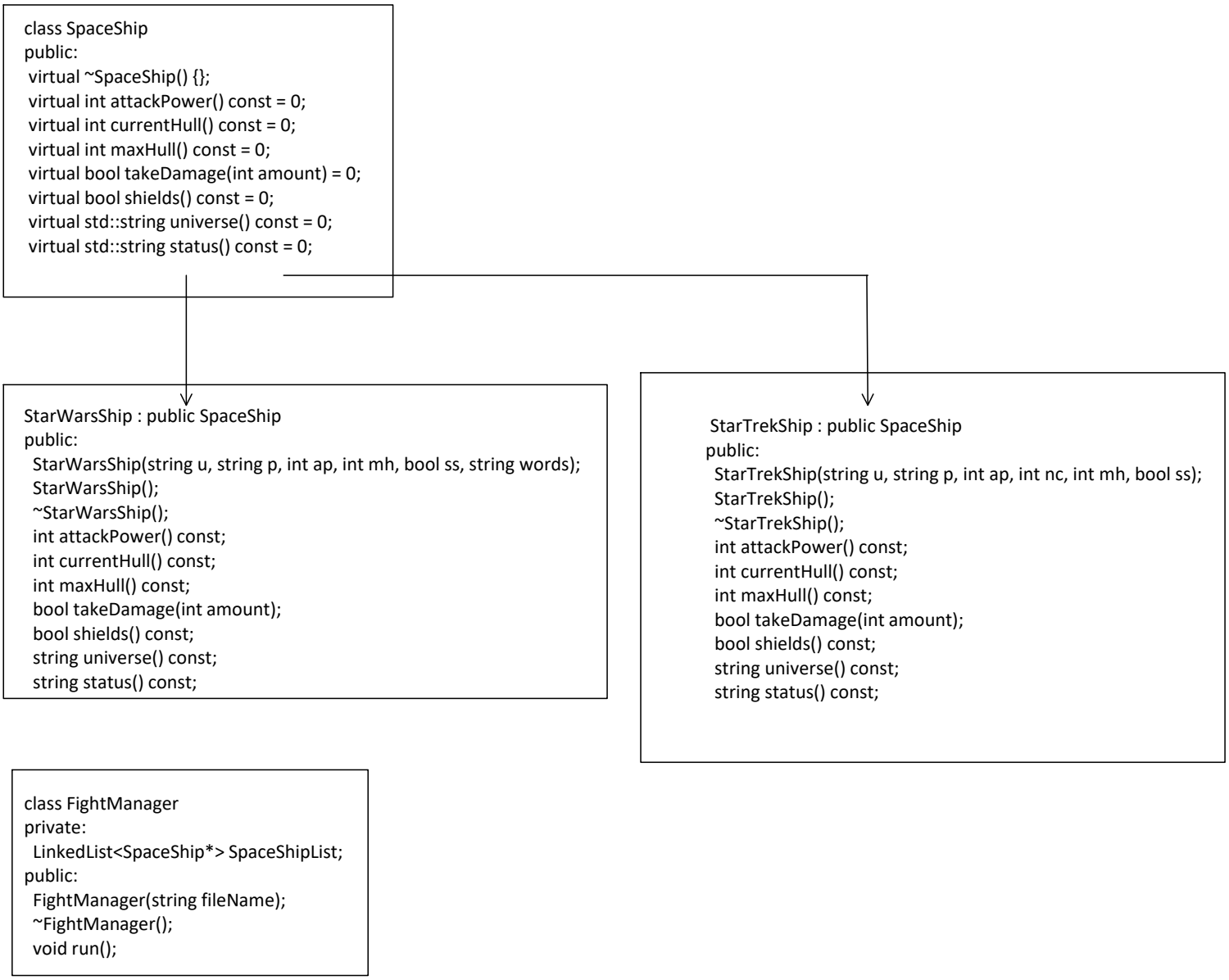
Tuesday, February 21, 2017 8:18 PM

1. Make a class diagram that shows the class hierarchy (or multiple hierarchies?) of the classes you need to define and list the methods that will belong to each class.
   - For each methods list the name, return type, and any parameter types,



2. What member variables do the Star Wars and Star Trek classes have that are implied by the interface?

   For this lab I simply made the SpaceShip abstract class an interface, meaning it had all virtual functions (most pure virtual) and no member variables. So, technically, none of the member variables are implied by my SpaceShip classs. One could make an abstract class with protected member variables that each derived class (type of ship) would have, i.e., universe, attack power, maximum Hull, and shield status. However I preferred to simply make the SpaceShip class an interface in the pure sense and leave the member variables for the derived classes to define.

3. What member variables do the Star Wars and Star Trek classes have that are not implied by the interface?

   Similarly to the previous question, I recognize that had I made the variables common to both types of ships part of the SpaceShip abstract class, then for this answer I would have the unique member variables listed- (Trek): captain, crew number; (StarWars): pilot, lastWords. Since I included no member variables in the SpaceShip interface, none of their member variables were implied by the interface. Hence, I declared all the member

variables for each type of ship in the respective header file for StarWars or StarTrec.