ABSTRACT

Online geospatial data are evident in many websites, covering a variety of interests such as route planning, incident locations, and outdoor recreation searches. One type of geospatial website is the online real estate search. Many realty websites allow prospective residential property buyers to sort listed properties interactively based on desired elements. These elements typically address features wanted within a home, such as the dwelling's size, number of bedrooms and bathrooms, whether a garage or swimming pool is included, and other furnishings. Equally important in considering the ideal home is to find the ideal location. Length of the commute time, crime frequency, proximity to cultural and retail options, and the location of desired schools can provide for an overall "neighborliness" that is vital to ensure a comfortable life in the new home at the new location. While some websites are beginning to address this concern by including small overlays within a property's webpage, none overtly considers that the home buying process may not start with the selection of home features, but by first determining the "best-fit" neighborhood. The web application created for this thesis is unique in its premise to first introduce potential homebuyers to neighborhoods. Prospective homebuyers may select from several neighborhood factors to find locations that satisfy their search parameters. An overlay of available properties is then displayed for the web application user to show what offerings are available in those resulting areas.