Homework: UML Class Diagram

Task 1:

Create a UML Class Diagram considering the following information:

1. Each person has a last name, first name and an e-mail address
2. Each (physical) address is inhabited by one or more person
3. Each (physical) address has a street name, postal code, city name and country
4. Each (physical) address can be confirmed (by its inhabited)
5. Each student has a registration number, a grad and is visiting some courses
6. Each Professor has an ID number, wages and gives some lectures
7. Student and Professor belong to the class Person
8. Each student can create an online access to his University account
9. Each account can just exist, if there is a student
10. The courses were the students are enrolled are GDB, Geoinformation Technology and C++ for dummies
11. The students get some homework and grades in each of those courses and can cancel their enrolment
12. Each Professor is giving a lecture in one of those courses

Task 2:

Create a UML Class Diagram considering the following information:

1. You have a Zoo with several animals. Each animal can exist without the Zoo.
2. Birds, Reptiles and Mammals are animals that you have in your Zoo
3. Lions, Tigers and a Monkeys are Mammals
4. You have also a Crocodile, some Snakes and a Lizard
5. Each bird has a spout, two legs, wings and some muscles
6. A Mammal has two to four legs and some muscles
7. The wings of the birds have also at least one muscle, as well as the legs of all animals
8. Each Bird can fly and make some noise
9. There are three persons which taking care of all your animals
10. Each person has some attributes which you can choose

Task 3:

Please, design an UML Class Diagram that explains the 'UML Class Diagram' concept!

What kind of relationships do you have? Which characteristic does a class have and how are the relationships between them?

Task 4:

Please, design an UML Class Diagram that is focuses on a municipality. The municipality is structured into properties, located at streets. You may find buildings on these properties, which consist of building parts. The geometry of the building parts is described by polygons. Of course properties and buildings are owned by persons.

Please, submit the homework till 30th November 2016, 23:59 o'clock.