

## Control & Data Models

### Lecture / Lab

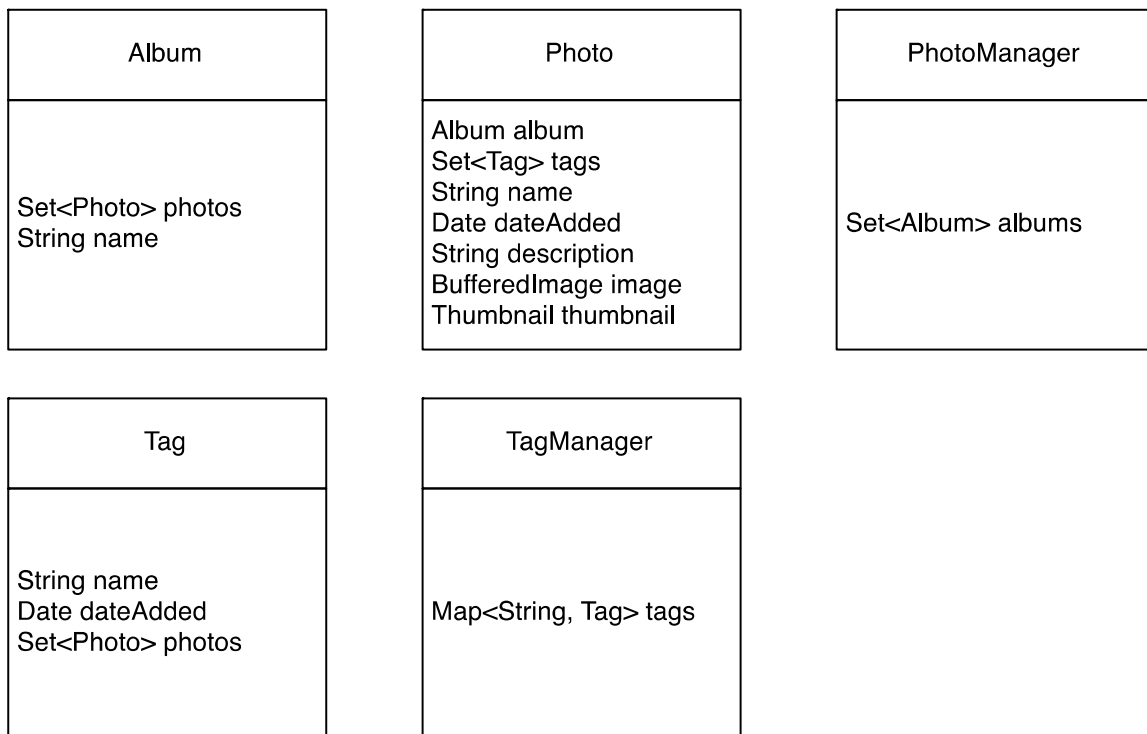
### Solutions

**Note:** the lecture/lab did not make it clear how far you should trace into method calls on Q4 and Q5. The solution presented here assumes that we do not include calls to any methods outside the `PhotoAlbumBase` system.

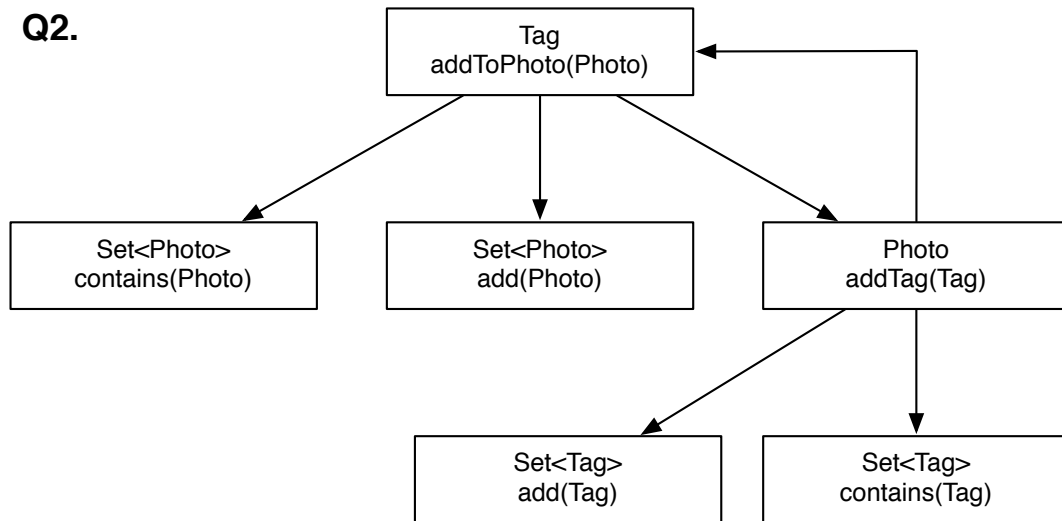
When you read the solution, make sure you have the code available and take time to make the connection between the models presented here and the code itself.

Question 5 was very challenging and it might take some time to understand the solution – be sure to make use of DLC or instructor office hours, if you need some help.

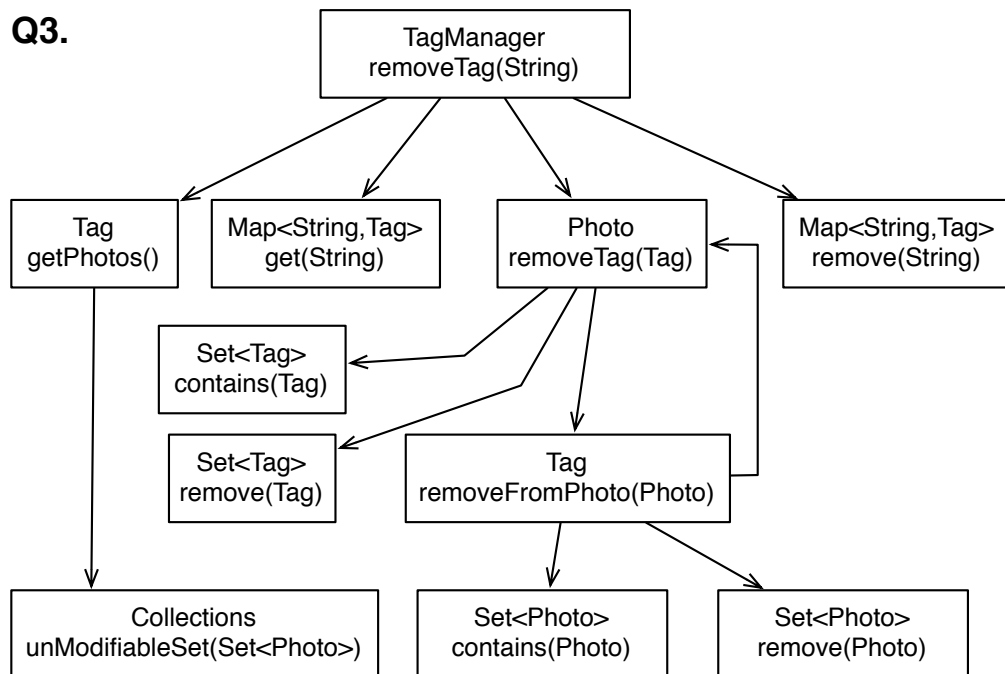
### Q1.



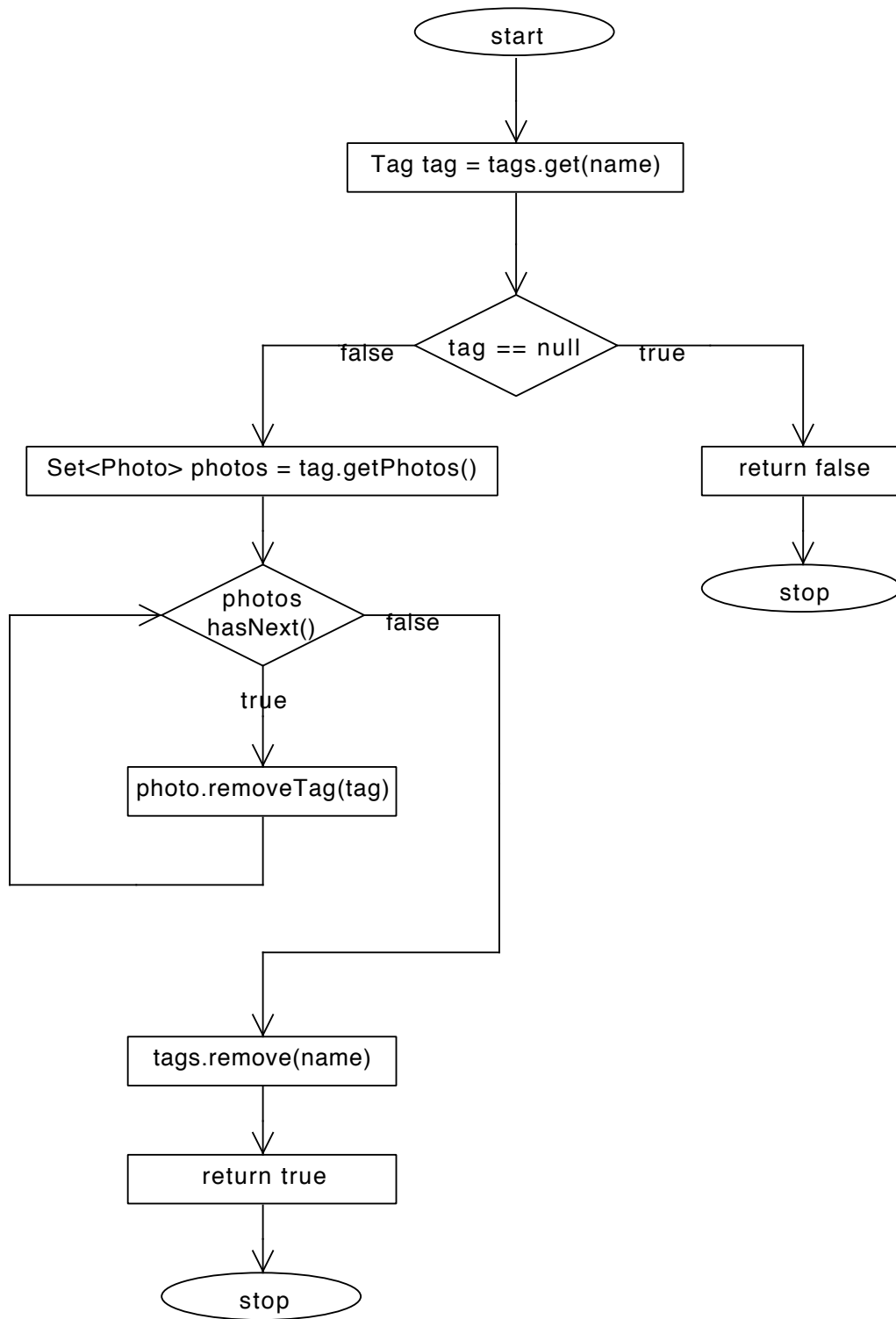
**Q2.**



**Q3.**



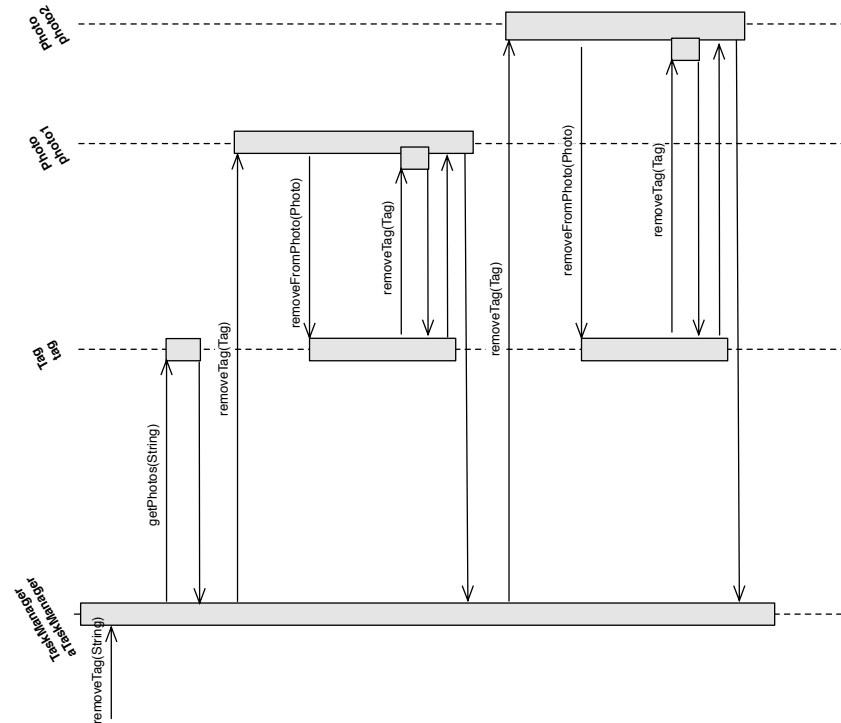
**Q4.**



## Q5 with following calls

(Note: there is an additional simplified solution after this one)

**NOTE:** we are leaving out calls to the library objects (such as photos of type `Set<Photo>`) for the sake of constraining the view. We will be *very* clear about whether you need to include these calls on assignments/labs/exams.



## Q5 without following calls

(Note: this is the level of detail we will expect on an exam/assignment)

