## **Class Interface for Login Servlet**

```
/* Outline for LoginServlet Class */
/*
This class handles the logging in for users.
It provides the ability to check the provided password and
username combinations against the database. Also allows perfomance
of POST and GET HTTP request methods.
package [package name]
import [whatever]
public class LoginServlet {
     protected void doPost(){
     }
     protected void doGet(){
     public boolean check(String name, String password) {
     /* Takes name and password from form as parameters */
     /* Compares against database */
     /*
     Returns true if match, false if either String doesn't match
     */
     }
}
```

# **Class Interface for RegisterServlet**

```
/* Outline for RegisterServlet Class */
/*
This class handles the registration of new users.
It provides the ability to check if the provided username exists
in the database. Also allows perfomance of POST and GET HTTP
request methods.
*/
package [package name]
import [whatever]
public class RegisterServlet {
     protected void doPost(){
     }
     public boolean checkIfAlreadyExists(String email) {
     /* Takes email provided by user as parameter */
     /* Compares against database */
     /*
     Returns true if match, false if String not found in databse
     */
}
```

#### Class Inteface for FriendsServlet

```
/* Outline for FriendsServlet Class */
/*
This class handles all the functionality to do with managing the
player's friends list.
It provides the ability to send, accept and decline friend
requests. Additionally, it allows the user to pull up their list
of friends or the list of a friends monsters. Thirdly, allows the
deletion of friends. Also allows perfomance of POST and GET HTTP
request methods.
* /
package [package name]
import [whatever]
public class FriendsServlet {
     protected void doPost(){
     protected void doGet() {
     public void sendFriendRequest(int friendID) {
     /* Takes friendID (int) as a parameter */
     /* Searches database for selected friend ID */
     /* Sends request */
     public void acceptFriendRequest(Friend friend) {
     /* Takes specified person from list of requests */
     /* Adds to database of friends */
     public void declineFriendRequest(Friend friend) {
     /* Takes specified person from list of requests */
     /* Removes from list */
     public List<Person> getFriendList() {
     /* Retrieves list of friends from database
     }
```

```
public List<Monster> getFriendMonsterList(Person friend) {
    /* Searches database for friend specified in parameter */
    /* Pulls friend's list of monsters from database */
    /* Returns List<Monster> of friend */
  }
  public void deleteFriend(int friendID) {
    /* Takes friendID parameter and searches database */
    /* Upon finding it, removes user from Friend list */
  }
  public boolean checkIfExists(int friendID) {
    /* Takes parameter friendID as query for database */
    /* Searches for friend in the db */
    /* If found, return true, else return false */
  }
}
```

## **Class Interface for MyMonsterServlet**

```
/* Outline for MyMonsterServlet Class */
/*
This class handles some of the basic functions to do with the
player's monsters.
It provides the ability to breed monsters, as well as check their
status and stats. Also allows perfomance of POST and GET HTTP
request methods.
* /
package [package name]
import [whatever]
public class MyMonsterServlet {
     protected void doPost(){
     protected void doGet(){
     public Monster breed(Monster monster) {
     public Monster checkMonsterStatus(Monster monster) {
     /* Takes parameter monster and accesses database */
     /* Returns monster and its stats (health, strength, etc */
}
```

#### Class Interface for MarketPlaceServlet

```
/* Outline for MarketPlaceServlet Class */
/*
This class handles the various processes of the online marketplace
for trading monsters, etc.
It provides the ability to buy, sell and list monsters. Also
allows perfomance of POST and GET HTTP request methods.
package [package name]
import [whatever]
public class MarketPlaceServlet {
     protected void doPost(){
     }
     protected void doGet() {
     public void sellMonster(Monster myMonster, int money) {
     /* Takes monster and amount of money (price) from params */
     /* Removes monster from player list and adds it to friend's */
     /* Decreases friend's money and increases player money */
     public void buyMonster(Monster monster, int money) {
     /* Takes monster and amount of money (price) from params */
     /* Adds monster to player list and removes it from friend's */
     /* Increases friend's money and decreases player money */
     public void buyMonsterToBreed(Monster monster, int money) {
     public List<Monster> getMonsterList() {
     /* Returns list of Monsters */
}
```

## **Class Interface for MonsterFightServlet**

```
/* Outline for MonsterFightServlet Class */
/*
This class handles the functionality of the monster fights.
It provides the ability to accept, decline and send fight requests
to users on the player's friends' list. Additionally, manages the
actual fights between users' monsters. Also allows perfomance of
POST and GET HTTP request methods.
* /
package [package name]
import [whatever]
public class MonsterFightServlet {
     protected void doPost() {
     protected void doGet() {
     public void sendFightRequest(Person friend) {
     /*
     Takes friend parameter and sends fight request to that person
     * /
     public void acceptFight(Person friend) {
     /* accepts fight from friend parameter */
     public void declineFight(Person friend) {
     /* declines fight from friend parameter */
     public void fight(int myMonsterID, int friendMonsterID) {
     /*
     Begin fight between monsters, pulling stats from database by
     using monsterID
     * /
     public List<Monster> getMonsterList(Person friend) {
     /* Retrieves list of monsters owned by friend */
     }
```

### **Class Interface for PersonDOA**

```
package [package name]
import [whatever]
public class PersonDOA {
    private EntityManagerFactory emf;
    private EntityManager em;

    public void persist(Person person) {
    }
    public boolean checkEmail(String email) {
    }
    public Person getPersonByEmail(String email) {
    }
    public List<Person> getAllPeople() {
    }
}
```

## **Class Interface for MonsterDOA**

```
package [package name]
import [whatever]
public class MonsterDOA {
    private EntityManagerFactory emf;
    private EntityManager em;

    public void persist(Monster monster) {
    }
    public List<Person> getAllMonsters() {
    }
    public Monster remove(Monster monster) {
    }
}
```