# Web GIS lab – TO DO

See the steps “Web GIS lab.docx” file that describes. That will build a typical three-layer web gis applications. These starting poing is quite oversimplified, and there are plenty of thing to do to complete, extend, improve.

1. The client is just the default OpenLayer map interface that comes with MapServer. It works fine, showing the map that is define in the mapfile, but you may want to improve the GUI by adding more buttons = functions.
2. Attached here you find a sample Leaflet GUI with some nice background raster maps. It would be nice to add a layer in this Leaftlet project, that connects to MapServer and consumes the point layer that sits in PostGIS.
3. You may experiment with more client application frameworks.
4. Alternative, you may try to add the background raster - which you can see in the LeafLet sample from n.2 – to the OpenLayers GUI that I mentioned in n. 1.
5. It looks like PostgreSQL/PostGIS is used with a GeoServer mapping engine instead of a MapServer mapping engine. Try to replace the mapping engine.
6. Alternatively, you may switch from PostgreSQL/PostGIS to MySQL by keeping MapServer as a mapping engine.
7. With reference to n. 1, 2, 3: instead of connecting the client to MapServer directly via CGI, you may try to define a WMS service in MapServer, and then consume the service in the client. There is some overhead but this is a OGC standard approach, very flexible.