

ABSTRACT

Application of Recommendations for Mobile Web-based House with Analytical Hierarchy Process (AHP) and First Come First Served (FCFS) Method.

Boarding houses are a temporary housing solution commonly used by individuals who require short-term accommodation. However, finding a boarding house that meets specific criteria is often challenging, especially for individuals coming from out of town. In this context, the search process that relies on information from friends or directly visiting boarding house locations is often inefficient and may lead to uncertainty in selecting the right place to stay. Therefore, this study aims to develop a prototype of a boarding house recommendation website based on the Analytic Hierarchy Process (AHP) and First Come First Serve methods, which can facilitate the search for boarding houses according to the needs of potential tenants. AHP is used to determine preferences based on four main criteria: price, facilities, distance, and comfort. Meanwhile, First Come First Serve is applied to manage booking queues based on the order of arrival. The results of this study indicate that using the Analytical Hierarchy Process can recommend boarding houses according to the specified criteria, and First Come First Serve can manage the booking queue in the system based on the order of arrival.

Keywords: *Boarding House, AHP, FCFS, Website*