**UML diagram – first pass**

1. There are mainly three classes, for the most fundamental entities of Youtube
   1. *User*
   2. *Video*
   3. *Ad*
2. And there are Manager classes for adding elements to each of these classes, namely
   1. *UserManager*
   2. *VideoManager*
   3. *AdManager*

These hold a data structure of type *Hashtable<Integer, T>*

Here the Integer corresponds to an Integer id, and the data type, *T* could be any of *User/Video/Ad*

1. I am still looking for a use case for Inheritance. At the moment, what I have is a class called *Celebrity*, who is basically a *User* (and so inherits the attributes and methods from it), but has some special privileges such as the ability to update the bio of his/her personal homepage. Another feature is the ability to send private messages to other celebrities alone.

*Please suggest a use case for Inheritance, if anything comes to mind*

1. Wanted to use Enum somewhere, so I have three types of *Use*r, namely
   1. *DEFAULT – normal user*
   2. *RED – a User who has RED privilege when logged in, can skip ads*
   3. *CELEBRITY – discussed in 3 above. I anyways have a class above, for Celebrity, would like to discuss with you if this enum is really required in which case. If not required, then I would have only two values for this enum, in which case, I don’t even need an enum, I can just keep a Boolean redUserYesNo kinda flag.*
2. *class Circle* – I want user to have the ability to create groups/cicrles, such as a Friends circle, Colleague circle, Family Circle etc. and be able to share videos within their circle. Haven’t thought through in detail. Don’t think Youtube has this feature, not sure.
3. *class youtubeshell* –The driver class from where all of the commands are executed.

**TODO**

1. I would like to add more elements such as
   1. Inheritance
   2. Access modifiers – private, public, protected, after discussion. I’m not sure how these work, have never used it.
   3. Abstract class
   4. Interface
   5. We’ll discuss
2. I really like this website called <https://www.genmymodel.com/> that I used to create my UML model, after trying out several other sites. They have a $5 per month subscription. Thinking of taking it, since I plan to use it for the next few months, and would like to get better at UML diagrams. What do you think?

Let me know what you think of the design, and suggest edits as appropriate.