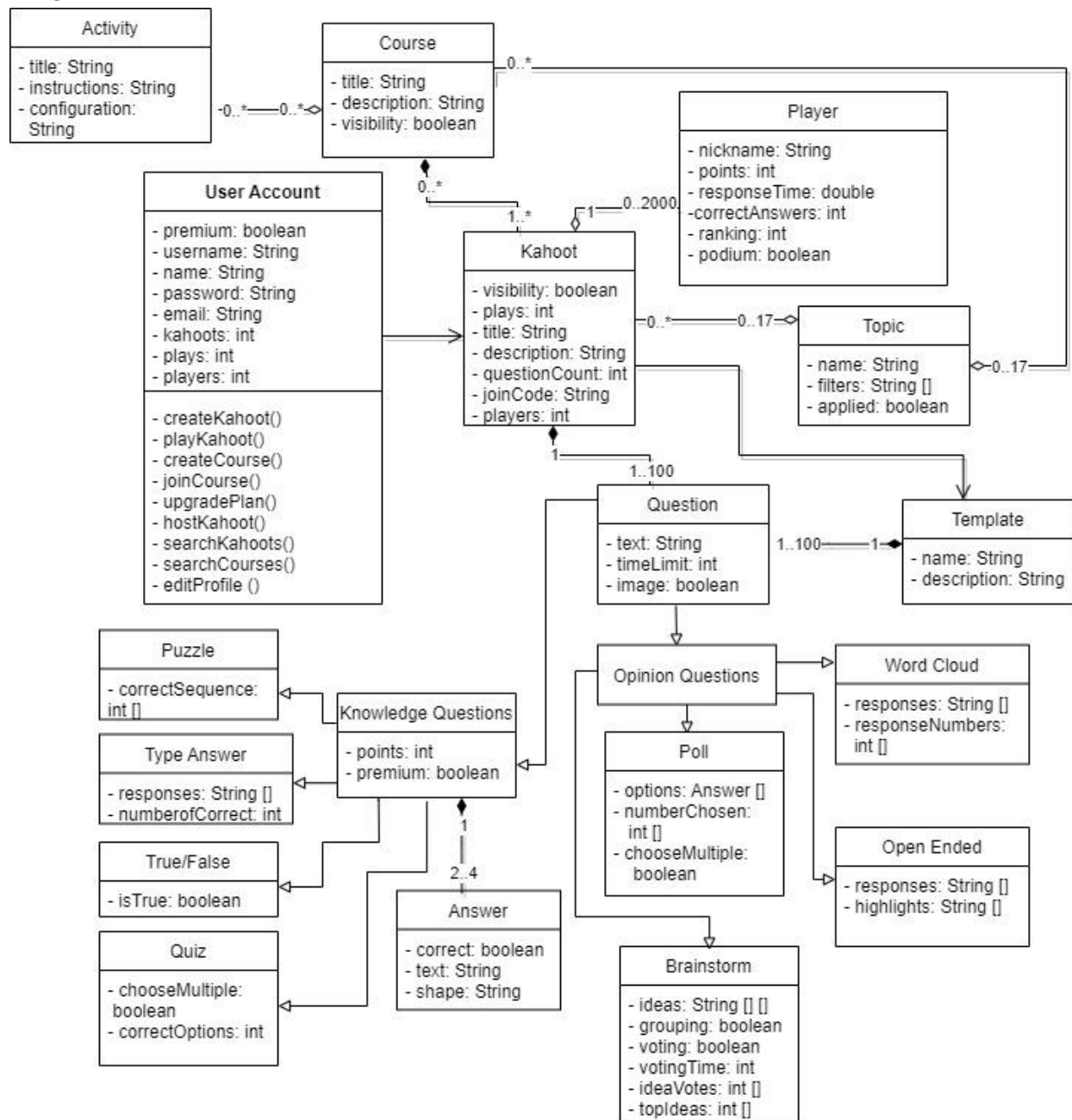


Name: Lucy Lin

### Class Diagram:

<https://drive.google.com/file/d/1JOLqgyVjXIQbrvfup5ZTSvdPdANqH8Pr/view?usp=sharing>

### Image:



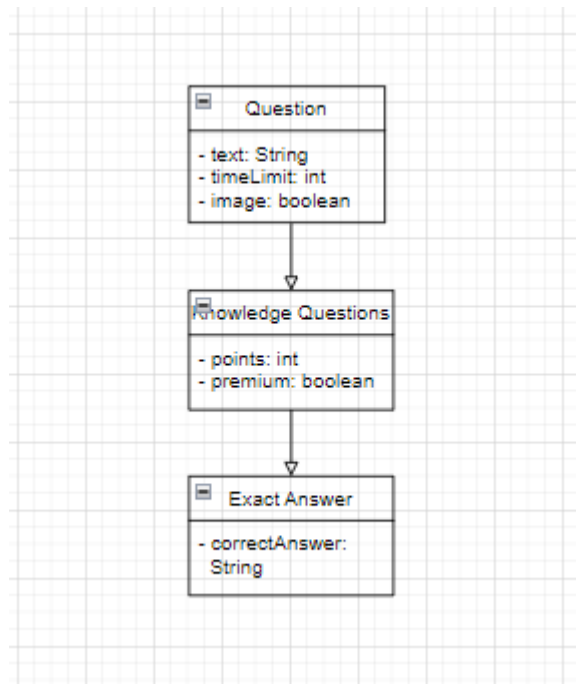
Justification: <https://www.wevideo.com/hub#media/ci/2632893007>

Questions:

1. a) I'd create an "Exact Answer" subclass of Knowledge Questions. Each question would give some sort of indication of a particular word, phrase, or number, and provide an open-answer response box. This differs from the existing open response type question in that the players must provide one exact answer to earn points, rather than the host judging which answers are correct. This would test the players' grasp of exact values or terms. This could be helpful in memorization of values (pi, Avogadro's number) or spellings.

b) This type of question would have to have a String to store the value of its exact answer, to compare against responses given by players. It would also have all the other attributes of knowledge questions: an integer storing point value, an integer storing time limit, a String storing the question itself, and a boolean storing whether the question has an image.

c) The "Exact Answer" question would be like the 4 existing types of Knowledge Questions: a subclass under the superclass of Knowledge Question (which in turn is a subclass under Question, making Question the granddaddy class of Exact Answer).



d)

2. For the outside-of-school scenario, I'm picturing a 24/7 free-for-all battle royale of trivia where anyone can drop in at any time and climb the ranks. This would require an effectively endless supply of questions, so the first change is abolishing the Kahoot class. Now, rather than organized Kahoot quizzes, we have a large pile of Questions being randomly drawn from. The multiplicity of players per Kahoot (well, now players per Question Pile) would have to go to infinity rather than 2000. Is this realistic? Probably

not, but neither is Question Pile. The demolition of the Kahoot Class will also lead to the demise of Courses, which rely on Kahoots to exist (composition relationship). The lack of organization also means topics need not exist anymore. Additionally, no one can host a Kahoot 24/7, so it would have to be automated: this removes the need for premium subscriptions. We are now all one class. The free-for-all Question Pile class.