

ΠΡΟΣΧΕΔΙΟ ΣΧΕΔΙΑΣΗΣ ΤΟΥ ΛΟΓΙΣΜΙΚΟΥ

- **ΚΛΑΣΕΙΣ ΠΟΥ ΘΑ ΧΡΗΣΙΜΟΠΟΙΗΘΟΥΝ:**

1. Map
2. Creature
3. Object
4. Avatar :public Creature
5. Werewolf :public Creature
6. Vampire :public Creature
7. Tree :public Object
8. Water :public Object
9. Potion :public Object

- **STRUCTS ΠΟΥ ΘΑ ΧΡΗΣΙΜΟΠΟΙΗΘΟΥΝ:**

1. state
2. surroundings
3. state_info
4. point

- **ΤΑ ΜΕΛΗ ΚΑΘΕ ΚΛΑΣΗΣ:**

```
Map {  
    private: int length, int width, bool night  
    public: Map(constructor) , ~Map(destructor)  
            void set_time(bool)  
            int get_length()const  
            int get_width()const  
            bool get_time()const  
}  
Creature{  
    protected: Point position, S surround  
    public: virtual void movement(State state, int first)  
            void set_position(Point position)  
            Point get_position()const  
            void set_surround(S sur)  
            S get_surround()const  
}  
Object{  
    protected: Point position  
    public: void set_position(Point position)  
            Point get_position()const }  
}
```

```

Avatar: public Creature{           ( + τα μέλη με του Creature)
private: int potions
public: void movement(State state, char character)
        void set_potions(int potions)
        int get_potions()const
        void help_team(State state)
}
Werewolf: public Creature {       ( + τα μέλη με του Creature)
private: int health, int strength, int defence, int medkit
public: void attack(Vampire*)
        void help(Werewolf*)
        void set_health(int health)
        void set_strength(int strength)
        void set_defence(int defence)
        void set_medkit(int medkit)
        int get_health()const
        int get_strength()const
        int get_defence()const
        int get_medkit()const
}
class Vampire :public Creature {   ( + τα μέλη με του Creature)
private: int health, int strength, int defence, int medkit
public: void attack(Werewolf*)
        void help(Vampire*)
        void set_health(int health)
        void set_strength(int strength)
        void set_defence(int defence)
        void set_medkit(int medkit)
        int get_health()const
        int get_strength()const
        int get_defence()const
        int get_medkit()const
        void movement(State state, int first)
}
Tree :public Object {} ( ίδια μέλη με το Object)
Water :public Object {} ( ίδια μέλη με το Object)
Potion :public Object {} ( ίδια μέλη με το Object)

```

- **ΚΑΘΟΛΙΚΕΣ ΣΥΝΑΡΤΗΣΕΙΣ:**

1. State state_create(Map* map)
2. void state_update(State state)
3. void board(int x, int y, State state)
4. void menu(State state)
5. void deallocation(State state)

- **ΣΤΑΤΙΚΕΣ-ΒΟΗΘΗΤΙΚΕΣ ΣΥΝΑΡΤΗΣΕΙΣ:**

1. static void check(State state, Creature* c)
2. static void reload(State state, Creature* cr)
3. static void move(Creature* cr, State state,int i)
4. static Werewolf* create_w(State state, int x, int y)
5. static Vampire* create_v(State state, int x, int y)
6. static Avatar* create_avatar(State state, int x, int y)
7. static Tree* create_tree(State state, int x, int y)
8. static Water* create_water(State state, int x, int y)
9. static Potion* create_potion(State state, int x, int y)
10. static void add(State state, int x, int y)