

Universiti Teknologi MARA

**RESIDENCE IN KLANG VALLEY
RECOMMENDATION SYSTEM USING
COLLABORATIVE FILTERING**

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ABSTRACT

The Klang Valley region provides a diverse range of living and employment options, resulting in an increasing demand for residential accommodation. However, due to the immense scope of the area, it is difficult for home buyers to analyze all available residence options. The Residence in Klang Valley Recommendation System Using Collaborative Filtering project addresses the difficulties individuals face when looking for suitable residential properties in Malaysia's developing Klang Valley region. By assessing the similarity between individuals or things based on their rating data, collaborative filtering has shown great accuracy in recommender systems. Collaborative filtering identifies user trends and similarities by assessing user preferences, historical data, and property information, and then provides customized residence options that fit with individual tastes and requirements. This system aims to simplify the property search process, improve the overall user experience, and help individuals in discovering residential homes that meet their needs across the Klang Valley's different districts. The project will be separated into five phases to ensure the project will be done smoothly which are preliminary study, design, system development, evaluation, and documentation. The system architecture, flowchart, and GUI prototype will be useful references during the development phase. The system's accuracy is assessed through evaluation. The algorithm's recommendation accuracy is evaluated using Mean Absolute Error (MAE) and Root Mean Square Error (RMSE), assuring accurate choices for users. Finally, the "Residence in Klang Valley Recommendation System Using Collaborative Filtering" intends to provide a helpful tool for home seekers while also contributing to the progress of the real estate domain in the Klang Valley region.

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