

LAPORAN TUGAS AKHIR

PENDEKATAN HUMAN-CENTERED DESIGN UNTUK PENGEMBANGAN DAN PENGUJIAN UI/UX APLIKASI VIRTUAL KOST DENGAN FITUR REKOMENDASI BERBASIS LOKASI DAN KEBUTUHAN PENGGUNA



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**PROGRAM STUDI SISTEM INFORMASI
FAKULTAS ILMU KOMPUTER
UNIVERSITAS NAROTAMA**

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SURAT PENYATAAN

Dengan ini saya menyatakan bahwa dalam Laporan Tugas Akhir ini tidak terdapat karya yang pernah diajukan untuk memperoleh gelar kesarjanaan di suatu Perguruan Tinggi, dan sepanjang pengetahuan saya juga tidak terdapat Karya/Pendapat yang pernah ditulis oleh orang lain, kecuali yang secara tertulis diacu dalam naskah ini dan disebutkan dalam Daftar Acuan/Daftar Pustaka.

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ABSTRAK

Urbanisasi yang meningkat di Indonesia menciptakan kebutuhan tinggi akan hunian sementara seperti kos-kosan, namun proses pencarian masih menghadapi kendala ketidakefisienan informasi dan kurangnya personalisasi. Penelitian ini bertujuan mengembangkan UI/UX aplikasi Virtual Kost menggunakan pendekatan Human-Centered Design dengan fitur rekomendasi berbasis lokasi. Metode penelitian meliputi survei kepada 50 responden (25 pemilik kost dan 25 penyewa kost) di Surabaya pusat dan implementasi HCD melalui tiga tahapan: spesifikasi konteks pengguna, spesifikasi kebutuhan pengguna, dan perancangan solusi dari wireframe hingga prototype menggunakan Figma. Evaluasi menggunakan System Usability Scale (SUS) dan usability testing menghasilkan performa di atas standar industri dengan effectiveness 84%, learnability 74%, dan satisfaction 74.5%. Sistem rekomendasi berbasis lokasi berhasil diintegrasikan dengan filter intuitif dan peta interaktif GPS. Penelitian membuktikan bahwa pendekatan Human-Centered Design dapat menghasilkan solusi digital yang user-friendly dengan sistem rekomendasi personal.

Kata Kunci: Human-Centered Design; UI/UX; Virtual Kost; Sistem Rekomendasi; Usability Testing.

ABSTRACT

The increasing urbanization in Indonesia creates a high demand for temporary housing such as boarding houses, but the search process still faces obstacles of information inefficiency and lack of personalization. This research aims to develop UI/UX of Virtual Boarding House application using Human-Centered Design approach with location-based recommendation feature. The research method includes a survey to 50 respondents (25 boarding house owners and 25 boarding house tenants) in central Surabaya and implementation of HCD through three stages: user context specification, user requirement specification, and solution design from wireframe to prototype using Figma. Evaluation using System Usability Scale (SUS) and usability testing resulted in performance above industry standards with effectiveness 84%, learnability 74%, and satisfaction 74.5%. The location-based recommendation system was successfully integrated with intuitive filters and GPS interactive maps. The research proves that the Human-Centered Design approach can produce user-friendly digital solutions with a personalized recommendation system.

Keywords: Human-Centered Design; UI/UX; Virtual Boarding House; Recommendation System; Usability Testing

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