

BAB IV

IMPLEMENTASI DAN PENGUJIAN

4.1. Instalasi *Software*

Dalam pembuatannya aplikasi ini dibuat menggunakan menggunakan Xampp 1.8.1 yang merupakan sebuah paket *software yang* digunakan dalam pemrograman dimana paket tersebut terdiri :

- a. PHP (*Perl Hypertext preprocessor*)versi 5.4.7.
- b. MySqlversi5.5.27 yang digunakan sebagai *database*.
- c. phpMyAdminversi3.5.2.2 .
- d. Sublime Text Versi 3126 sebagai *text editor*

4.2 Implementasi *Hardware* dan *Software*

Dalam mengembangkan aplikasi ini tentu memerlukan perangkat keras (*Hardware*)sebagai penunjang, dimana dalam pengembangannya diperlukan dua perangkat yaitu compute runtuk proses pengembangannya. Berikut inispesifikasi minimum perangkatkeraspenunjang:

- a. Komputer
 1. Processor : Pentium 4
 2. RAM : 2 GB
 3. Operating System : Windows 10

4.3 Implementasi Basis Data

Dalam pembuatan database, aplikasi ini menggunakan MySql yang dapat di manajemen dengan phpMyAdmin seperti gambar berikut:

1. Tabel Users

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(10)		UNSIGNED	No	None		AUTO_INCREMENT	Change Drop Primary Unique More
2	email	varchar(50)	utf8mb4_unicode_ci		No	None			Change Drop Primary Unique More
3	password	varchar(191)	utf8mb4_unicode_ci		No	None			Change Drop Primary Unique More
4	remember_token	varchar(100)	utf8mb4_unicode_ci		Yes	NULL			Change Drop Primary Unique More
5	created_at	timestamp			Yes	NULL			Change Drop Primary Unique More
6	updated_at	timestamp			Yes	NULL			Change Drop Primary Unique More
7	user_name	varchar(50)	utf8mb4_unicode_ci		Yes	NULL			Change Drop Primary Unique More
8	contact_number	varchar(13)	utf8mb4_unicode_ci		Yes	NULL			Change Drop Primary Unique More
9	id_customer	varchar(10)	utf8mb4_unicode_ci		Yes	NULL			Change Drop Primary Unique More

Gambar 4.1 Tabel Users

2. Tabel Passports

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	user_id	int(10)		UNSIGNED	No	None			Change Drop Primary Unique Index Spatial More
2	date_issue	date			No	None			Change Drop Primary Unique Index Spatial More
3	expiry_date	date			No	None			Change Drop Primary Unique Index Spatial More
4	no_passport	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
5	given_name	varchar(60)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
6	last_name	varchar(30)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
7	date_of_birth	date			No	None			Change Drop Primary Unique Index Spatial More
8	place_of_birth	date			No	None			Change Drop Primary Unique Index Spatial More

Gambar 4.2 Tabel Passport

3. Tabel Applications

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	interview_date	date			No	None			Change Drop Primary Unique Index Spatial More
2	no_referensi	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
3	no_passport	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
4	contact_number	varchar(13)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More

Gambar 4.3 Tabel Application

4. Tabel Verifications

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	no_referensi	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
2	date_submit	date			No	None			Change Drop Primary Unique Index Spatial More
3	status	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More

Gambar 4.4 Tabel Verifications

4.4 Implementasi Program

Berikut adalah implementasi program sesuai dengan rancangan layar yang telah dibuat sebelumnya, antara lain :

1. Halaman Dashboard



Gambar 4.5 Halaman Dashboard

2. Halaman Form Registrasi



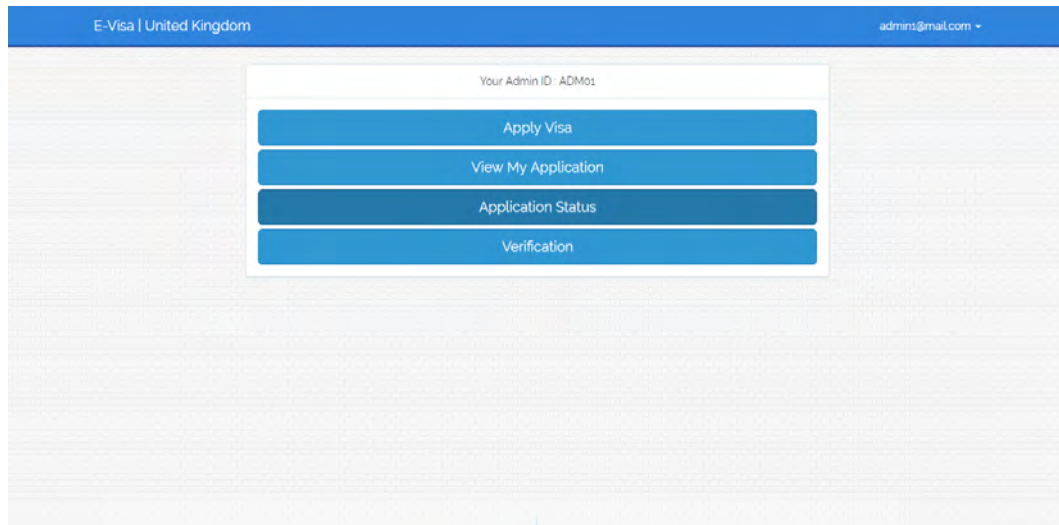
Gambar 4.6 Halaman Form Registrasi

3. Halaman Login



Gambar 4.7 Halaman Login

4. Halaman Menu Utama



Gambar 4.8 Halaman Menu Utama

5. Form Detail Personal Information

The screenshot displays the "Personal Information" form within the E-Visa system. The header includes "Electronic Visa UK" and "Your Customer ID: UK005". The form is divided into two main sections: "Personal Information" and "Passport Information". The "Personal Information" section contains input fields for "Given Name", "Last Name", "Date of Birth" (with a date format hint "mm/dd/yyyy"), "Place of Birth", "Contact Number", and "Email Address". The "Passport Information" section includes fields for "No. Passport", "Issue Date" (with a date format hint "mm/dd/yyyy"), and "Expiry Date" (with a date format hint "mm/dd/yyyy"). At the bottom of the form, there are two buttons: "Back" and "Save & Continue". A large, semi-transparent watermark for "UNIVERSITAS MERCU BUANA" is overlaid on the center of the form.

Gambar 4.9 Detail Personal Information

6. Tampilan Menu Form Family Data

Electronic Visa UK andia@live.com

Your Customer ID UKIX5

Form Family

What is this person relationship to you? Mother Father Stepmother Stepfather

Marital Status:

Given Name:

Last Name:

Date of Birth:

Place of Birth:

Nationality:

About your dependants

Are there people who need you for financial support, including those who are travelling with you and those who are not?

Children under 18
 Children over 18 who live with you at home
 Children who you look after all the time
 Older relatives who need you for accommodation or other support

Marital Status:

Given Name:

Last Name:

Date of Birth:

Place of Birth:

Nationality:

Gambar 4.10 Tampilan Menu Form Family Data

7. Tampilan Menu Form *Employment*

E-Visa | United Kingdom akun@mail.com

UNIVERSITAS MERCU BUANA

Your Customer ID UKBAW

How much of your total money income is given to your family members and other dependants?

What is the cost to you personally of your trip in GBP(£)?

The total amount of money you have for this trip.

The cost of the aeroplane, boat or train tickets.

The cost of your accommodation.

The cost of your living expenses.

Is someone other than you paying for all a part of your trip? Yes No

How much do you spend each month on living cost?

Gambar 4.11 Tampilan Menu Form *Employment*

8. Tampilan Menu Form Travel & Criminal

E-Visa | United Kingdom akuni@mail.com

Your Customer ID : UKBAW

Have you been issued any visa for the uk , UK overseas Territories or Commonwealth Country in the last 10 years? Yes No

Have you ever travelled to the UK in the last 10 years ? Yes No

Have you made an application to the Home Office to remain in the UK in the last 10 years? Yes No

Have you been refused entry to the UK in the last 10 years (e.g. at a UK airport or seaport)? Yes No

Have you been refused a visa for any country including the UK in the last 10 years Yes No

Have you been deported, removed or otherwise required to leave any country including the UK in the last 10 years? Yes No

Have you ever voluntarily elected to depart the UK? Yes No

Are you, or have you been subject to, an exclusion order from the UK ? Yes No

Gambar 4.12 Tampilan Menu Form Travel & Criminal

9. Tampilan Form Upload Dokumen

E-Visa | United Kingdom akuni@mail.com

Your Customer ID : UKBAW

1. Consent Letters and Proof of Relationship : No file chosen
This includes: Sponsor Letter From Parents, Custody/Courts Letters, Birth Certificate, Household Register

2. Employment Evidence : No file chosen

3. Financial Evidence : No file chosen
This includes: Bank Book, Bank Reference Letter, Financial Report, Marketing Documents.

4. Educational Evidence : No file chosen
This includes: High School & University Certificate Transcripts, School Reports, Letter From Educational Institute.

5. Sponsor Evidence : No file chosen
This includes: Sponsor Passport, Invitation Letter, Support Letter, Sponsor Proof of Accommodation.

6. Accomodation - Permanent / Temporary : No file chosen

7. Tuberculosis (TB) Certificate : No file chosen

8. Additional Documents / Others : No file chosen
e.g Death Certificate / Other Document etc.

9. Appendix II : No file chosen

Gambar 4.13 Tampilan Form Upload Dokumen

10. Tampilan Form View My Application

E-Visa | United Kingdom akun1@mail.com

Your Customer ID : UKBAW

Reference Number : UKR001	Place of Birth : Jakarta	Form Family Data
Interview Date : 05/05/2018	Contact Number : 08134455678	Form Employment
No Passport : IDN123456	Email Address : Sanusi@gmail.com	Form Travel
Given Name : Sanusi Bahari	Address : Setu, Pamulang Barat	Form Upload Document
Last Name : Bahari	Date Issue : 01/05/2013	
Date of Birth : 11/07/1995	Expiry Date : 01/05/2018	

[Save](#) [Edit](#) [Delete](#) [Print](#)

Gambar 4.14 Tampilan Form View My Application

11. Tampilan Form Cetak Formulir

United Kingdom Electronic Visa Application

Reference Number:



APPLICANT BIOGRAPHIC DETAILS AND TRAVEL DATE

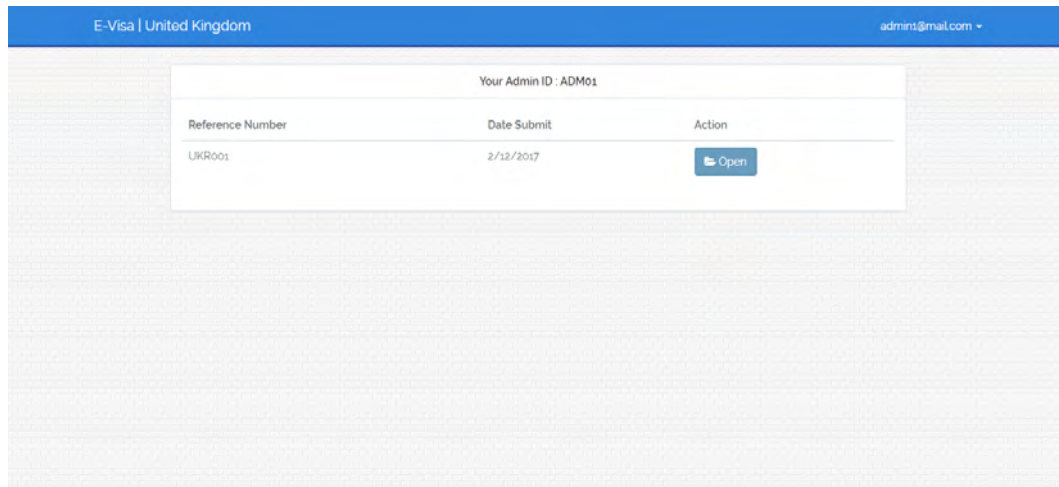
Given Names	Sanusi
Family Name	Bahari
Date of Birth	11/07/1995
Place of Birth	Jakarta
Passport Number	IDN 123456
Nationality	Indonesia

VISA APPLICANT CONTACT DETAILS

Applicants Email Address	akun1@mail.com
Applicant Primary Number	08134455678

Gambar 4.15 Tampilan Form Cetak Formulir

12. Tampilan Menu Form Verification



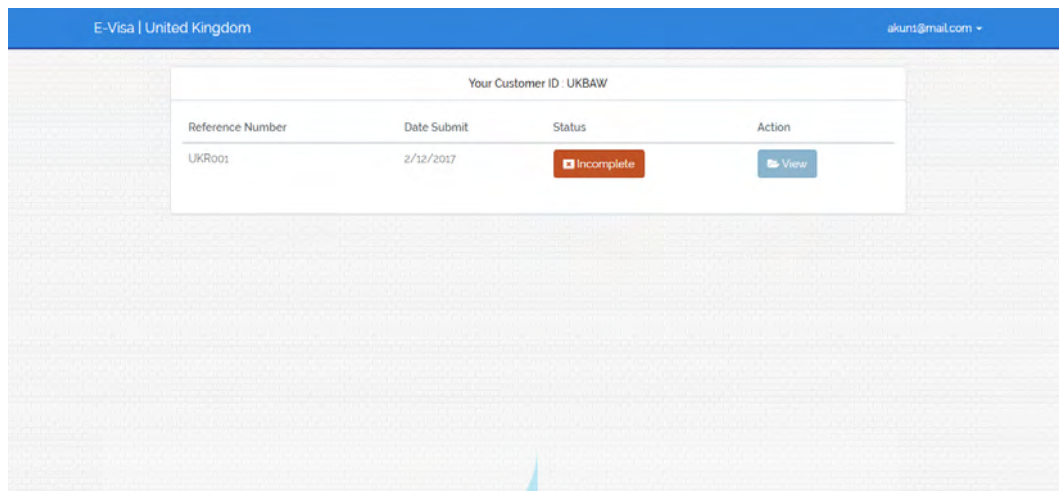
Gambar 4.16 Tampilan Menu Form Verification

13. Tampilan Menu Form Detail Verification



Gambar4.17 Tampilan Menu Form Detail Verification

14. Tampilan Form Status Application



Gambar 4.18 Tampilan Form Status Application

15. Form Bukti Cetak Pengambilan Visa

United Kingdom Electronic Visa Application

Reference Number	UKR001
Interview Date	05/05/2018
No. Passport	IDN123456
Given Name	Sanusi Bahari
Last Name	Bahari
Date of Birth	11/07/1995
Contact Number	08134455678
Email Address	Sanusi1@gmail.com
Address	Setu, Pamulang Barat
Date Issue	01/05/2013
Expiry Date	01/05/2018

Gambar 4.19 Tampilan Form Bukti Cetak Pengambilan Visa

16. Form Confirmation Interview Date

Gambar 4.20 Tampilan Form Confirmation Interview Date

4.5 Pengujian Unit

Pengujian terhadap program yang dibuat menggunakan *blackbox testing* yang focus terhadap proses masukan dan keluaran program.

a. Pengujian Terhadap Form Login

Tabel 4.1. Pengujian *Blackbox Testing* pada form Login

No	Skenario pengujian	Text Case	Hasil yang diharapkan	Hasil Pengujian	Kesimpulan
1.	<i>Email laddres</i> dan <i>password</i> tidak diisi kemudian klik tombol <i>login</i> .	<i>Email Addres</i> ⊗kosong) <i>Password</i> ⊗kosong)	Sistemakan menolak akses dari <i>user</i> dan menampilkan “ <i>Please fill out this field</i> ”	Sesuai harapan	Valid
2	<i>Email addres</i> dan <i>password</i> tidak diisi kemudian klik tombol <i>login</i> .	<i>Email Addres</i> :Made <i>Password</i> ⊗kosong)	Sistemakan menolak akses dari <i>user</i> dan menampilkan “ <i>Please fill out this field</i> ”	Sesuai harapan	Valid
3	<i>Email addres</i> tidak diisi dan <i>password</i> diisi kemudian klik	<i>Username</i> ⊗kosong) <i>Password</i> :	Sistemakan menolak akses dari <i>user</i> dan menampilkan	Sesuai harapan	Valid

	tombol login	123123	" <i>These cridentials do not match our record</i> "		
4	Mengetikan salah satu kondisi salah pada <i>Email address</i> atau <i>Password</i> kemudian klik tombol <i>login</i>	<i>Username:</i> Made <i>Password:</i> 123	Sistem akan menolak akses dari <i>user</i> dan menampilkan " <i>These cridentials do not match our record</i> "	Sesuai harapan	Valid
5	Mengetikan <i>Email address</i> dan <i>Password</i> dengan data yang benar kemudian klik tombol <i>login</i>	<i>Username:</i> Made <i>Password:</i> 123123	Sistem akan menerima akses <i>admin</i> lalu menampilkan halaman menu utama	Sesuai harapan	Valid

b. Pengujian Terhadap Form *Register*

No	Skenario pengujian	<i>Text Case</i>	Hasil yang diharapkan	Hasil Pengujian	Kesimpulan
1	Mengetikan <i>Name</i> dengan data yang benar kemudian klik tombol <i>Register</i>	<i>Name:</i> (Kosong)	Sistem akan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid
2	Mengetikan <i>Contact Number</i> dengan data yang benar kemudian klik tombol <i>Register</i>	<i>Contact Number:</i> (Kosong)	Sistem akan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid
3	Mengetikan <i>Email Address</i> dan <i>Password</i> dengan data yang benar kemudian klik tombol <i>Register</i>	<i>Email Address:</i> (Kosong) <i>Password:</i> (Kosong)	Sistem akan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid
4	Mengetikan <i>Confirm Password</i> dengan data yang benar kemudian klik	<i>Confirm Password:</i> (Kosong)	Sistem akan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid

	tombol <i>Register</i>				
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Tabel 4.2. Pengujian *Blackbox Testing* pada form *Register*

c. Pengujian Terhadap Form Data *Detail Personal*

Tabel 4.3. Hasil Pengujian *Blackbox Testing* pada form Data *Detail Personal*

No	Skenario pengujian	<i>Text Case</i>	Hasil yang diharapkan	Hasil Pengujian	Kesimpulan
1.	<i>Given Names</i> dan <i>Last Name</i> tidak diisi kemudian klik tombol <i>Save And Continue</i> .	<i>Given Names</i> (⊖kosong) <i>Last Name</i> (⊖kosong)	Sistemakan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid
2	<i>Date Of Birth</i> dan <i>Place Of Birth</i> tidak diisi kemudian klik tombol <i>Save And Continue</i> .	<i>Date Of birth</i> (⊖kosong) <i>Place Of Birth</i> (⊖kosong)	Sistemakan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid
3	<i>Contact Number</i> dan <i>Email Address</i> tidak diisi kemudian klik tombol <i>Save And Continue</i> .	<i>Contact Number</i> (⊖kosong) <i>Email Address</i> (⊖kosong)	Sistemakan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid
4	<i>No Passport</i> tidak diisi kemudian klik tombol <i>Save And Continue</i> .	<i>No Passport</i> (⊖kosong)	Sistemakan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid
5	<i>Issue Date</i> dan <i>Expiry Date</i> tidak diisi kemudian klik tombol <i>Save And Continue</i> .	<i>Issue Date</i> (⊖kosong) <i>Expiry Date</i> (⊖kosong)	Sistemakan menolak akses dari user dan menampilkan " <i>Please fill out this field</i> "	Sesuai harapan	Valid

4.6 Analisis Pengujian

Setelah melakukan pengujian terhadap beberapa fungsi system pada aplikasi E – Form pembuatan visa, maka dapat disimpulkan bahwa pengujian telah menunjukkan hasil yang sesuai dengan rancangan aplikasi dari program ini. Hasil yang didapatkan dari pengujian diatas adalah fungsi dari program ini berjalan dengan baik dan benar, itu semua telah dibuktikan dari hasil scenario pengujian menggunakan *Black Box Testing*.

