

Web-Based New Student Admissions Information System at the Adzkia Integrated Islamic Elementary School (SDIT)

Maikiansi¹, Aswin Akbar²

^{1,2} Program Studi Manajemen, Sekolah Tinggi Ilmu Manajemen Sukma, Indonesia

Abstract

The information system for admitting new students is one of the processes in educational institutions such as schools that are useful for making it easier to screen prospective students who will be selected according to the expected criteria and determined by the school. In this study the application was at the Adzkia Integrated Islamic Elementary School, which had been done manually and had not been computerized. The author is motivated to create an Information System for making a web about Admission of New Students at the Adzkia Integrated Islamic Elementary School. Admission of New Web-Based Students with the Prototype model development method and with an object-oriented system approach that is modeled using PHP, HTML and SQL which is able to manage data quickly and to avoid cheating entering data. Admission of New Students has several stages, namely registration, selection, and announcement of acceptance of new students.

Keywords: *HTML, Information Systems, PHP, SQL, Web*

Copyright (c) 2023 Maikiansi

✉ Corresponding author :

Email Address : maikiansi790@gmail.com

INTRODUCTION

The rapid development of information technology influences and has a big impact on human life, progress is something that we cannot avoid in this life, because technological progress will go hand in hand with advances in science, especially advances in education (Podins & Lavrenovs, 2018; Putra, 2009; Sopandi & Kurnianda, n.d.; Varela & Barbosa, 2012).

The e-learning system or distance learning system, online library, e-campus and online student registration are proof that information technology is increasingly in demand and has even become a necessity (Alattas et al., n.d.; Haqi, 2019; Nugraha & Syarif, 2018). Because, every innovation that is created to provide positive benefits for human life (Morales-del-Castillo et al., 2009; Pathania et al., 2018; Shen et al., 2009).

Education is an effective means of supporting the development and improvement of human resources in a positive direction (Solihin, 2017; Zein & Sari, 2018). Technological developments in the manual student registration system have begun to be abandoned and take advantage of technological developments such as the online registration system (Azra, 1994; Garcia-Alfaro & Navarro-Arribas, 2007; Nurrohmah & Nugraha, 2021; Oda & Somayaji, 2010; Rietta, 2006; Wijaya et al., 2022).

Adzkia's Integrated Islamic Elementary School (SDIT) is an elementary school located on Jln. Cendrawasih Neighborhood 04 Paya Kiri Tengah, North Pelawi, P. Brandan (Eviani et al., 2016). The system for registering prospective new students in integrated Islamic elementary schools as a whole still uses a manual process and fills out forms. Information on the Integrated Islamic Elementary School is only obtained through brochures, banners, billboards and through social media, such as from WA, IG and FB. In addition, for prospective new students who have difficulties in terms of taking and returning forms, because it requires more time and costs. Therefore, the author is interested in changing a new registration system using the Website, where information about SDIT adzkia can be loaded on the website page so that it helps prospective students register using the online form available on the Website.

METHODOLOGY

This research was conducted at the Adzkia Integrated Islamic Elementary School located on Jl. Bird of Paradise Link IV PKT. North Pelawi Village, Babalan District, Langkat Regency, North Sumatra. The reason for the researcher taking the place of research at the Adzkia Integrated Islamic Elementary School is to make data collection easier. When the research was conducted at the Adzkia Integrated Islamic Elementary School from April 2023.

The type of data used is primary data obtained directly from the research subject by taking data on visits by Prospective New Students in monthly reports for the 2022 period. Meanwhile, secondary data is obtained from interviews and observations with the person in charge and the principal of the Adzkia Islamic Elementary School.

Methods Data collection was carried out by observation and interviews. This study uses qualitative data using the SDLC (System Development Life Cycle) method, which is a system process known as a life cycle with several stages, the famous classical SDLC model is called the waterfall model. The stages of system design using a waterfall include planning, system analysis, system design, system implementation (program code), testing, and system operation and implementation.

RESULTS AND DISCUSSION

Software Requirements Analysis

Stages of Analysis

This stage is useful as a process of identifying the needs of every aspect related to the new student admissions website at Adzkia Integrated Islamic Elementary School. Some of the specifications that have been designed are as follows:

Admin page

- 1) Admin can login
- 2) Admin can manage school profiles
- 3) Admin can manage web gallery
- 4) Admin can manage the registration form
- 5) Admin can manage registrant recap reports
- 6) Admin can log out

Prospective students page

- 1) Prospective students can open the website
- 2) Prospective students can read school information
- 3) Prospective students can register online
- 4) Prospective students can see the announcement

Design Stages

Database design

In this database design stage, the author divides the database into 4 tables namely:

- 1) Admin Login Tables

This table is used to store admin login data, so that only the data listed in the admin table can log into the new admissions website for Adzia Integrated Islamic Elementary School to perform data processing.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	username	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
3	password	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More

Figure 1. Admin login table

- 2) Student Data Table

This table is used to record the personal data of prospective students such as Student Name, NIK, Place and Date of Birth and others which will later be separated by the parent data table or additional data table.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
2	Tanggal_daftar	date			Yes	NULL			Change Drop More
3	nama_lengkap	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
4	nik	varchar(16)	utf8mb4_general_ci		Yes	NULL			Change Drop More
5	jenis_kelamin	enum('Laki-laki', 'Perempuan')	utf8mb4_general_ci		Yes	NULL			Change Drop More
6	tempat_lahir	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
7	tanggal_lahir	date			Yes	NULL			Change Drop More
8	agama	enum('Islam')	utf8mb4_general_ci		Yes	NULL			Change Drop More
9	anak_ke	int(11)			Yes	NULL			Change Drop More
10	jumlah_saudara_kandung	int(11)			Yes	NULL			Change Drop More
11	jumlah_saudara_tiri	int(11)			Yes	NULL			Change Drop More
12	jumlah_saudara_angkat	int(11)			Yes	NULL			Change Drop More
13	nisan	varchar(10)	utf8mb4_general_ci		Yes	NULL			Change Drop More
14	alamat_lengkap	text	utf8mb4_general_ci		Yes	NULL			Change Drop More
15	no_hp	varchar(15)	utf8mb4_general_ci		Yes	NULL			Change Drop More
16	berat_badan	decimal(5,2)			Yes	NULL			Change Drop More
17	tinggi_badan	decimal(5,2)			Yes	NULL			Change Drop More
18	golongan_darah	enum('A', 'B', 'AB', 'O')	utf8mb4_general_ci		Yes	NULL			Change Drop More
19	penyakit	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
20	bertempat_tinggal_dengan	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
21	alat_transportasi	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
22	waktu_tempuh	time			Yes	NULL			Change Drop More
23	no_kps	varchar(16)	utf8mb4_general_ci		Yes	NULL			Change Drop More

Figure 2. Student data table

- 3) Parent Data Table

This table will be used to recapitulate parental data from prospective students who will enroll in the Adzkia Integrated Islamic Elementary School which will later be interconnected with the Student Data table that was created previously.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2 id_siswa	int(11)			Yes	NULL			Change Drop More
<input type="checkbox"/>	3 nama_ayah	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	4 nik_ayah	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	5 tempat_lahir_ayah	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	6 tanggal_lahir_ayah	date			Yes	NULL			Change Drop More
<input type="checkbox"/>	7 pendidikan_terakhir_ayah	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	8 pekerjaan_ayah	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	9 penghasilan_bulanan_ayah	enum('Kurang dari 1 juta', '1-2 juta', '2-5 juta', ...)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	10 nama_ibu	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	11 nik_ibu	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	12 tempat_lahir_ibu	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	13 tanggal_lahir_ibu	date			Yes	NULL			Change Drop More
<input type="checkbox"/>	14 pendidikan_terakhir_ibu	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	15 pekerjaan_ibu	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	16 penghasilan_bulanan_ibu	enum('Kurang dari 1 juta', '1-2 juta', '2-5 juta', ...)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	17 nama_wali	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	18 tempat_lahir_wali	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	19 tanggal_lahir_wali	date			Yes	NULL			Change Drop More
<input type="checkbox"/>	20 hubungan_keluarga_wali	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	21 pendidikan_terakhir_wali	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	22 pekerjaan_wali	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More

Figure 3. Parent data table

4) Additional Data Tables

Contains additional information regarding the origin of previous education from prospective students who will enroll in the Adzkia Integrated Islamic Elementary School.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 id	int(11)			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2 id_siswa	int(11)			Yes	NULL			Change Drop More
<input type="checkbox"/>	3 asal_murid	enum('Rai', 'Taman kanak-kanak')	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	4 nama_taman_kanak_kanak	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	5 alamat_tk	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	6 nama_sekolah_asal	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More
<input type="checkbox"/>	7 diterima_di_sekolah_ini_pada_tanggal	date			Yes	NULL			Change Drop More
<input type="checkbox"/>	8 tingkat	varchar(255)	utf8mb4_general_ci		Yes	NULL			Change Drop More

Figure 4. Supplementary table

User Interface

1) Main Page Display

The main page or Home is the index page that opens for the first time when a visitor opens the url or domain of the school's website. The home page contains basic information about the Adzkia Integrated Islamic Elementary School.



Figure 5. Display main page

2) View the Registration Form Page

It is on this page that prospective students will fill in the information according to the brochure when the new student admission system is still manual. This Registration Form page will contain information about prospective students, parent and guardian data as well as additional data that will be needed in the process of admitting new students at the school Adzkia's Integrated Islamic Fundamentals.

Formulir Penerimaan Siswa Baru Sekolah Dasar Islam Terpadu Adzkia

Nama Lengkap:
Masukkan Nama Lengkap

NIK:
Masukkan NIK

Jenis Kelamin:
Laki-laki

Tempat Lahir:
Masukkan Tempat Lahir

Tanggal Lahir:
dd / mm / yyyy

Agama:
Islam

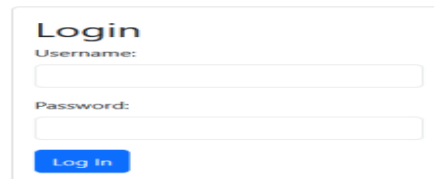
Anak Ke:
Masukkan Anak Ke

Jumlah Saudara Kandung:

Figure 6. Display of the registration form page

3) Display the Login page

The login page functions for the school admin to enter and access the data of prospective students who have entered or inputted originating from filling out the form on the registration form page. Prospective new students at Adzkia Integrated Islamic Elementary School.



Login

Username:

Password:

Figure 7. View of the login page

4) Display Admin Page

On this page later the admin can recap the data that has been entered from prospective students who have registered. Later this page can only be accessed if the admin has successfully logged in which aims to maintain data security for the Adzkia Integrated Islamic Elementary School.

Tampil Data Siswa

ID	Tanggal Daftar	Nama Lengkap	NIK	Jenis Kelamin	Tempat Lahir	Tanggal Lahir	Agama	Anak ke	Jumlah Saudara Kandung	Jumlah Saudara Tiri	Jumlah Saudara Angkat	NISN	Alamat Lengkap	No. HP	Berat Badan	Tinggi Badan	Golongan Darah	Penyakit	Bertempat Tinggal dengan	Alat Transportasi	Waktu Tempuh	No. KPS	Aksi
1	2023-05-31	aaa	334	Laki-laki	3dfafda	1111-11-11	Islam	1	1	1	1	1	1	1	1.00	1.00	A	1	1	1	11:11:00	2	<input type="button" value="Edit"/> <input type="button" value="Hapus"/>
2	2023-05-31	dfaf	33333	Laki-laki	faer	2000-11-11	Islam	1	1	1	1	1	1	1	1.00	1.00	A	1	1	1	11:11:00	1	<input type="button" value="Edit"/> <input type="button" value="Hapus"/>
4	2023-05-31	zikry	111111	Laki-laki	medan	2001-11-11	Islam	1	1	1	-1	1	medan	123456	35.00	120.00	A	0	Orang tua	becak	00:15:00	1	<input type="button" value="Edit"/> <input type="button" value="Hapus"/>

Figure 8. Display of the admin page

CONCLUSION

The conclusions from the research that has been carried out are: (1) There is a web-based information system at the Adzkia Integrated Islamic Elementary School. (2) With the existence of a new web-based student admissions information system, it is hoped that there will be no more lost data due to manual data collection using paper forms. (3) With the existence of a web-based new admissions information system, it is hoped that schools can further promote schools because they can be accessed from anywhere via the internet. (4) This web-based new student admissions information system can later be developed from a prototype model to live so that it can help both the school and prospective new students who will register at the Adzkia Integrated Islamic School.

References :

- Alattas, S., Orlando, E., & SKom, M. (n.d.). Application of Borrowing and Return the Book in Library Azzira Using Microsoft Visual Basic 6.0. Jurnal Sistem Informasi STMIK Jakarta STI&K, 133050.
- Azra, A. (1994). Pendidikan Tinggi Islam dan Kemajuan Sains," Pengantar untuk Charles Michael Stanton, Pendidikan Tinggi dalam Islam, penerj. Afandi Dan Hasan Asari Dari Higher Learning in Islam: The Classical Period AD, 700-1300.

- Eviani, S., Rizki, S. D., & Pratiwi, M. (2016). Sistem Informasi Penerimaan Siswa Baru Berbasis Web Pada Smpn 34 Kabupaten Tebo. *Jurnal Teknologi*, 6(1).
- Garcia-Alfaro, J., & Navarro-Arribas, G. (2007). Prevention of cross-site scripting attacks on current web applications. *On the Move to Meaningful Internet Systems 2007: CoopIS, DOA, ODBASE, GADA, and IS: OTM Confederated International Conferences CoopIS, DOA, ODBASE, GADA, and IS 2007*, Vilamoura, Portugal, November 25-30, 2007, Proceedings, Part II, 1770-1784.
- Haqi, B. (2019). Aplikasi SPK Pemilihan Dosen Terbaik Metode Simple Additive Weighting (SAW) Dengan Java. Deepublish.
- Morales-del-Castillo, J. M., Peis, E., & Herrera-Viedma, E. (2009). A filtering and recommender system prototype for scholarly users of digital libraries. Springer.
- Nugraha, W., & Syarif, M. (2018). Penerapan Metode Prototype Dalam Perancangan Sistem Informasi Penghitungan Volume Dan Cost Penjualan Minuman Berbasis Website. *JUSIM (Jurnal Sistem Informasi Musirawas)*, 3(2), 94-101.
- Nurrohman, S. F., & Nugraha, M. F. (2021). Build Website-Based Equipment Inventory Information System in Pesantren Al Ma'soem. *IOP Conference Series: Materials Science and Engineering*, 1115(1), 12047.
- Oda, T., & Somayaji, A. (2010). Visual Security Policy for the Web. *HotSec*.
- Pathania, A., Radhika, B. S., & Shyamasundar, R. (2018). MySecPol: A Client-Side Policy Language for Safe and Secure Browsing. *Information Systems Security: 14th International Conference, ICISS 2018, Bangalore, India, December 17-19, 2018, Proceedings 14*, 427-447.
- Podins, K., & Lavrenovs, A. (2018). Security implications of using third-party resources in the world wide web. *2018 IEEE 6th Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE)*, 1-6.
- Putra, S. J. (2009). Development of Integrated Web Based Academic Information System: A Case Study at Secondary Islamic School of Muhammadiyah. *JURNAL TEKNIK INFORMATIKA*, 2(1).
- Rietta, F. S. (2006). Application layer intrusion detection for SQL injection. *Proceedings of the 44th Annual Southeast Regional Conference*, 531-536.
- Shen, Y., Liu, Z., Luo, S., Fu, H., & Li, Y. (2009). Empirical research on e-government based on content mining. *2009 International Conference on Management of E-Commerce and e-Government*, 91-94.
- Solihin, H. H. (2017). Perancangan Sistem Informasi Penerimaan Siswa Baru Berbasis Web (Studi Kasus: SMP Plus Babussalam Bandung). *Infotronik: Jurnal Teknologi Informasi Dan Elektronika*, 1(1), 54-63.
- Sopandi, N., & Kurnianda, N. R. (n.d.). Implementing a Work Program Monitoring Information System (Case Study at PT Telkom Tbk).
- Varela, A., & Barbosa, M. L. A. (2012). The Complexity of Finding Information in Collaborative Information Systems: Cognitive Needs. In *Systems Science and Collaborative Information Systems: Theories, Practices and New Research* (pp. 87-120). IGI Global.
- Wijaya, S., Andhika, A., & Ilyas, M. (2022). Development of Sales Information System for SME with the Waterfall Method: A Grocery Store BSR Case. *Jurnal Teknik Informatika (JUTIF)*, 3(4), 1043-1049.
- Zein, A. S., & Sari, E. M. (2018). Pengembangan Sistem Informasi Penerimaan Siswa Baru Berbasis Web Di Sma 1 Annuqayah Sumenep. *Jurnal Ilmiah Edutic: Pendidikan Dan Informatika*, 4(2), 53-62.