

Request/Response

Request pattern:

```
{  
    request: String;  
    data: JSON Object;  
}
```

Response pattern:

```
{  
    response: String;  
    code: Int;  
    data: JSON Object;  
}
```

// we have no intention to make requests from server, right?

- Right.

The list of requests/response:

// Action: Log in the User

```
{  
    request: "login",  
    data: {  
        name: ~UserName~,           -> String  
        pasword: ~Password~         -> String  
    }  
}  
  
{  
    response: "login",  
    code: ~ResponseCode~,  
    data: {  
        error: ~ErrorMessage~       -> String  
    }  
}
```

```
}  
}
```

// Action: Add the last created route to the database

```
{  
    request: "addRoute",  
    data: {  
        info: {                                -> JSON object  
            origin: {                          -> JSON object  
                placeID: ~GoogleMapsPlaceID~ -> String  
                name: ~CityName~              -> String  
            },  
            destination: {                    -> JSON object  
                placeID: ~GoogleMapsPlaceID~, -> String  
                name: ~CityName~              -> String  
            },  
            length: ~RouteMilage~             -> Double  
        },  
        hash: ~GoogleMapsHash~,               -> String  
        stops: [{                             -> JSON array  
            placeID: ~GoogleMapsPlaceID~,     -> String  
            name: ~CityName~                  -> String  
        }]  
    }  
}  
{  
    response: "addRoute",  
    code: ~ResponseCode~,  
    data: {  
        id: ~RouteID~                         -> Int  
    }  
}
```

// Action: Get a brief list of routes information

```

{
    request:"getRouteList",
    data: { <empty> } // for now          -> JSON object
}
{
    response:"getRouteList",
    code: ~ResponseCode~,
    data: {                                -> JSON object
        routesList: [{                   -> JSON array
            origin: ~CityName~,           -> String
            destination: ~CityName~,      -> String
            length: ~Kilometers~          -> Double
        }]
    }
}

```

// Action: Get a complete information of a route from the database

```

{
    request: "getRoute",
    data: {
        id: ~RouteID~                    -> Int
    }
}
{
    response: "getRoute",
    code: ~ResponseCode~
    data: {
        hash: ~GoogleMapsHash~,          -> String
        stops: [{                         -> JSON array
            placeID: ~GoogleMapPlaceID~,  -> String
            name: ~CityName~ // optional? -> String
        }]
    }
}

```

Glossary

Data structures:

Credentials {

 name:String;

 password:String;

}

Route {

 id:Int;

 info:RouteInfo;

 googleMapsHash:String;

 stops:City[];

 path:Path; // * _ *

}

RouteInfo {

 origin:City;

 destination:City;

 length:Double;

}

City {

 placeID:String;

 name:String;

 population:Int;

}

Path { // * _ *

 roads:Road[];

}

Road { // * _ *

 id:String;

 name:String; // M05 (Kiev-Odessa), M06 (Kiev-Lviv) etc.

```
    statistics:RoadStatistics; // quality, traffic etc.  
    ???  
}
```

****Add your argued propositions here.****