The data structure used in assignment 3: Roads are Coming is a weighted undirected graph, it is implemented in C++ as following,

Std::unorder_map<TownID, TownData*>,

where TownData is

```
struct TownData{
        TownID id;
        std::string name;
        Coord xy;
        Dist d;
        int tax;
        std::vector<TownData*> vassals;
        TownData* master;
        std::vector<TownData*> routes;
        int visited;
        TownData* rFrom;
}
```

the std::vector<TownData*> routes stores all the pointers of towns where the current town could go. int visited is a flag used in the searching algorithm to check whether this town has been visited before. and TownData* rFrom is used for tracking from which town we currently get to this town.

The reason for choosing this specific data structure is, that the complexity of using a key to find a value is constant in time. And in this program, most of methods need to find the townData based on the given townID. By using the unorder_map, the performance of the whole program will improve.