

ABSTRAK

Kemajuan di bidang teknologi informasi semakin hari semakin meningkat seiring berkembangnya permintaan akan hidup yang lebih mudah, efisien dan aman. Peralihan sistem informasi pelatihan yang semula telah memiliki sistem semi komputerisasi menjadi terkomputerisasi sepenuhnya ini akan sangat membantu pengelolaan informasi pelatihan di T&D Corpt.

Konsep dari aplikasi pelatihan ini akan dirubah dari yang berbasis desktop menjadi berbasis web dikarenakan untuk mereduksi biaya sistem operasi yang digunakan, dari sistem operasi Windows menjadi sistem operasi Linux. Hal – hal yang ditawarkan dari aplikasi pelatihan berbasis web ini adalah migrasi sistem semi komputerisasi menjadi terkomputerisasi seluruhnya yang akan dibagi menjadi 5 bagian yaitu master data, perencanaan, persetujuan, pelaksanaan, dan laporan.

Keuntungan yang diperoleh adalah dapat mempersingkat dan mempercepat informasi proses pengadaan suatu pelatihan serta dapat mensentralisasi, memperbaiki dan menyelesaikan masalah data yang ada seperti redundansi data dan data yang tidak terstruktur.

Sebuah laporan yang dibuat dengan metode survei analisa pekerjaan dan teknik wawancara untuk menelusuri lebih dalam mengenai kebutuhan aplikasi pelatihan berbasis web ini, diharapkan dapat memberikan jawaban untuk pertanyaan yang selama ini belum terjawab serta dapat dijadikan sebagai referensi untuk pembangunan aplikasi berikutnya yang lebih baik.

Kata Kunci : T&D, Windows, Linux, Basis Web, *Master Data*, Analisa Pekerjaan, dan Wawancara

ABSTRACT

The improvement in information technology has been increased day by days along with the more requests to make the life will be much more easier, efficient and secure. The transition of information practise system which at the beginning has a system semi computerisation has change to a fully computerisation. This does really helps the process of practise information in T&D corporation.

The concept that comes from a practise application will be changed from something that was based on desktop to something that is web based, in order to reduce the usage amount of operation system fees. From windows operation system to a Linux operation system. These matters that have been offered from this application that has based on web is a semi computerisation migran system that has changed to a fully computerisation which will be divided by 5 regions such as master data, planning, agreement, implementation, and report.

The profit that are received can be shortened and speed up the information process for an existing of practise and as well as centalise, fix and solve data problems that are redundanton data and an unstructured data.

For the answer of all of the questions that have not been answered as well as a reference for the better building application in the future is a hope, so that the report that is made with a work analyse survey method and interview technique for following deeper about the needs of application practice that is based on web.

Keywords : T&D, Windows, Linux, Web Based, Master Data, Survey Method, and Interview.

DAFTAR ISI

KATA PENGANTAR.....	i
LEMBAR PERNYATAAN PERSETUJUAN PUBLIKASI KARYA ILMIAH UNTUK KEPENTINGAN AKADEMIS	iii
SURAT PERNYATAAN ORISINALITAS KARYA.....	iv
DAFTAR ISI	vii
DAFTAR GAMBAR	ix
DAFTAR TABEL.....	xiv
DAFTAR LAMPIRAN.....	xvi
BAB I PENDAHULUAN	17
I.1Latar Belakang.....	17
I.2Perumusan Masalah	17
I.3Tujuan	18
I.4Batasan Masalah	18
I.5Sistematika Penulisan	18
BAB II LANDASAN TEORI.....	19
II.1Basis Data	19
II.1.1Pengertian Basis Data	19
II.2 DFD (Data Flow Diagram)	25
II.3 Flow Chart.....	28
II.4 HTML (Hypertext Markup Language).....	32
II.5 SOP (Standard Operation Procedure).....	32
II.6 PHP (PHP Hypertext Preprocessor)	33
II.7 LINUX	35
II.8 AJAX (Asynchronous Javascript And XML).....	36
II.9 ERD (Entity Relationship Diagram)	37
BAB III ANALISIS DAN PERANCANGAN	43
III.1 Sejarah PT. X.....	43
III.1.1 Visi dan Misi Perusahaan	44
III.2 Proses Bisnis	46
III.3 Flow Chart	47
III.4 ERD (Entity Relationship Diagram)	54
III.5 DFD (Data Flow Diagram)	72
III.5.1DFD LEVEL 0 / DIAGRAM CONTEXT.....	72
III.5.2 DFD LEVEL 1 / DIAGRAM CONTEXT	74
III.5.3 DFD LEVEL 2 PROSES 1	78
III.5.4 DFD LEVEL 2 PROSES 2	79
III.5.5 DFD LEVEL 2 PROSES 4	105
III.5.6 DFD LEVEL 2 PROSES 5	106
III.5.7 DFD LEVEL 2 PROSES 6.....	107
III.6 KAMUS DATA	109
III.7 PSPEC(PROSES SPESIFIKASI)	115
III.8 RANCANGAN TAMPILAN	120
BAB IV HASIL TERCAPAI	136
IV.1 Login	136

IV.2 Pilih Company	136
IV.3 Pilih Area.....	137
IV.4 Pilih Menu	137
IV.5 Tampilan T&D.....	138
IV.6 Edit Master Data Location	139
IV.7 Display Master Data Location	140
IV.8 Edit Master Data Building	141
IV.9 Display Master Data Building	142
IV.10 Edit Master Data Room.....	143
IV.11 Display Master Data Room	144
IV.12 Edit Resources	145
IV.13 Tampil Resources.....	146
IV.14 Tambah Baru Master Data Topik Sub-Topik	147
IV.15 Ubah & Hapus Data Topik Sub-Topik.....	148
IV.16 Tampil Data Topik Sub-Topik	150
IV.17 Tampil Company Internal	151
IV.18 Edit Company Eksternal.....	151
IV.19 Tampil Company Eksternal.....	152
IV.20 Tampil Instructur Internal	154
IV.21 Edit Instructur Eksternal.....	155
IV.22 Tampil Instructur Eksternal	156
IV.23 Fiscal year	157
IV.24 Monitoring Fiscal year	158
IV.25 Baru Propose Demand	159
IV.26 Ubah & Hapus Propose Demand	160
IV.27 Approval Propose Demand.....	161
IV.28 Approval Topik Sub-Topik	162
IV.29 Tambah Baru FPPK	163
IV.30 Ubah & Hapus FPPK	164
IV.31 Tampil FPPK	165
IV.32 Approval FPPK.....	166
IV.33 Edit Bussiness Event Plan	167
IV.34 Tampil Bussiness Event Plan.....	168
IV.35 Tambah Baru Bussiness Event Plan Resources	169
IV.36 Ubah & Hapus Bussiness Event Plan Resources	170
IV.37 Tampil Bussiness Event Plan Resources.....	171
IV.38 Tambah Baru BEP & Attendee.....	172
IV.39 Ubah & Hapus Attendee.....	173
IV.40 Tampil Attendee.....	174
IV.41 Alert.....	175
IV.42 AutoComplete.....	177
BAB V EVALUASI DAN TESTING	179
V.1 Evaluasi Fungsionalitas	179
V.2 Form Validasi.....	180
BAB VI PENUTUP	198
VI.1 Kesimpulan.....	198

VI.2 Saran.....	198
DAFTAR PUSTAKA	xii

DAFTAR GAMBAR

Gambar II 1 Simbol Flowchart	30
Gambar II 2 Prgram Flowchart	31
Gambar II 3 Proses Flowchart	31
Gambar II 4 Keterkaitan Linux dengan UNIX	35
Gambar II 5 Relationship Set	38
Gambar II 6 Atribut 1 ERD	38
Gambar II 7 Atribut 2 ERD	39
Gambar II 8 Atribut 3 ERD	39
Gambar II 9 Derajat Satu	39
Gambar II 10 Derajat Dua	39
Gambar II 11 Derajat Tiga	39
Gambar II 12 Cardinality Ration	40
Gambar II 13 Participant Constraint	40
Gambar II 14 Weak Entity	41
Gambar II 15 Simbol ERD	41
Gambar II 16 Contoh ERD	42
Gambar III 1 Flow Proses Produksi	45
Gambar III 2 Flow Chart Pengajuan Pengadaan Training	52
Gambar III 3 Flow Chart Pengarsipan & Perekaman Data	53
Gambar III 4 Flow Chart Pelaksanaan Training	53
Gambar III 5 Flow Chart Proses Evaluasi	54
Gambar III 6 ERD	55
Gambar III 7 DFD LEVEL 0	72
Gambar III 8 DFD Level 1	75
Gambar III 9 DFD Level 2 Proses 1	78
Gambar III 10 DFD Level 2 Proses 2	79
Gambar III 11 DFD Level 3 Proses 2.1	88
Gambar III 12 DFD Level 3 Proses 2.2	89
Gambar III 13 DFD Level 3 Proses 2.3	91
Gambar III 14 DFD Level 2 Proses 2.4	92
Gambar III 15 DFD Level 2 Proses 2.5	93
Gambar III 16 DFD Level 3 Proses 2.6	94
Gambar III 17 DFD Level 3 Proses 2.7	95
Gambar III 18 DFD Level 3 Proses 2.8	96
Gambar III 19 DFD Level 3 Proses 2.9	97
Gambar III 20 DFD Level 3 Proses 2.10	98
Gambar III 21 DFD Level 3 Proses 2.11	99
Gambar III 22 DFD Level 3 Proses 2.12	101
Gambar III 23 DFD Level 3 Proses 2.13	102
Gambar III 24 DFD Level 3 Proses 2.14	103
Gambar III 25 DFD Level 2 Proses 4	105
Gambar III 26 DFD Level 2 Proses 5	106
Gambar III 27 DFD Level 2 Proses 6	107
Gambar III 28 Rancangan Tampilan Login	120

Gambar III 29 Rancangan Alert Salah Login	120
Gambar III 30 Rancangan Tampilan Pilihan Company	121
Gambar III 31 Rancangan Tampilan Pilihan Area	121
Gambar III 32 Rancangan Tampilan Pilihan Menu	121
Gambar III 33 Rancangan Tampilan Awal T&D	122
Gambar III 34 Rancangan Tampilan Master Data Building Tambah	122
Gambar III 35 Rancangan Tampilan Master Data Building Ubah	123
Gambar III 36 Rancangan Tampilan Master Data Building Hapus	123
Gambar III 37 Rancangan Tampilan Master Data Building Tampil	124
Gambar III 38 Rancangan Tampilan Master Data Location Baru	125
Gambar III 39 Rancangan Tampilan Master Data Location Ubah	125
Gambar III 40 Rancangan Tampilan Master Data Location Hapus	126
Gambar III 41 Rancangan Tampilan Master Data Location Tampil	126
Gambar III 42 Rancangan Tampilan Master Data Room Baru	127
Gambar III 43 Rancangan Tampilan Master Data Room Ubah	127
Gambar III 44 Rancangan Tampilan Master Data Room Hapus	128
Gambar III 45 Rancangan Tampilan Master Data Room Tampil	128
Gambar III 46 Rancangan Tampilan Master Data Company Internal Baru	129
Gambar III 47 Rancangan Tampilan Master Data Company Internal Ubah	130
Gambar III 48 Rancangan Tampilan Master Data Company Internal Hapus	130
Gambar III 49 Rancangan Tampilan Master Data Company Internal Tampil	131
Gambar III 50 Rancangan Tampilan Master Data Materi Baru	131
Gambar III 51 Rancangan Tampilan Master Data Materi Ubah	132
Gambar III 52 Rancangan Tampilan Master Data Materi Hapus	132
Gambar III 53 Rancangan Tampilan Master Data Materi Tampil	133
Gambar III 54 Rancangan Tampilan Propose Demand Baru	133
Gambar III 55 Rancangan Tampilan Propose Demand Ubah	134
Gambar III 56 Rancangan Tampilan Propose Demand Hapus	134
Gambar III 57 Rancangan Tampilan Propose Demand Tampil	135
Gambar III 58 Rancangan SubMenu WEB T&D	135
Gambar IV 1 Tampilan Login	136
Gambar IV 2 Tampilan Pilihan Company	136
Gambar IV 3 Tampilan Pilihan Area	137
Gambar IV 4 Tampilan Pilihan Menu	137
Gambar IV 5 Tampilan Awal T&D	138
Gambar IV 6 Tampilan Edit Location	139
Gambar IV 7 Tampilan Display Location	140
Gambar IV 8 Tampilan Print Preview Location	140
Gambar IV 9 Tampilan Edit Building	141
Gambar IV 10 Tampilan Display Building	142
Gambar IV 11 Print Preview Building	142
Gambar IV 12 Tampilan Edit Room	143
Gambar IV 13-1 Tampilan Display Room	144
Gambar IV 14 Tampilan Print Preview Room	144
Gambar IV 15 Edit Resources	145
Gambar IV 16 Tampil Resources	146

Gambar IV 17 Tampil Print Preview Resource	147
Gambar IV 18 Tampilan Tambah Baru Topik	147
Gambar IV 19 Tampilan Ubah Hapus Topik	148
Gambar IV 20 Tampilan Display Topik	150
Gambar IV 21 Tampilan Print Preview Topik	150
Gambar IV 22 Tampil Company Internal	151
Gambar IV 23 Edit Company Eksternal	151
Gambar IV 24 Tampil Company Eksternal.....	152
Gambar IV 25 Print Preview Company Eksternal.....	153
Gambar IV 26 Tampil Instruktur Internal	154
Gambar IV 27 Print Preview Instruktur Internal	154
Gambar IV 28 Edit Instruktur Eksternal	155
Gambar IV 29 Tampil Instruktur Eksternal.....	156
Gambar IV 30 Print Preview Instruktur Eksternal.....	156
Gambar IV 31 Tampilan Edit Fiscal year	157
Gambar IV 32 Monitoring Fiscal year	158
Gambar IV 33 Monitoring Fiscal year	158
Gambar IV 34 Baru Propose Demand	159
Gambar IV 35 Ubah & Hapus Propose Demand.....	160
Gambar IV 36 Approval Propose Demand	161
Gambar IV 37 Approval Topik Sub-Topik	162
Gambar IV 38 Tambah Baru FPPK.....	163
Gambar IV 39 Ubah & Hapus FPPK	164
Gambar IV 40 Tampil FPPK.....	165
Gambar IV 41 Print Preview FPPK	165
Gambar IV 42 Approval FPPK.....	166
Gambar IV 43 Edit BEP.....	167
Gambar IV 44 Tampil BEP	168
Gambar IV 45 Tambah Baru BEP RES	169
Gambar IV 46 Ubah & Hapus BEP RES	170
Gambar IV 47 Tampil BEP RES	171
Gambar IV 48 Print Preview BEP Res.....	171
Gambar IV 49 Tambah Baru BEP ATT.....	172
Gambar IV 50 Ubah & Hapus BEP ATT.....	173
Gambar IV 51 Tampil Attendee	174
Gambar IV 52 Print Preview Attendee	174
Gambar IV 53 Alert Penyimpanan Data	175
Gambar IV 54 Alert Pengubahan Data	175
Gambar IV 55 Alert Penghapusan Data 1	175
Gambar IV 56 Alert Penghapusan Data 2	176
Gambar IV 57 Alert Pengecekan Format Tanggal	176
Gambar IV 58 Alert Pengecekan Format Tanggal 2.....	176
Gambar IV 59 Alert Pengecekan Data 1	176
Gambar IV 60 Alert Pengecekan Data Kosong.....	176
Gambar IV 61 Alert Pengecekan Data Waktu.....	177
Gambar IV 62 Auto Complete Tipe 1	177

Gambar IV 63 Auto Complete Tipe..... 178
Gambar IV 64 Auto Complete Tipe 3..... 178

DAFTAR TABEL

Tabel II 1 Tabel Customer.....	20
Tabel II 2 Simbol DFD.....	26
Tabel III 1 Daftar Perusahaan PT. X.....	44
Tabel III 2 MPP PT. X.....	45
Tabel III 3 ENTITY PAN_TEMLOCM.....	56
Tabel III 4 ENTITY PAN_TEMBUIM.....	56
Tabel III 5 ENTITY PAN_TEMROOM.....	57
Tabel III 6 ENTITY PAN_TEMRESM (Resources).....	58
Tabel III 7 ENTITY PAN_TEMCMEM.....	59
Tabel III 8 ENTITY PAN_TEMATEM.....	60
Tabel III 9 ENTITY PAN_TEMINIM.....	60
Tabel III 10 ENTITY PAN_TEMINEM.....	61
Tabel III 11 ENTITY PAN_TEMTSTM.....	62
Tabel III 12 ENTITY PAN_TEMPSDM.....	62
Tabel III 13 ENTITY PAN_TEMBEPT.....	63
Tabel III 14 ENTITY PAN_TEMBERS.....	64
Tabel III 15 ENTITY PAN_TEMBEATT.....	64
Tabel III 16 ENTITY PAN_TEMFCYF.....	65
Tabel III 17 ENTITY HRD_PIB022s.....	65
Tabel III 18 ENTITY PAN_USRMENU (User Menu).....	68
Tabel III 19 ENTITY PAN_USRRC AU (Company Area Unit).....	69
Tabel III 20 ENTITY PAN_USRRLVL (User).....	69
Tabel III 21 ENTITY PAN_USRROLE (User).....	69
Tabel III 22 ENTITY PAN_USRUSER (User).....	70
Tabel III 23 ENTITY HRD_PAR001S (Area).....	70
Tabel III 24 ENTITY PST_CMP002S (Company).....	71
Tabel III 25 ENTITY PST_ORU003S.....	71
Tabel III 26 Kamus Data Building.....	109
Tabel III 27 Kamus Data Location.....	110
Tabel III 28 Kamus Data Room.....	110
Tabel III 29 Kamus Data Propose Demand.....	112
Tabel III 30 Kamus Data Bussiness_Event_Plan.....	112
Tabel III 31 Kamus Data Bussiness Event Plan Resources.....	113
Tabel III 32 Kamus Data Bussiness Event Plan Attendee.....	114
Tabel III 33 PSPEC data Login.....	115
Tabel III 34 PSPEC data user.....	115
Tabel III 35 PSPEC Master Data Building.....	116
Tabel III 36 PSPEC Master Data Location.....	117
Tabel III 37 PSPEC Master Data Room.....	117
Tabel III 38 PSPEC Propose Demand.....	118
Tabel III 39 PSPEC BEP.....	119

DAFTAR LAMPIRAN

Lampiran A Kuesioner	A-1
Lampiran B Data.....	B-1
Lampiran C Source Code	C-1
Lampiran D Jurnal Harian Magang Di PT.X	D-1
Lampiran E SPL PT.X	E-1
Lampiran F Riwayat Hidup / CV Penulis	F-1