

```
ArenalInterface.h

ArenalInterface( )
virtual ~ArenalInterface( )
virtual bool addFighter( string info ) = 0;
virtual bool removeFighter( string name ) = 0;
virtual FighterInterface* getFighter(string name) = 0;
virtual int getSize() = 0;
```



```
Arena.h

vector<Fighter*> fighters;

virtual bool addFighter( string info );
virtual bool removeFighter( string name );
virtual FighterInterface* getFighter(string name);
virtual int getSize();
```

```
FighterInterface.h

FighterInterface(){}
virtual ~FighterInterface(){}
virtual string getName() = 0;
virtual int getMaximumHP() = 0;
virtual int getCurrentHP() = 0;
virtual int getStrength() = 0;
virtual int getSpeed() = 0;
virtual int getMagic() = 0;
virtual int getDamage() = 0;
virtual void takeDamage(int damage) = 0;
virtual void reset() = 0;
virtual void regenerate() = 0;
virtual bool useAbility() = 0;
```



```
Fighter.h

string name;
int current_hp;
int max_hp;
int strength;
int speed;
int magic;

virtual string getName();
virtual int getMaximumHP();
virtual int getCurrentHP();
virtual int getStrength();
virtual int getSpeed();
virtual int getMagic();
virtual int getDamage();
virtual void takeDamage(int damage);
virtual void reset();
virtual void regenerate();
virtual bool useAbility();
void setCurrentHP(int hp);
void setSpeed(int speed);
void increaseSpeed(int i);
```

```
Factory.h

static ArenalInterface* createArena();
```



```
Robot.h

int max_energy;
int current_energy;
int bonus_damage;

int getCurrentEnergy();
int getMaxEnergy();
virtual int getDamage();
virtual void reset();
virtual bool useAbility();
```



```
Cleric.h

int max_mana;
int current_mana;

int getMaxMana();
int getCurrentMana();
virtual int getDamage();
virtual void reset();
virtual void regenerate();
virtual bool useAbility();
```



```
Archer.h

int original_speed;

int getCurrentSpeed();
virtual int getDamage();
virtual void reset();
virtual bool useAbility();
```