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Abstract

We have constructed China population and social economic information system based on open source geographic Web framework GeoDjango. By comparing different WebGIS system structures, implementation patterns, spatial database management patterns and mainstream popular open source APIs, open source WebGIS framework GeoDjango, MVT pattern, Python and MySQL database, client-side browser framework openLayer were implemented. The database system utilized a Top-Down design method — DATAID-D to establish distributed database, and construct a uniform encoding standard, through normalized processes of the statistic yearbook, we constructed population and social economic database. This system has basic functions of web information publishing, spatial data storage, distributed management and spatial query. Additionally, the system is able to meet multi-user access issues, and have functions of population and economy data visualization, thematic mapping, query and statistics, charting and output, et.al.

Keywords : Population and social economy;GeoDjango;WebGIS