

```
#include <iostream>
#include <random>
#include <string>
#include <vector>

#include "weapons.hpp"
#include "helpers.hpp"

using namespace std;

#pragma once

/*
 * @brief: parent class for all fighters
 */
struct BaseFighter {
    string name;
    Weapon *weapon;
    int hp = rand() % 5 + 3;
    int maxHP = hp;
    double regen = (rand() % 60 + 15) / 100;

    BaseFighter() {
        name = "None";
        weapon = new Weapon;
    }

    int attack(){
        return weapon->use();
    }
    /*
     * @brief: returns damage taken during attack
     */
    void damage(int d){
        hp -= d;
    }
    /*
     * @brief: checks if character is alive
     */
    bool alive(){
        return hp > 0;
    }
    /*
     * @brief: heals character is not dead
     */
    void heal(){
        if (hp < maxHP){
            hp += regen;
        }
    }

    // friend ostream& operator<<(ostream& os, const BaseFighter& f) {
```

```
//      return os << "[" << f.name << " , " << *f.weapon << "];  
// }  
  
};  
/*  
*@brief: fighter "Warrior"  
*@method: Warrior() creates warrior fighter  
*/  
struct Warrior : public BaseFighter{  
    Warrior(){  
        name = "Warrior";  
        Sword* sword = new Sword();  
        weapon = sword;  
    }  
};  
/*  
*@brief: fighter "Wizzard"  
*@method: Wizzard() creates Wizzard fighter  
*/  
struct Wizard : public BaseFighter{  
    Wizard(){  
        name = "Wizard";  
        Spell* spell = new Spell();  
        weapon = spell;  
    }  
};  
/*  
*@brief: fighter "Archer"  
*@method: Archer() creates archer fighter  
*/  
struct Archer : public BaseFighter{  
    Archer(){  
        name = "Archer";  
        Bow* bow = new Bow();  
        weapon = bow;  
    }  
};  
/*  
*@brief: fighter "Elf"  
*@method: Elf() creates Elf fighter  
*/  
struct Elf : public BaseFighter{  
    Elf(){  
        name = "Elf";  
        M_Weapon* mWeapon = new M_Weapon();  
        weapon = mWeapon;  
    }  
};  
/*  
*@brief: fighter "DragonBorn"  
*@method: DragonBorn() creates DragonBorn fighter  
*/  
struct DragonBorn : public BaseFighter{  
    DragonBorn(){
```

```
    name = "Dragon Born";  
    F_Weapon* fWeapon = new F_Weapon();  
    weapon = fWeapon;  
}  
};
```