

ABSTRAK

WIT Indonesia memiliki lima divisi antara lain, divisi admin bekerja di bidang network engineer dan pengelolaan domain maupun hosting, divisi *finance* bekerja di bidang keuangan kantor, divisi *developer* bekerja di bidang pembuatan *website*, divisi WMS bekerja dibidang pembuatan *management system*. Supaya dapat meningkatkan efektivitas kinerja divisi admin dalam pengelolaan domain maupun hosting, divisi *finance* dalam mengirimkan *invoice* domain kepada *client* dan divisi *developer* dalam pemesanan domain baru kepada divisi admin. Teori yang digunakan untuk pembuatan *website* ini antara lain *WHOIS*, *API*, *visual studio*, *sql server*, *use case* dan *entity relationship modeling*. Analisis dan rancangan dilakukan dengan membuat *use case*, *scenario*, desain penyimpanan data dan *mockup website*. Jika analisis dan rancangan selesai lalu dilakukan implementasi untuk pembuatan *website*. *Website* yang sudah dibuat dilakukan pengujian berupa *test case* dan *user acceptance testing* (UAT). Dari semua yang dilakukan dapat disimpulkan *website* ini dapat membantu divisi admin dalam melakukan pengelolaan domain maupun hosting, divisi *finance* dalam melakukan pengiriman *invoice* kepada *client* dan divisi *developer* dalam melakukan *order* domain kepada divisi admin.

Kata kunci: domain, hosting, *invoice*, *order* dan *website*



ABSTRACT

WIT Indonesia has five divisions, among others admin division working in the field of network engineer and domain and hosting management, finance division working in the field of office finance, developer division working in the field of website creation, WMS division working in the field of making management system. In order to improve the effectiveness of admin division performance in domain and hosting management, finance division in sending invoice domain to client and division of developer in ordering new domain to admin division. Theories used for the creation of this website include WHOIS, API, visual studio, sql server, use case and entity relationship modeling. Analysis and design is done by making use case, scenario, data storage design and mockup website. If the analysis and design is completed then implemented for website creation. Website that has been made testing done in the form of test case and user acceptance testing (UAT). From all that can be concluded this website can help the division admin in managing the domain and hosting, finance division in the delivery of invoices to clients and division developer in the order domain to admin division.

Keywords: domain, hosting, invoice, order and website



DAFTAR ISI

LEMBAR PENGESAHAN	i
PERNYATAAN ORISINALITAS LAPORAN PENELITIAN.....	ii
PERNYATAAN PUBLIKASI LAPORAN PENELITIAN.....	iii
PRAKATA.....	iv
ABSTRAK.....	v
ABSTRACT.....	vi
DAFTAR ISI.....	vii
DAFTAR GAMBAR.....	xii
DAFTAR TABEL.....	xvi
BAB 1 PENDAHULUAN	1
1.1 Latar Belakang	1
1.2 Rumusan Masalah	2
1.3 Tujuan Pembahasan	2
1.4 Ruang Lingkup.....	2
1.5 Sumber Data.....	3
1.6 Sistematika Penyajian	3
BAB 2 KAJIAN TEORI	4
2.1 <i>Whois API</i>	4
2.2 <i>.UML (Unified Modeling Language)</i>	5
2.2.1 <i>Use Case</i>	5
2.2.2 <i>Entity Relationship Modeling</i>	5
2.3 <i>Visual Studio</i>	6
2.4 <i>SQL Server</i>	6
BAB 3 ANALISIS DAN RANCANGAN SISTEM	7

3.1	Gambaran Aplikasi.....	7
3.2	Desain Perangkat Lunak	7
3.2.1	<i>Use Case Diagram</i>	7
3.2.2	<i>Scenario</i>	9
3.2.2.1	<i>Scenario Login</i>	9
3.2.2.2	<i>Scenario Dashboard</i>	10
3.2.2.3	<i>Scenario Whois Lookup</i>	11
3.2.2.4	<i>Scenario Order Domain</i>	12
3.2.2.5	<i>Scenario Mail</i>	13
3.2.2.6	<i>Scenario Manage Domain</i>	14
3.2.2.7	<i>Scenario Manage Hosting</i>	14
3.2.2.8	<i>Scenario Manage User</i>	15
3.2.2.9	<i>Scenario Logout</i>	15
3.2.2.10	<i>Scenario Front End</i>	16
3.2.3	<i>Sequence Diagram</i>	17
3.2.3.1	<i>Sequence Diagram Login</i>	17
3.2.3.2	<i>Sequence Diagram Whois Lookup</i>	18
3.2.3.3	<i>Sequence Diagram Order Domain</i>	18
3.2.3.4	<i>Sequence Diagram Mail</i>	19
3.2.3.5	<i>Sequence Diagram Add Domain</i>	19
3.2.3.6	<i>Sequence Diagram Edit Domain</i>	20
3.2.3.7	<i>Sequence Diagram Add Hosting</i>	20
3.2.3.8	<i>Sequence Diagram Edit Hosting</i>	21
3.2.3.9	<i>Sequence Diagram Add Manage User</i>	21
3.2.3.10	<i>Sequence Diagram Edit Manage User</i>	22
3.2.4	Desain Penyimpanan Data	23

3.2.5 Rancangan Antarmuka	24
3.2.5.1 Antarmuka <i>Login</i>	24
3.2.5.2 Antarmuka <i>Dashboard Admin</i>	24
3.2.5.3 Antarmuka <i>Dashboard Finance</i>	25
3.2.5.4 Antarmuka <i>Dashboard Developer</i>	25
3.2.5.5 Antarmuka <i>Whois Lookup Admin</i>	26
3.2.5.6 Antarmuka <i>Whois Lookup Finance</i>	26
3.2.5.7 Antarmuka <i>Whois Lookup Developer</i>	27
3.2.5.8 Antarmuka <i>Order Domain Admin</i>	27
3.2.5.9 Antarmuka <i>Order Domain Developer</i>	28
3.2.5.10 Antarmuka <i>Mail Admin</i>	28
3.2.5.11 Antarmuka <i>Mail Finance</i>	29
3.2.5.12 Antarmuka <i>Domain</i>	29
3.2.5.13 Antarmuka <i>Add Domain</i>	30
3.2.5.14 Antarmuka <i>Edit Domain</i>	30
3.2.5.15 Antarmuka <i>Hosting</i>	31
3.2.5.16 Antarmuka <i>Add Hosting</i>	31
3.2.5.17 Antarmuka <i>Edit Hosting</i>	32
3.2.5.18 Antarmuka <i>Manage User</i>	32
3.2.5.19 Antarmuka <i>Add User</i>	33
3.2.5.20 Antarmuka <i>Edit User</i>	33
BAB 4 IMPLEMENTASI	34
4.1 Basis Data.....	34
4.2 Antarmuka Program Admin	35
4.2.1 Antarmuka <i>Login</i>	35
4.2.2 Antarmuka <i>Dashboard</i>	36

4.2.3 Antarmuka <i>Whois Lookup</i>	42
4.2.4 Antarmuka <i>Order Domain</i>	43
4.2.5 Antarmuka <i>Mail</i>	46
4.2.6 Antarmuka <i>Domain</i>	50
4.2.7 Antarmuka <i>Hosting</i>	53
4.2.8 Antarmuka <i>Manage User</i>	56
4.3 Antarmuka Program <i>Finance</i>	59
4.3.1 Antarmuka <i>Dashboard</i>	59
4.3.2 Antarmuka <i>Whois Lookup</i>	64
4.3.3 Antarmuka <i>Mail</i>	65
4.4 Antarmuka Program <i>Developer</i>	69
4.4.1 Antarmuka <i>Dashboard</i>	69
4.4.2 Antarmuka <i>Whois Lookup</i>	74
4.4.3 Antarmuka <i>Order Domain</i>	75
4.5 Antarmuka Program <i>Client</i>	78
4.6 Implementasi <i>API (Application Programming Interface)</i>	79
BAB 5 PENGUJIAN.....	80
5.1 <i>Test Case</i>	80
5.1.1 Pengujian <i>Login</i>	80
5.1.2 Pengujian <i>Dashboard Admin</i>	81
5.1.3 Pengujian <i>Whois Lookup Admin</i>	82
5.1.4 Pengujian <i>Order Domain Admin</i>	82
5.1.5 Pengujian <i>Mail Admin</i>	83
5.1.6 Pengujian <i>Data Send Invoice</i>	83
5.1.7 Pengujian <i>Compose Admin</i>	83
5.1.8 Pengujian <i>Domain Table</i>	84

5.1.9 Pengujian <i>Add Domain</i>	84
5.1.10 Pengujian <i>Edit Domain</i>	85
5.1.11 Pengujian <i>Hosting Table</i>	85
5.1.12 Pengujian <i>Add Hosting</i>	86
5.1.13 Pengujian <i>Edit Hosting</i>	87
5.1.14 Pengujian <i>Manage User</i>	87
5.1.15 Pengujian <i>Add Manage User</i>	88
5.1.16 Pengujian <i>Edit Manage User</i>	89
5.1.17 Pengujian <i>Dashboard Finance</i>	90
5.1.18 Pengujian <i>Whois Lookup Finance</i>	91
5.1.19 Pengujian <i>Mail Finance</i>	91
5.1.20 Pengujian <i>Data Send Invoice Finance</i>	91
5.1.21 Pengujian <i>Compose Finance</i>	92
5.1.22 Pengujian <i>Dashboard Developer</i>	92
5.1.23 Pengujian <i>Whois Lookup Developer</i>	93
5.1.24 Pengujian <i>Order Domain Developer</i>	93
5.1.25 Pengujian <i>Front End</i>	94
5.2 <i>User Acceptance Testing (UAT)</i>	94
5.2.1 <i>User Acceptance Testing (UAT) Kepada Admin</i>	94
5.2.2 <i>User Acceptance Testing (UAT) Kepada Finance</i>	96
5.2.3 <i>User Acceptance Testing (UAT) Kepada Developer</i>	96
BAB 6 SIMPULAN DAN SARAN	98
6.1 Simpuln	98
6.2 Saran.....	98
DAFTAR PUSTAKA	99

DAFTAR GAMBAR

Gambar 3.1 <i>Use Case Diagram</i>	8
Gambar 3.2 <i>Sequence Diagram Login</i>	17
Gambar 3.3 <i>Sequence Diagram Whois Lookup</i>	18
Gambar 3.4 <i>Sequence Diagram Order Domain</i>	18
Gambar 3.5 <i>Sequence Diagram Mail</i>	19
Gambar 3.6 <i>Sequence Diagram Add Domain</i>	19
Gambar 3.7 <i>Sequence Diagram Edit Domain</i>	20
Gambar 3.8 <i>Sequence Diagram Add Hosting</i>	20
Gambar 3.9 <i>Sequence Diagram Edit Hosting</i>	21
Gambar 3.10 <i>Sequence Diagram Add Manage User</i>	21
Gambar 3.11 <i>Sequence Diagram Edit Manage User</i>	22
Gambar 3.12 Rancangan Basis Data	23
Gambar 3.13 Antarmuka <i>Login</i>	24
Gambar 3.14 Antarmuka <i>Dashboard Admin</i>	24
Gambar 3.15 Antarmuka <i>Dashboard Finance</i>	25
Gambar 3.16 Antarmuka <i>Dashboard Developer</i>	25
Gambar 3.17 Antarmuka <i>Whois Lookup Admin</i>	26
Gambar 3.18 Antarmuka <i>Whois Lookup Finance</i>	26
Gambar 3.19 Antarmuka <i>Whois Lookup Developer</i>	27
Gambar 3.20 Antarmuka <i>Order Domain Admin</i>	27
Gambar 3.21 Antarmuka <i>Order Domain Developer</i>	28
Gambar 3.22 Antarmuka <i>Mail Admin</i>	28
Gambar 3.23 Antarmuka <i>Mail finance</i>	29
Gambar 3.24 Antarmuka <i>Domain</i>	29
Gambar 3.25 Antarmuka <i>Add Domain</i>	30
Gambar 3.26 Antarmuka <i>Edit Domain</i>	30
Gambar 3.27 Antarmuka <i>Hosting</i>	31
Gambar 3.28 Antarmuka <i>Add Hosting</i>	31
Gambar 3.29 Antarmuka <i>Edit Hosting</i>	32
Gambar 3.30 Antarmuka <i>Manage User</i>	32

Gambar 3.31 Antarmuka <i>Add User</i>	33
Gambar 3.32 Antarmuka <i>Edit User</i>	33
Gambar 4.1 ER Diagram.....	34
Gambar 4.2 Antarmuka <i>Login</i>	35
Gambar 4.3 Antarmuka <i>Code Login</i>	36
Gambar 4.4 Antarmuka <i>Dashboard Admin</i>	36
Gambar 4.5 Antarmuka <i>Dashboard Order</i>	37
Gambar 4.6 Antarmuka <i>Dashboard Domain</i>	37
Gambar 4.7 Antarmuka <i>Dashboard Hosting</i>	38
Gambar 4.8 Antarmuka <i>Code Dashboard Order, Domain dan Hosting</i>	38
Gambar 4.9 Antarmuka <i>Dashboard D-30 Expired Alert</i>	39
Gambar 4.10 Antarmuka <i>Code D-30 Expired Alert</i>	39
Gambar 4.11 Antarmuka <i>Dashboard D-30 Expired</i>	40
Gambar 4.12 Antarmuka <i>Code D-30 Expired</i>	40
Gambar 4.13 Antarmuka <i>Dashboard Expired</i>	41
Gambar 4.14 Antarmuka <i>Code Dashboard Expired</i>	41
Gambar 4.15 Antarmuka <i>Whois Lookup</i>	42
Gambar 4.16 Antarmuka <i>Whois Lookup Hasil</i>	42
Gambar 4.17 Antarmuka <i>Code Whois Lookup</i>	43
Gambar 4.18 Antarmuka <i>Order Domain</i>	43
Gambar 4.19 Antarmuka <i>Code Order Domain</i>	44
Gambar 4.20 Antarmuka <i>Email Order Domain</i>	45
Gambar 4.21 Antarmuka <i>Mail</i>	46
Gambar 4.22 Antarmuka <i>Compose</i>	46
Gambar 4.23 Antarmuka <i>Code Compose</i>	47
Gambar 4.24 Antarmuka <i>Email</i>	48
Gambar 4.25 Antarmuka <i>Data Send Invoice</i>	49
Gambar 4.26 Antarmuka <i>Code Download</i>	49
Gambar 4.27 Antarmuka <i>Domain</i>	50
Gambar 4.28 Antarmuka <i>Add Domain</i>	50
Gambar 4.29 Antarmuka <i>Code Add Domain</i>	51
Gambar 4.30 Antarmuka <i>Edit Domain</i>	51

Gambar 4.31 Antarmuka <i>Code Edit Domain</i>	52
Gambar 4.32 Antarmuka <i>Hosting</i>	53
Gambar 4.33 Antarmuka <i>Add Hosting</i>	53
Gambar 4.34 Antarmuka <i>Code Add Hosting</i>	54
Gambar 4.35 Antarmuka <i>Edit Hosting</i>	55
Gambar 4.36 Antarmuka <i>Code Edit Hosting</i>	55
Gambar 4.37 Antarmuka <i>Manage User</i>	56
Gambar 4.38 Antarmuka <i>Add Manage User</i>	56
Gambar 4.39 Antarmuka <i>Code Add Manage User</i>	57
Gambar 4.40 Antarmuka <i>Edit Manage User</i>	57
Gambar 4.41 Antarmuka <i>Code Edit Manage User</i>	58
Gambar 4.42 Antarmuka <i>Dashboard</i>	59
Gambar 4.43 Antarmuka <i>Dashboard Order</i>	59
Gambar 4.44 Antarmuka <i>Dashboard Domain</i>	60
Gambar 4.45 Antarmuka <i>Dashboard Hosting</i>	60
Gambar 4.46 Antarmuka <i>Code Dashboard Order, Domain dan Hosting</i>	61
Gambar 4.47 Antarmuka <i>Dashboard D-30 Expired Alert</i>	61
Gambar 4.48 Antarmuka <i>Code D-30 Expired Alert</i>	62
Gambar 4.49 Antarmuka <i>Dashboard D-30 Expired</i>	62
Gambar 4.50 Antarmuka <i>Dashboard D-30 Expired</i>	63
Gambar 4.51 Antarmuka <i>Dashboard Expired</i>	63
Gambar 4.52 Antarmuka <i>Code Dashboard Expired</i>	64
Gambar 4.53 Antarmuka <i>Whois Lookup</i>	64
Gambar 4.54 Antarmuka <i>Whois Lookup Hasil</i>	64
Gambar 4.55 Antarmuka <i>Code Whois Lookup</i>	65
Gambar 4.56 Antarmuka <i>Mail</i>	65
Gambar 4.57 Antarmuka <i>Compose</i>	66
Gambar 4.58 Antarmuka <i>Code Compose</i>	66
Gambar 4.59 Antarmuka <i>Email</i>	67
Gambar 4.60 Antarmuka <i>Data Send Invoice</i>	68
Gambar 4.61 Antarmuka <i>Code Data Send Invoice</i>	68
Gambar 4.62 Antarmuka <i>Dashboard</i>	69

Gambar 4.63 Antarmuka <i>Dashboard Order</i>	69
Gambar 4.64 Antarmuka <i>Dashboard Domain</i>	70
Gambar 4.65 Antarmuka <i>Dashboard Hosting</i>	70
Gambar 4.66 Antarmuka <i>Code Dashboard Order, Domain dan Hosting</i>	71
Gambar 4.67 Antarmuka <i>Dashboard D-30 Expired Alert</i>	71
Gambar 4.68 Antarmuka <i>Code D-30 Expired Alert</i>	72
Gambar 4.69 Antarmuka <i>Dashboard D-30 Expired</i>	72
Gambar 4.70 Antarmuka <i>Code Dashboard D-30 Expired</i>	73
Gambar 4.71 Antarmuka <i>Dashboard Expired</i>	73
Gambar 4.72 Antarmuka <i>Code Dashboard Expired</i>	74
Gambar 4.73 Antarmuka <i>Whois Lookup</i>	74
Gambar 4.74 Antarmuka <i>Whois Lookup Hasil</i>	74
Gambar 4.75 Antarmuka <i>Code Whois Lookup</i>	75
Gambar 4.76 Antarmuka <i>Order Domain</i>	75
Gambar 4.77 Antarmuka <i>Code Order Domain</i>	76
Gambar 4.78 Antarmuka <i>Email Order Domain</i>	77
Gambar 4.79 Antarmuka <i>Whois Lookup</i>	78
Gambar 4.80 Antarmuka <i>Whois Lookup Hasil</i>	78
Gambar 4.81 Antarmuka <i>Code Whois Lookup</i>	79
Gambar 4.82 <i>Code API (Application Programming Interface)</i>	79

DAFTAR TABEL

Tabel 3.1 <i>Scenario Login</i>	9
Tabel 3.2 <i>Scenario Dashboard</i>	10
Tabel 3.3 <i>Scenario Whois Lookup</i>	11
Tabel 3.4 <i>Scenario Order Domain</i>	12
Tabel 3.5 <i>Scenario Mail</i>	13
Tabel 3.6 <i>Scenario Manage Domain</i>	14
Tabel 3.7 <i>Scenario Manage Hosting</i>	14
Tabel 3.8 <i>Scenario Manage User</i>	15
Tabel 3.9 <i>Scenario Logout</i>	15
Tabel 5.1 Pengujian <i>Login</i>	80
Tabel 5.2 Pengujian <i>Dashboard Admin</i>	81
Tabel 5.3 Pengujian <i>Whois Lookup Admin</i>	82
Tabel 5.4 Pengujian <i>Order Domain Admin</i>	82
Tabel 5.5 Pengujian <i>Mail Admin</i>	83
Tabel 5.6 Pengujian <i>Data Send Invoice Admin</i>	83
Tabel 5.7 Pengujian <i>Compose Admin</i>	83
Tabel 5.8 Pengujian <i>Domain Table Admin</i>	84
Tabel 5.9 Pengujian <i>Add Domain</i>	84
Tabel 5.10 Pengujian <i>Edit Domain</i>	85
Tabel 5.11 Pengujian <i>Hosting Table</i>	85
Tabel 5.12 Pengujian <i>Add Hosting</i>	86
Tabel 5.13 Pengujian <i>Edit Hosting</i>	87
Tabel 5.14 Pengujian <i>Manage User</i>	87
Tabel 5.15 Pengujian <i>Add Manage User</i>	88
Tabel 5.16 Pengujian <i>Edit Manage User</i>	89
Tabel 5.17 Pengujian <i>Dashboard Finance</i>	90
Tabel 5.18 Pengujian <i>Whois Lookup Finance</i>	91
Tabel 5.19 Pengujian <i>Mail Finance</i>	91
Tabel 5.20 Pengujian <i>Data Send Invoice Finance</i>	91
Tabel 5.21 Pengujian <i>Compose Finance</i>	92

Tabel 5.22 Pengujian <i>Dashboard Developer</i>	92
Tabel 5.23 Pengujian <i>Whois Lookup Developer</i>	93
Tabel 5.24 Pengujian <i>Order Domain Developer</i>	93
Tabel 5.25 Pengujian <i>Front End</i>	94
Tabel 5.26 <i>User Acceptance Testing (UAT) Kepada Admin</i>	94
Tabel 5.27 <i>User Acceptance Testing (UAT) Kepada Finance</i>	96
Tabel 5.28 <i>User Acceptance Testing (UAT) Kepada Developer</i>	96

