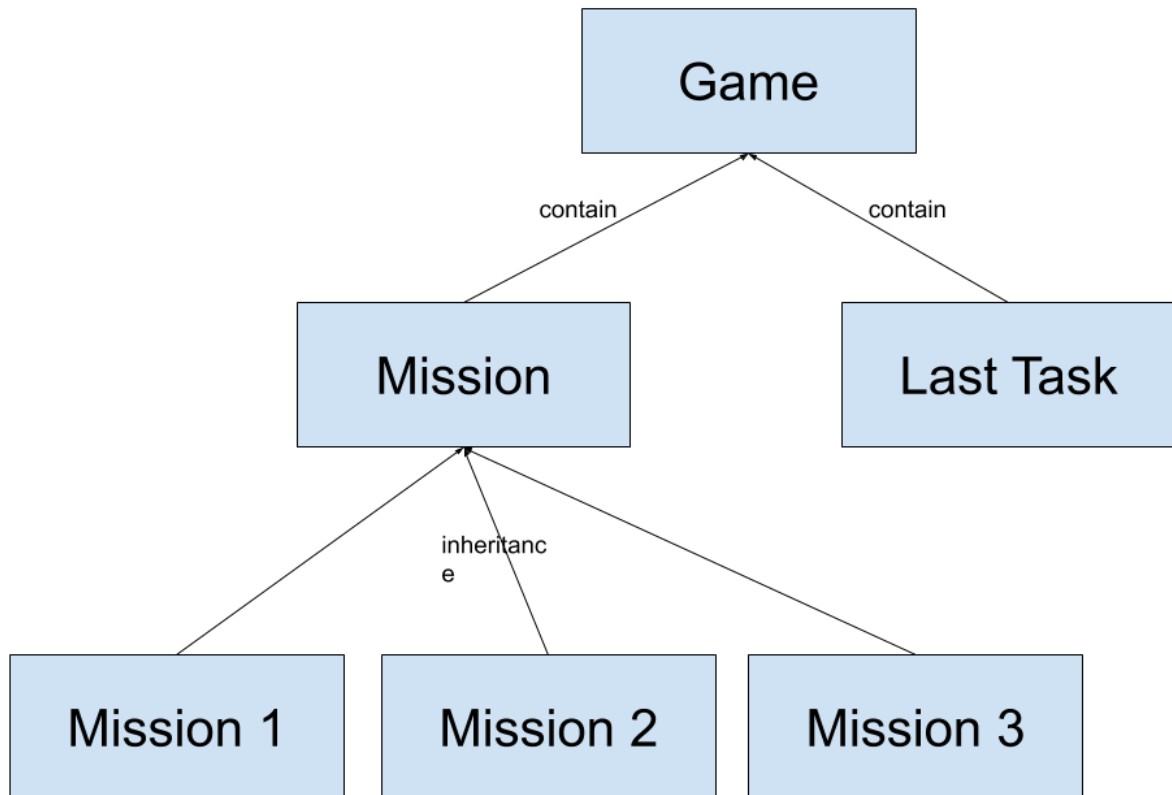# CaveAdventure

Student: Jaingshan Luo
BU ID: U89971259

Class Structure

Design

The classes that I defined are shown in the above section. The main idea of my design is to firstly create a Game class that contains all the game specific information (player, mission plugins). By doing that, I could easily change the game setting by plug in and out different data members.

And then, I created an abstract class Mission as the base class of all the three tasks/adventures because those tasks are similar to each other and own the same methods that they need. In Mission class, I defined several methods like setters and getters of the indicator of whether a task is passed, contains the second treasure, and an abstract method called "question", which is

overridden by all three tasks. For the subclasses, they only override the question method and put the unique questions/task descriptions there.

Finally, I defined a Last Task class since it's quite different to the other three missions. And the methods it has is to gather and generate words combinations.

In general, I tried to make the objects as generic as it could so that it would be easy to make adjustments (e.g. modify the game rules). And the details refer to my comments inside each code file.