**DAFTAR ISI**

ABSTRAK .....i

*ABSTRACT ....*ii

KATA PENGANTAR ...iii

DAFTAR ISI ....iv

DAFTAR GAMBAR ....ix

DAFTAR TABEL .. ..xiv

DAFTAR SIMBOL .. ..xvi

DAFTAR SINGKATAN .. ..xix

DAFTAR LAMPIRAN ...xx

**Bab I Pendahuluan I-1**

1.1 Latar Belakang I-1

1.2 Identifikasi Masalah I-2

1.3 Tujuan I-2

1.4 Ruang Lingkup I-2

1.5 Sistematika Penulisan I-2

**Bab II Landasan Teori II-4**

2.1 Bimbingan Belajar II-4

2.2 Sistem II-4

2.3 Administrasi II-4

2.4 Auli Learning Center II-4

2.5 Framework dan CMS II-5

2.6 Codeigniter II-5

2.7 PHP II-6

2.8 MySQL II-6

2.9 UML *(* *Unfied Modeling Languange )*  II-7

2.10 HTML *( Hypertext Markup Languange )*  .II-9

2.11 CSS *( Cascading Style Sheet )*  II-10

2.12 SMS Gateway II-11

2.13 Gammu II-11

**Bab III Analisis Dan Perancangan III-12**

3.1 Analisis III-12

3.1.1 Analisis Sistem Yang Sedang Berjalan III-12

3.1.2 Analisis Sistem Yang Akan Di Bangun III-16

3.1.2.1 Flowmap Aplikasi Yang Akan Di Bangun III-17

3.1.3 Deskripsi Kebutuhan Aplikasi III-26

3.1.3.1 Analisis Kebutuhan Perangkat Lunak dan Perangkat Keras III-27

3.1.3.2 Analisis Kebutuhan Perangkat Keras Yang Dibutuhkan III-27

3.2 Perancangan III-27

3.2.1 Usecase Diagram III-27

3.2.1.1 Definisi Usecase Diagram III-27

3.2.1.2 Skenario Usecase III-29

3.2.2 Class Diagram III-52

3.2.2.1 Definisi Class Diagram III-52

3.2.3 Sequence Diagram III-54

3.2.3.1 Sequence Diagram Login III-54

3.2.3.2 Sequence Diagram Tambah Data Siswa Pemilik III-55

3.2.3.3 Sequence Diagram Laporan Keuangan III-55

3.2.3.4 Sequence Diagram Melihat Laporan Jumlah Siswa III-56

3.2.3.5 Sequence Diagram Melihat Jadwal Belajar III-56

3.2.3.6 Sequence Diagram Melihat Melihat Kapasitas Ruangan III-57

3.2.3.7 Sequence Diagram Melihat Data Siswa III-57

3.2.3.8 Sequence Diagram Melihat Data Pengajar III-58

3.2.3.9 Sequence Diagram Mengelola Data Pembayaran III-58

3.2.3.10 Sequence Diagram Mengelola Data Ruangan III-59

3.2.3.11 Sequence Diagram Mengelola Data Siswa III-59

3.2.3.12 Sequence Diagram Mengelola Data Pengajar III-60

3.2.3.13 Sequence Diagram Mengelola Daftar Hadir Pengajar III-61

3.2.3.14 Sequence Diagram Mengelola Daftar Hadir Siswa III-62

3.2.3.15 Sequence Diagram Mengelola Jadwal Belajar III-62

3.2.3.16 Sequence Diagram Melihat Daftar Hadir Siswa III-63

3.2.3.17 Sequence Diagram Melihat Daftar Hadir Pengajar III-64

3.2.3.18 Sequence Diagram Mengelola Kuota Kelas III-64

3.2.3.19 Sequence Diagram Mengirim SMS Pemberitahuan III-65

3.2.4 Collaboration Diagram III-65

3.2.4.1 Collaboration Diagram Login III-66

3.2.4.2 Collaboration Diagram Tambah Data Siswa Pemilik III-66

3.2.4.3 Collaboration Diagram Laporan Keuangan III-67

3.2.4.4 Collaboration Diagram Melihat Laporan Jumlah Siswa III-67

3.2.4.5 Collaboration Diagram Melihat Jadwal Belajar III-68

3.2.4.6 Collaboration Diagram Melihat Melihat Kapasitas Ruangan.III-68

3.2.4.7 Collaboration Diagram Melihat Data Siswa III-69

3.2.4.8 Collaboration Diagram Melihat Data Pengajar III-69

3.2.4.9 Collaboration Diagram Mengelola Data Pembayaran III-70

3.2.4.10 Collaboration Diagram Mengelola Data Ruangan III-70

3.2.4.11 Collaboration Diagram Mengelola Data Siswa III-71

3.2.4.12 Collaboration Diagram Mengelola Data Pengajar III-71

3.2.4.13 Collaboration Diagram Mengelola Daftar Hadir Pengajar III-72

3.2.4.14 Collaboration Diagram Mengelola Daftar Hadir Siswa III-72

3.2.4.15 Collaboration Diagram Mengelola Jadwal Belajar III-73

3.2.4.16 Collaboration Diagram Melihat Daftar Hadir Siswa .III-73

3.2.4.17 Collaboration Diagram Melihat Daftar Hadir Pengajar .III-74

3.2.4.18 Collaboration Diagram Mengelola Kuota Kelas .III-74

3.2.4.19 Collaboration Diagram Mengirim SMS Pemberitahuan .III-75

3.2.5 Activity Diagram .III-75

3.2.5.1 Activity Diagram Bagian Administrasi .III-76

3.2.5.2 Activity Diagram Bagian Keuangan .III-78

3.2.5.3 Activity Diagram SMS Gateway .III-79

3.2.5.3 Activity Diagram Pemilik .III-79

3.2.5.3 Activity Diagram SMS Gateway .III-81

3.2.6 Statechart Diagram .III-81

3.2.6.1 Statechart Diagram Login .III-81

3.2.6.2 Statechart Diagram Tambah Data Siswa Pemilik .III-82

3.2.6.3 Statechart Diagram Laporan Keuangan .III-83

3.2.6.4 Statechart Diagram Melihat Laporan Jumlah Siswa .III-83

3.2.6.5 Statechart Diagram Melihat Jadwal Belajar .III-84

3.2.6.6 Statechart Diagram Melihat Melihat Kapasitas Ruangan .III-84

3.2.6.7 Statechart Diagram Melihat Data Siswa .III-85

3.2.6.8 Statechart Diagram Melihat Data Pengajar .III-85

3.2.6.9 Statechart Diagram Mengelola Data Pembayaran .III-86

3.2.6.10 Statechart Diagram Mengelola Data Ruangan .III-86

3.2.6.11 Statechart Diagram Mengelola Data Siswa .III-87

3.2.6.12 Statechart Diagram Mengelola Data Pengajar .III-87

3.2.6.13 Statechart Diagram Mengelola Daftar Hadir Pengajar .III-88

3.2.6.14 Statechart Diagram Mengelola Daftar Hadir Siswa .III-88

3.2.6.15 Statechart Diagram Mengelola Jadwal Belajar .III-89

3.2.6.16 Statechart Diagram Melihat Daftar Hadir Siswa .III-90

3.2.6.17 Statechart Diagram Melihat Daftar Hadir Pengajar .III-90

3.2.6.18 Statechart Diagram Mengelola Kuota Kelas .III-91

3.2.6.19 Statechart Diagram Mengirim SMS Pemberitahuan .III-91

3.2.7 Component Diagram .III-92

3.2.8 Deployment Diagram .III-92

3.2.9 Perancangan Basis Data .III-92

3.2.9.1 *Conceptual Data Model (CDM)* .III-93

3.2.9.2 *Physical Data Model (PDM)* .III-93

3.2.10 Struktur Menu .III-96

3.2.10.1 Form Login .III-96

3.2.10.2 Tampilan Bagian Pemilik .III-97

3.2.10.3 Tampilan Bagian Administrasi .III-98

3.2.10.4 Tampilan Bagian Keuangan .III-98

**Bab IV Implementasi dan pengujian ...............................................................IV-100**

4.1 Implementasi ...........................................................................................IV-100

4.1.1 Lingkungan Implementasi ..............................................................IV-100

4.2 Tampilan Antar Muka .............................................................................IV-100

4.2.1 Halaman Login ...............................................................................IV-100

4.2.2 Halaman *Home* Bagian Keuangan .................................................IV-101

4.2.3 Halaman Input Pembayaran ...........................................................IV-102

4.2.4 Halaman Edit Pembayaran .............................................................IV-102

4.2.5 Halaman Home Bagian Administrasi .............................................IV-103

4.2.6 Halaman View Siswa .....................................................................IV-103

4.2.7 Halaman *Edit* Siswa .......................................................................IV-103

4.2.8 Halaman *Input* Daftar Hadir Siswa .................................................IV-104

4.2.9 Halaman *Edit* Daftar Hadir Siswa ..................................................IV-104

4.2.10 Halaman *Input* Daftar Hadir Pengajar ..........................................IV-105

4.2.11 Halaman *Edit* Daftar Hadir Pengajar ...........................................IV-105

4.2.12 Halaman *Input* Jadwal Belajar ......................................................IV-106

4.2.13 Halaman *Edit*  Jadwal Belajar ......................................................IV-107

4.2.14 Halaman *Input* Detail Jadwal Belajar ...........................................IV-107

4.2.15 Halaman *Edit* Detail Jadwal Belajar ............................................IV-108

4.2.16 Halaman Home Pemilik ...............................................................IV-108

4.2.17 Halaman Input Siswa ....................................................................IV-109

4.2.18 Halaman Jumlah Siswa ................................................................IV-109

4.3 Pengujian *Blackbox* .................................................................................IV-110

4.3.1 Identifikasi dan Rencana Pengujian ...............................................IV-110

**Bab V Kesimpulan dan Saran V-119**

5.1 Kesimpulan V-119

5.2 Saran V-119

**DAFTAR PUSTAKA**