

ABSTRAK

Penelitian ini dilatarbelakangi oleh permasalahan perorangan dalam pembuatan sebuah denah. Aplikasi penggambaran denah yang telah ada bersifat mahal untuk perorangan. Adapun masalah pengaksesan aplikasi yang dibatasi oleh tempat. Aplikasi tersebut tidak bisa diakses dimanapun dan kapanpun. Dengan mengembangkan sebuah aplikasi penggambaran denah lantai ruangan berbasis *web*, dapat menanggulangi masalah tersebut. Penelitian ini menggunakan *usecase diagrams*, *activity diagrams*, dan *ERD* sebagai dasar model dalam desain program. Aplikasi dibuat dengan memanfaatkan bahasa pemrograman HTML5, JavaScript, Ajax, dan penyimpanan data MySQL. Fungsi utama dari aplikasi ini meliputi penggambaran bentuk dasar (garis, kotak, lingkaran, dan kurva), memodifikasi sebuah objek, mengelola proyek gambar, dan mengekspor gambar menjadi berkas berformat png. Semua objek yang telah dibuat pada aplikasi disimpan kedalam simpanan data menggunakan special data dan ditampilkan kepada pengguna dalam bentuk gambar yang bersifat *bitmap* menggunakan kanvas (fitur dari HTML5). Blackbox test digunakan untuk mengecek semua fungsi yang ada dalam aplikasi. Hasil dari test menunjukkan semua fungsi dari aplikasi sudah berjalan sesuai dengan desainnya. Aplikasi juga masih bisa dikembangkan untuk beberapa aspek tentang koneksi ke system *cloud* dan penambahan detail dalam informasi di sebuah objek.

Kata kunci: Ajax, denah, HTML5, JavaScript, website, kanvas, MySQL.



ABSTRACT

This research based on problems in making a floor plan. The existing floor plan software drawing is expensive for individuals. The other problem of a desktop-based software is place to access the software, which is limited by place. It can not access form anywhere and anyplace. By building a web-based floor-planning software, it can overcome these problem. This research uses usecase diagrams, activity diagrams, and ERD as a basis for modeling the software's design. The software is created by using HTML5 programming language, JavaScript, Ajax, and MySQL data storage. The main functionality of the software are drawing a basic shape (line, square, circle, and curve), modifying an object, manage the drawing project, and exporting drawing to png file. All object, which created on the software, are stored in database using spatial data and show to the user in bitmap image by using canvas (a feature from HTML 5). Blackbox testing method is used to check all functionality of the software. The testing result show all of the software's functionality already run as same as the design. The software still can be enhanced for certain aspect to improve the connection with the cloud system and more detail information of the object.

Keywords : Ajax, floor plan, HTML5, JavaScript, website, canvas, MySQL.



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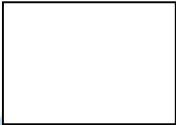
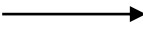


DAFTAR SINGKATAN

ERD	Entity Relationship Diagram
MMJar	Multi Media Jaringan
RPL	Rekayasa Perangkat Lunak
SI	Sistem Informasi
UML	Unified Modelling Language
WEB	World Wide Web



DAFTAR NOTASI/LAMBANG

Jenis	Notasi/ Lambang	Nama	Arti
<i>Use Case Diagram</i>		<i>Actor</i>	Orang/sistem yang berkaitan dan berinteraksi dengan program
		<i>Association line</i>	Fungsi yang hanya menggambarkan keterlibatan <i>actor</i> dengan <i>use case</i>
		<i>System Boundary</i>	Batas gambaran antara sistem dan <i>actor</i>
<i>Activity Diagram</i>		<i>Initial State</i>	Kondisi awal sebuah objek sebelum ada perubahan keadaan
		<i>Final State</i>	Kondisi akhir ketika objek berhenti memberikan respon
		<i>State</i>	Kondisi sebuah entitas
		<i>Transition</i>	Perubahan kondisi suatu objek yang disebabkan oleh suatu event
		<i>Decision</i>	Kondisi percabangan yang diharuskan memilih satu kondisi

Referensi:

Notasi / Lambang *Use Case Diagram* dari *UML Distilled*. [1]

Notasi / Lambang *Activity Diagram* dari *Object-Oriented Software Engineering: Practical Software Development using UML and Java*. [2]