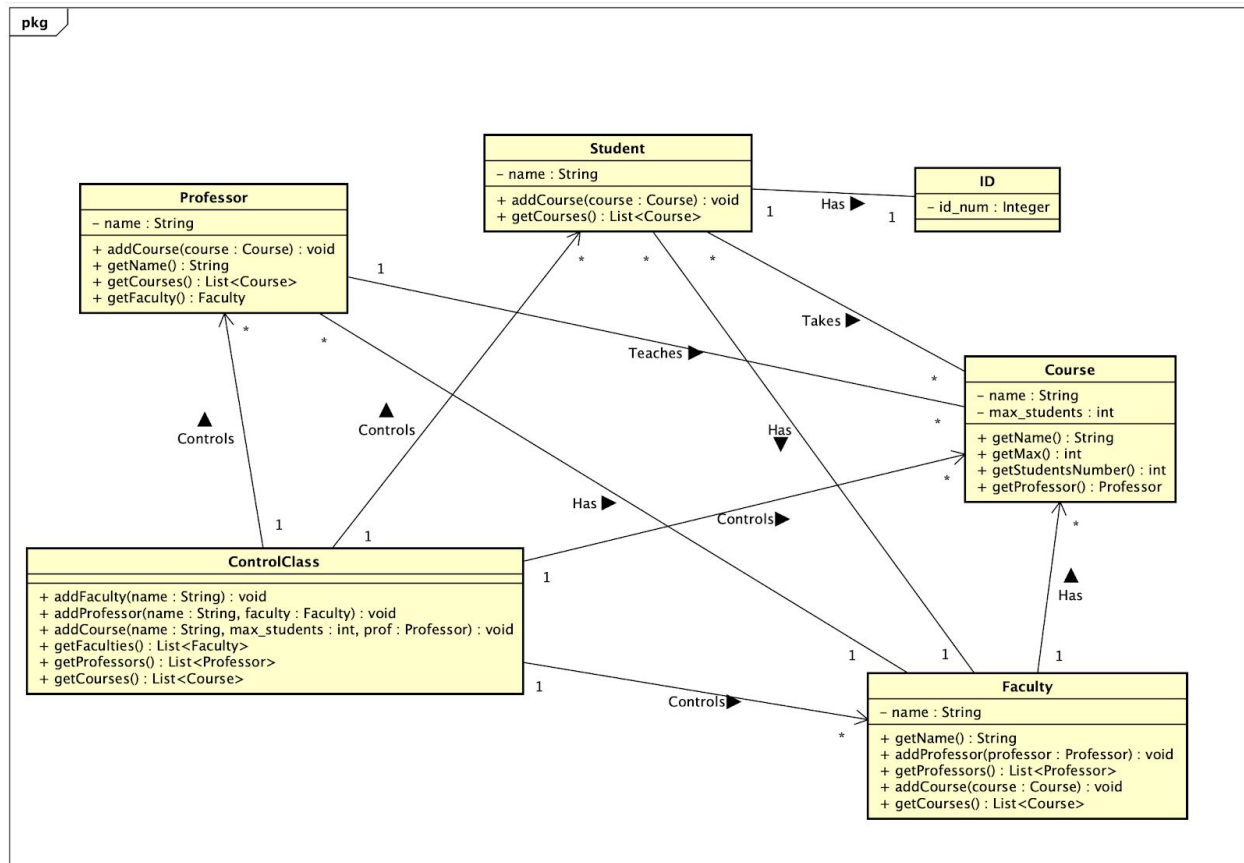
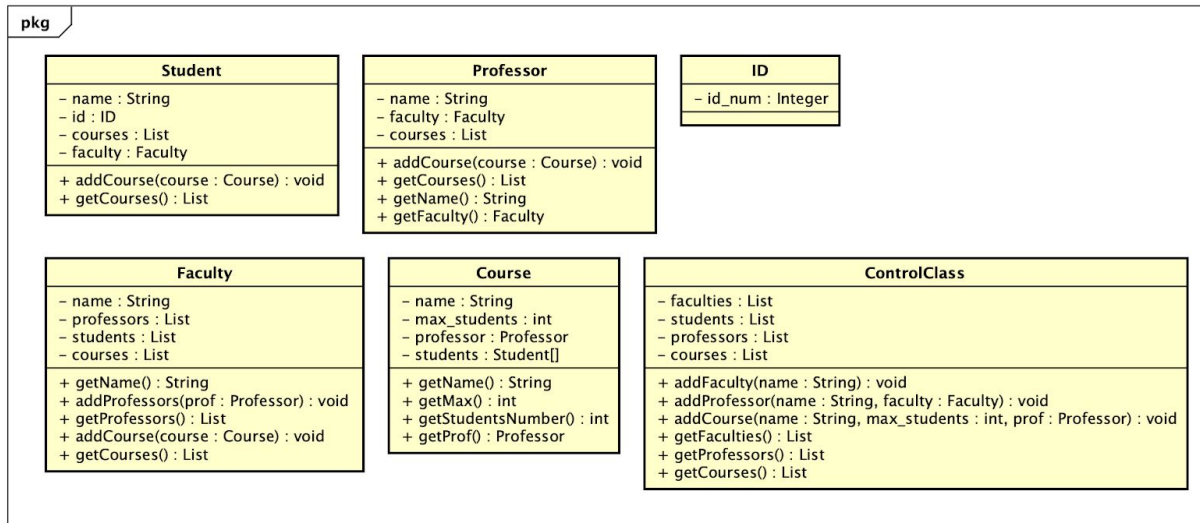


Marcus Miller
8/26/2019
SER 315
Assignment 1

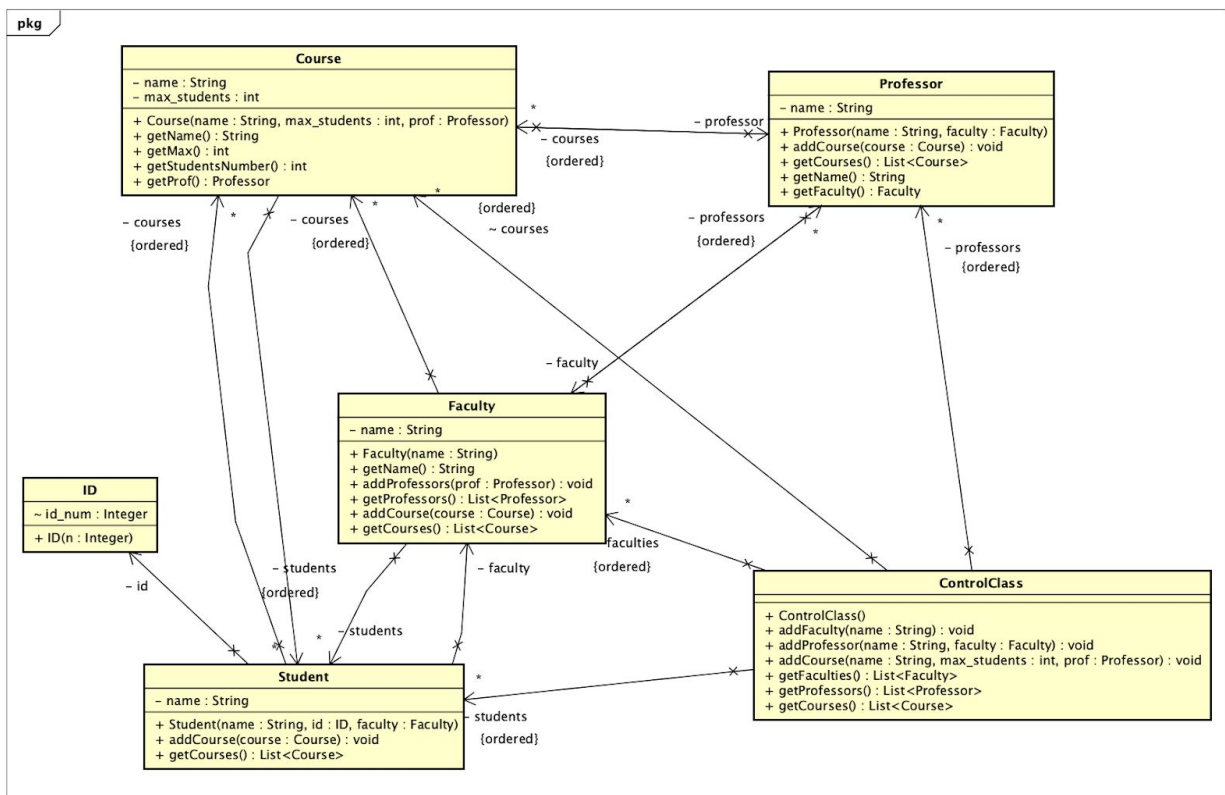
Task 1



Task 2.1



Task 2.2



1. All three diagrams have a different level of abstraction, explain the main differences.
The first and third diagrams show associations between classes instead of having references to other classes as attributes. The first diagram names associations while the third diagram doesn't. The second diagram doesn't use multiplicities.

2. Why all three diagrams still represent the same information.

The first and third diagram are farther away from the java implementation of the code but still represents the same information because you can see the associations between the classes. The second diagram shows the associations as references to other classes by attributes thus conveying the same information at the first and third diagram.

3. Why an association is basically the same as having the attribute in the class.

An association is basically the same as having the attribute in the class because the association shows how many of one class is connected to the other class and vice versa. The association also gives a helpful name to describe the relationship.

What are the main differences and which diagram type would be the best to export to Java right away as a template. Explain your reasons.

All of the exports have a different number of classes. Export 1 includes java built in classes which is not useful for implementing the model. Export 2-1 has a Student array class that doesn't make sense. Export 2-1 and Export 2-2 have import statements. Export 2-2 instantiates the attributes while Export 1 and Export 2-1 only declare attributes. Export 1 and Export 2-2 use arrays while Export 2-1 uses List. Export 1 and Export 2-2 have the correct function signatures while Export 2-1 doesn't include the type for generics like List. Export 2-1 includes the final keyword which is probably not desired. Export 1 classes has a ControlClass attribute which is probably not desired. I would say that Export 2-2 is the best to export right away as a java template because of the reasons mentioned above.