

INTISARI

RANCANG BANGUN SISTEM INFORMASI RUMAH KOS BERBASIS WEB DENGAN FITUR *PERSONALIZED* *RECOMMENDATION* DI YOGYAKARTA

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Pemanfaatan teknologi dalam bidang bisnis dapat dimanfaatkan dalam layanan rumah kos di Yogyakarta. Yogyakarta merupakan kota pelajar di Indonesia dengan banyak kampus seperti Universitas Gadjah Mada, Universitas Negeri Yogyakarta, Universitas Muhammadiyah Yogyakarta, Universitas Atma Jaya Yogyakarta, dan lainnya. Fenomena ini menjadi salah satu penyebab banyaknya perantau datang dan melanjutkan pendidikan di Yogyakarta, sehingga menyebabkan banyak mahasiswa yang membutuhkan rumah kos. Namun, terdapat kendala yang dihadapi mahasiswa dalam mencari kos-kosan di Yogyakarta, seperti minimnya informasi mengenai fasilitas kos yang komprehensif dan sulitnya menentukan harga yang sesuai. Kendala-kendala ini dapat menyita banyak waktu. Dari permasalahan tersebut, diperlukan sistem yang dapat memudahkan mahasiswa dalam menemukan rumah kos berdasarkan preferensi mahasiswa. Pada penelitian ini terdapat penambahan fitur, yaitu *personalized recommendation system* dengan *SQL filtering*, perhitungan jarak otomatis dari tempat kos ke kampus menggunakan metode *Spherical Law of Cosines*, dan fitur *chatting*. Metode penelitian melibatkan pengumpulan data serta pengembangan sistem dengan pendekatan waterfall yang mencakup tahapan analisis kebutuhan, perancangan, pengembangan, dan pengujian, termasuk pengujian *black box* dan *UAT*. Sistem ini berdampak positif bagi mahasiswa di Yogyakarta dengan menyediakan fitur rekomendasi kos yang sesuai dengan preferensi mahasiswa, perhitungan *spherical law of cosines* untuk memilih lokasi kos yang terdekat dengan kampus, serta fitur *chatting* untuk memfasilitasi interaksi antara mahasiswa dan pemilik kos dalam memilih tempat kos.

Kata Kunci: Sistem Informasi, Rumah Kos, Website, *Personalized Recommendation System*, *SQL Filtering*, *Spherical Law of Cosines*

ABSTRACT

DEVELOPMENT OF A WEB-BASED BOARDING HOUSE INFORMATION SYSTEM WITH PERSONALIZED RECOMMENDATION FEATURE IN YOGYAKARTA

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The utilization of technology in the business sector can be utilized in boarding house services in Yogyakarta. Yogyakarta is a student city in Indonesia with many campuses such as Gadjah Mada University, Yogyakarta State University, Muhammadiyah University of Yogyakarta, Atma Jaya University Yogyakarta, and others. This phenomenon is one of the reasons why many migrants come and continue their education in Yogyakarta, causing many students to need boarding houses. However, there are obstacles faced by students in finding boarding houses in Yogyakarta, such as the lack of information about comprehensive boarding facilities and the difficulty in determining the appropriate price. These constraints can take up a lot of time. From these problems, a system is needed that can facilitate students in finding boarding houses based on student preferences. In this research, there are additional features, namely a personalized recommendation system with SQL filtering, automatic distance calculation from boarding houses to campus using the Spherical Law of Cosines method, and chat features. The research method involves data collection and system development with a waterfall approach that includes the stages of needs analysis, design, development, and testing, including black box and UAT testing. This system has a positive impact on students in Yogyakarta by providing a boarding house recommendation feature that matches student preferences, Spherical Law of Cosines calculation to select the closest boarding house location to campus, and a chat feature to facilitate interaction between students and boarding house owners in choosing a boarding place.

Keywords: *Information Systems, Boarding Houses, Websites, Personalized Recommendation Systems, SQL Filtering, Spherical Law of Cosines*