Commit
  - b. Create Repository or DAO class (with interface) for AppUser and define CRUD.
    - i. Add functionality to find an AppUser by email in the class/repository. Make the method return Optional<AppUser>.
  - c. Create Repository or DAO class (with interface) for OrderItem and define CRUD
    - i. Integration test your class / interface for code YOU wrote.
    - ii. Commit
  - d. Create Repository or DAO class (with interface) for ProductOrder and define CRUD.
    - Add functionality to find ProductOrders by **DATE**. Refactoring may be needed.
    - ii. Add functionality to find ProductOrders by productid (in Product).
    - iii. Add functionality to find ProductOrders by productName (in Product).
    - iv. Add functionality to find ProductOrders by AppUser id.
    - v. Integration test your class / interface for code YOU wrote.
    - vi. Commit.