- In the last three semesters we were using the mysql workbench to either generate a sql script from a model or the other way around. We used DB normalization to 3N (third normal form) to eliminate duplication of data, improve DB processing and ensure referential integrity.
- The sql connection used in the last semester is very expensive to open and close just like a file reader is expensive to open and close, maybe the ORM is more efficient as it uses transactions and could make all the queries then commit them all at once via. the entitymanager and entitymanagerfactory.
- It's faster since you don't have to make datamappers (with prepared statements etc.) you just make the normal class with its fields and use annotations to tell about cardinality relations between objects and so on. ORM Provides an object based view of data and brings the power of OOP to the world of DB.
- It prevents n+1 selects: If you have a collection of cars and each car has a collection of wheel objects. If you want to iterate through each cars and print out all of it's wheels you could have two selects: "select * from cars;" and "select * from wheel where careId = ?" then you would have 1 select for cars and then N aditionel selects for each car (n+1 selects). This can be solved much better with one select: "select * from wheel" and these n+1 selects is what ORM is good at solving automatically.
- The basic components of JPA: EntityManager and the EntityManagerFactory, The annotations, The Facade.