HW2: design a class.

Design (with UML diagram) and define (in code) your own class (e.g., Gadget, Superhero, Soldier, Villain, Dragon, Sports Player, Car, Pet, Baby).

Your class should have

1. several member variables,
2. member functions simulating various actions/behaviors,
3. accessor and mutator methods for each member variable,
4. default constructor,
5. constructor with parameters,
6. copy constructor (defined explicitly),
7. destructor (defined explicitly).

Split your program into header file (containing class definition), implementation file (containing initialization of static variables and implementation of member functions), and application file (containing main).

In main create several of the class (via each of the constructors) and call member functions on them.

Have your program count and output the total number of existing objects (after an object is created or destroyed).

Submit UML diagram, code, output to screen.