Assignment 2
Group 52
Nicolas Johansson
Aapo Haavisto

In this assignment we made an ontology of our E-R diagram using protege. We decided to merge the CoursePlanning and CourseInstances entities since this seemed more simple to model with an ontology and removes redundancy (each course instance should have exactly one planning anyways). AssignedHours and ReportedHours were also merged into TeacherAssignment with attributes *reportedHours* and *assignedHours*, as suggested in the feedback on Lab 1. Further, TeacherAssitstant and its ISA relations were removed (now falls under Teacher), and we exchanged the Student-ProgrammeCourse relation with a Student-Programme relation. We also added entities for Department and Division since the attributes were used in several entities.

The rest of the entities, relationships and attributes were kept the same except for relationships which had attributes. We couldn't add attributes to relationships, so we decided it would be easier to change them to entities instead. This doesn't change any functionality in our diagram, just adds a couple of new relations. However, we had to think about the type of these new relations; for example we decided that both Students and CourseInstances should both have a many-to-one relationship to Registrations. The new ProgrammeCourses entity is more abstract, and similar decisions were made there. The updated ER has been submitted with the assignment (note that some relationship names may differ slightly between the ER and the ontology).

We found translating weak entities into OWL a bit challenging. Some papers online suggested they should be made to subclasses, but we did not find that to be a good approach, because weak entities are not really subclasses of the classes they have a relation to. Finally, we decided to treat weak entities like regular entities.