This is a modified version of the original Geocoeditor (both the client and the server). No changes in the core algorithms have been made. The implementation was made for the purpose of conducting the experiments described in this FOSS4G 2025 paper.

There are changes in the GUI and a trivial room management has been added (reasonably well tested). Majority of the RELEVANT changes relate to performance tweaking, primarily to make the *range index* hit as often as possible. Furthermore, the client can now delay redrawing upon receiving remote operations when OL is in “modify” state. In situations with high vertex count geometries coupled with high influx of remote operations (i.e. many active clients) redrawing immediately makes OL view manipulation from laggy to virtually impossible (depending on the vertex count of the geometry being modified).

Furthermore, and solely for the purpose of performing the experiments described in the paper, automatic operation generation has been introduced to the client. The initial version was fully client controlled (code remnants still present), but due to all modern browsers’ JS timers throttling, the operation generation initiation had to be transferred to the server. Most of the code for running automatic clients was generated by ChatGPT.

In short, automatic client functionality works as follows. Each automatic client can (in fact is must) belong to a group. Groups are made by simply giving each client that one wants in a group, identical name (we used the names 1, 2, 3 and 4). Any number of automatic clients can be in a group. Automatic clients are started by the server, following the provided group start schedule. A group start schedule is generated by clicking the appropriate button on the controller client and entering the order that the groups are to be started (comma separated list of group names). This is sent to the server which then controls the groups. Repeating the same group name twice in the schedule makes the scheduler wait for another interval (currently hardcoded to be 60 seconds). All groups are stopped simultaneously by clicking the designated button on the controller client. For reference, in the specific case of our FOSS4G paper the schedule was 1,1,2,3,4.