

PERANCANGAN *PROTOTYPE* SISTEM INFORMASI *DORMITORY OFFICE* DI SMK NEGERI BALI MANDARA

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ABSTRAK

Permasalahan administrasi perizinan di lingkungan asrama SMK Negeri Bali Mandara hingga kini masih dilakukan secara manual, sehingga prosesnya sering kali lambat, tidak praktis, dan berisiko mengalami keterlambatan maupun kehilangan data. Hal ini menjadi kendala bagi siswa, staf asrama, dan pihak pengelola dalam memastikan proses perizinan berjalan efisien dan transparan. Berdasarkan permasalahan tersebut, penelitian ini bertujuan untuk mengembangkan rancangan antarmuka sistem Informasi *Dormitory Office* yang mendukung digitalisasi proses perizinan di lingkungan asrama SMK Negeri Bali Mandara. Metode yang digunakan adalah *Design Thinking* dengan lima tahapan, yaitu *Empathize*, *Define*, *Ideate*, *Prototype*, dan *Testing*. Tahap *Empathize* dilakukan melalui observasi dan wawancara mendalam untuk menggali kebutuhan dan permasalahan nyata. Pada tahap *Define*, hasil temuan dianalisis menggunakan *Empathy Map*, *User Persona*, dan *Affinity Diagram* untuk merumuskan inti masalah serta kebutuhan prioritas pengguna. Tahap *Ideate* menghasilkan rancangan fitur utama yang diklasifikasikan menggunakan *Now-Wow-How Matrix*, kemudian dituangkan ke dalam kerangka *Information Architecture* (IA) dan *User Flow Diagram* (UFD). Hasil rancangan diwujudkan pada tahap *Prototype* dalam bentuk *Low-Fidelity* dan *High-Fidelity Prototype* dengan menerapkan prinsip *UI/UX*. Pengujian (*Testing*) dilakukan menggunakan metode *Think Aloud* yang melibatkan dua kelompok pengguna, yaitu siswa sebagai pengguna utama dan pengelola asrama sebagai pihak otorisasi. Hasil pengujian menunjukkan bahwa prototipe dapat digunakan dengan baik sesuai skenario tugas, mudah dipahami, serta mendapatkan umpan balik yang membangun untuk penyempurnaan detail antarmuka. Dengan demikian, prototipe *Dormitory Office* yang dikembangkan terbukti layak, praktis, dan mendukung digitalisasi proses perizinan siswa, sehingga diharapkan dapat meningkatkan efisiensi, transparansi, dan akuntabilitas pengelolaan administrasi di asrama SMK Negeri Bali Mandara.

Kata Kunci: *Design Thinking*, *Dormitory Office*, Sistem Informasi Perizinan, *User Interface*

**DESIGN OF A DORMITORY OFFICE INFORMATION SYSTEM
PROTOTYPE AT SMK NEGERI BALI MANDARA**

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ABSTRACT

The permit administration process in the dormitory environment of SMK Negeri Bali Mandara is still carried out manually, which often makes it slow, impractical, and prone to delays or data loss. This condition creates obstacles for students, dormitory staff, and management in ensuring that the permit process runs efficiently and transparently. Based on these problems, this study aims to develop an interface design for the Dormitory Office inFormation system to support the digitalization of the permit process within the dormitory environment of SMK Negeri Bali Mandara. The method used is Design Thinking, which consists of five stages: Empathize, Define, Ideate, Prototype, and Testing. The Empathize stage was carried out through observation and in-depth interviews to identify actual User needs and problems. In the Define stage, the findings were analyzed using an Empathy Map, User Persona, and Affinity Diagram to Formulate the core problems and priority User needs. The Ideate stage generated the main feature designs, which were classified using the Now-Wow-How Matrix and then outlined in the InFormation Architecture (IA) framework and User Flow Diagram (UFD). The design output was realized in the Prototype stage in the Form of Low-Fidelity and High-Fidelity Prototypes applying UI/UX principles. The Testing stage was conducted using the Think Aloud method involving two groups of Users: students as primary Users and dormitory managers as authorizing parties. The Testing results show that the Prototype can be used properly according to the task scenarios, is easy to understand, and received constructive feedback for refining interface details. Therefore, the developed Dormitory Office Prototype is proven to be feasible, practical, and supportive of the digital permit process for students, and is expected to improve the efficiency, transparency, and accountability of dormitory administration management at SMK Negeri Bali Mandara.

Keywords: *Design Thinking, Dormitory Office, Permit InFormation System, User Interface*