PSM 2 Demo Video https://youtu.be/ocoPN-kl0Uc

PSM 2 Slide Presentation Video https://youtu.be/U3pAPRRcA38

PSM 2 Project Presentation



Student Academic Management System for SMAS Muhammadiyah 1 Banda Aceh

MUHAMMAD DARLEN SAVA A19EC0258







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Acknowledgement

PROF. MADYA. TS. DR. Mohd Shahizan Bin Othman as Supervisor

Rahmawati S.Pd as Stakeholder



Introduction



Problem Background

- In the current day of modern technologies, many tasks and jobs have started to be done automatically throughout many fields of work.
- Many institutions have already made their sophisticated system that records and manage all of a student's data, but here in Aceh, Indonesia is still a step behind.
- One example of institution that still does not have a website to check/manage students' academic data is SMAS Muhammadiyah 1, a private high school located in Banda Aceh City, Indonesia.



Project Aim

- This project aims to create an effective solution to enable the institution to convert its manual student management system into a computerized system.
- Introduce the computerized system to students and teachers of SMAS Muhammadiyah
- Increase the efficiency of managing student's academic data



Objectives

The objectives of this project include:

- To identify the requirements of the student academic management system
- To design the student academic management system based on the Stakeholder's requirement
- To develop the student academic management system based on the Stakeholder's requirement
- To test the functionalities of the student academic management system according to stakeholder's requirement

Scopes

The scopes of this project are:

- This project only focused on the conversion of manually managing student data to a website that stores all of the student's data, which can be accessed by teachers, and students.
- SMAS Muhammadiyah 1 will provide the data that is needed for the system
- Users in this system are teachers, students, and admins of SMAS Muhammadiyah.



Literature Review



Semester

Tahun Pelajaran : 2021/2022

: 1 (Satu) / Ganjil

Manual Operation

DAFTAR NILAI SEMESTER : <u>GANJIL</u> TAHUN PELAJARAN : <u>2020/2021</u>

 Mata Pelajaran
 : Fisika
 Kelompok Mapel
 : IIS

 Kelas
 : XI
 Guru Mapel
 : Rahmawati, S.P.d

No			Nama Siswa	L/P	Nilai Perolehan (NP)		Kompetensi	Deskripsi Kompetensi
Urut	NIS	NISN		~.	Angka	Huruf		2 courses recurs
					78	С	Pengetahuan	Cukup mampu menguasai materi pelajaran yang disajikan, namun perlu ditingkatkan lagi pemahaman pada materi Momen gaya dan Momen inersia.
1	9391	0022235491	Putri Aliffa Riesty P	p	78	С	Keterampilan	Sudah terampil dan mandiri dalam mengerjakan tugas yang di berikan, namun perlu ketelitan dalam mengerjakan soal-soal yang diberikan dan masih perlu ditingkatkan juga kemahiran berhitungnya.
					15	В	Sikap	Baik, pertahankan sikap sopan dan santun terhadap guru dan diharapkan lebih disiplin dan lebih bertanggung jawab terhadap semua tugas yang diberikan.
2			Alfarisi	L	72	С	Pengetahuan	Cukup mampu menguasai materi pelajaran yang disajikan, namun perlu ditingkatkan lagi pemahaman pada materi Fluida statik khususnya sub materi Hukum pascal dan Hukum archimedes.
				75	С	Keterampilan	Cukup terampil dan mandiri dalam	

Mark Recap

Nama Sekolah : SMA Muhammadiyah 1 Banda Aceh Kelas : XI MIPA

: Jln. Ujong Batee Setui Banda Aceh

Nama : Sheila Faiqah Aurora Nomor Induk/NISN : 9460/ 0053357399

Alamat

B. Pengetahuan dan Keterampilan

No	Mata Dalatana	ккм	Peng	etahuan	Keterampilan	
No	Mata Pelajaran		Nilai	Predikat	Nilai	Predikat
Kelo	ompok A (Umum)					
1	Pendidikan Agama dan Budi Pekerti	70	85	В	85	В
2	Pendidikan Pancasila dan Kewarganegaraan	70	85	В	85	В
3	Bahasa Indonesia	70	85	В	85	В
4	Matematika	70	83	В	84	В
5	Sejarah Indonesia	75	83	В	80	В
6	Bahasa Inggris	75	90	В	90	В
Kelo	ompok B (Umum)		5			
1	Seni Budaya	75	85	В	83	В
2	Pendidikan Jasmani, Olah Raga, dan Kesehatan	75	85	В	83	В
3	Prakarya dan Kewirausahaan	80	85	В	85	В
4						
Kelo	ompok C (Peminatan)					100
1	Biologi	75	84	В	82	В
2	Kimia	70	82	В	82	В
3	Fisika	70	85	В	84	В
4	Matematika	70	82	В	80	В
5	Ekonomi	70	83	В	83	В
6						

*) : Bila ada

Tabel interval predikat berdasarkan KKM.
Predikat

Academic Report



Manual Operation



Attendance Book

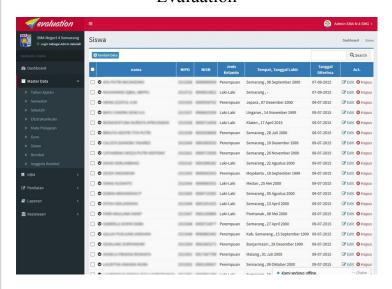


Tuition Card

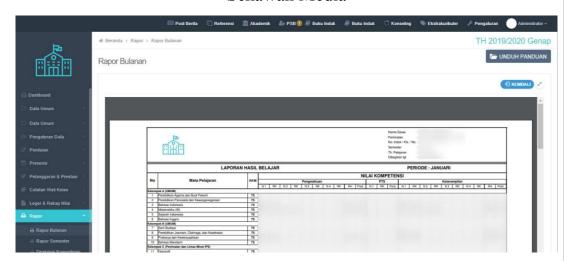


Similar Existing System Analysis

Evaluation



Sekawan Media





Similar Existing System Analysis

Function/Feature	evaluation	Sekawan Media Aplikasi Rapor Online	
Report Marking	Yes	Yes	
Manage Academic Report	Yes	Yes	
Generate Report	Yes	Yes	
Tuition Record Management	No	No	
Admin Dashboard	Yes	Yes	
Generating Timetable	No	No	
View Timetable	No	No	
Centralized Database	Yes	Yes	
Attendance Record Management	No	Yes	



Technology Used

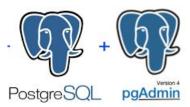




















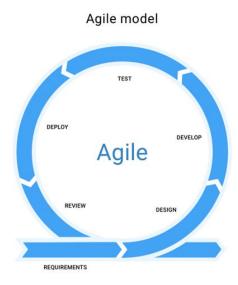
System Development Methodology



Methodology Choice and Justification

Agile methodology was chosen for several reasons:

- Agile methodology is one of the most popular methodologies used in development nowadays.
- The Agile SDLC development approach emphasizes customer satisfaction, and development across several short cycles, or sprints, instead of a top-down process with a single set of steps
- In these sprints, a task or function of the system has to be done based on the time set. Because of this, the development will have a rapid delivery of the system since each sprint, there is something to show to the stakeholders.

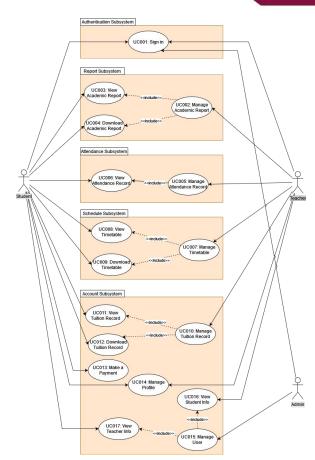




Requirement Analysis and Design



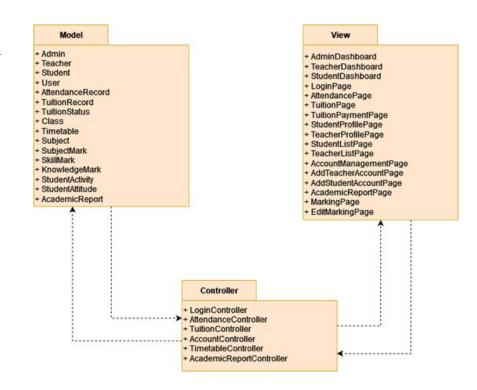
Functional Requirement Use Case Diagram





Project Design

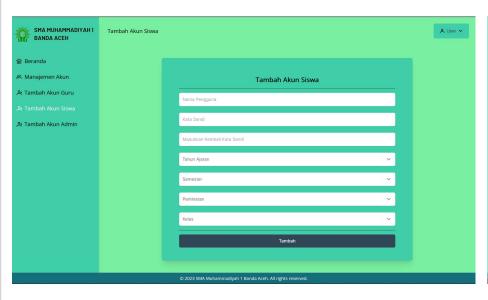
Architecture Model

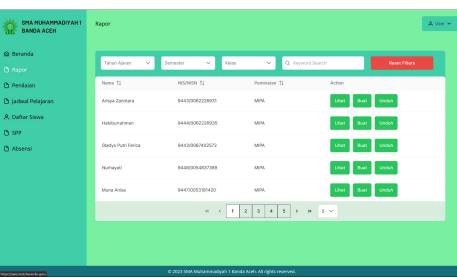






User Interfaces of the main functions







Testing

Table 5.1 User Testing Result

Table 3.1 Us	ser Testing Result		
User Acceptance Testing Result			
Questions	Average Satisfaction		
1. Does the system effectively perform all	8.5/10		
the functions requirements?			
2. Is the user interface of the system intuitive	9/10		
and easy to navigate?			
3. Does the system handle errors effectively	7.5/10		
and provide meaningful error messages?			
4. Is the system's performance satisfactory	8/10		
under various loads?			
5. Are the system's security measures	8/10		
effective and reliable?			



Testing

	Table 5.2 A	Admin Add Student Account				
Tester Name	RAHMAWATI					
Date	23 June 2023					
Module	Account Module					
		Instruction				
1. Login	Login with Admin Account					
2. Click	2. Click "Tambah Akun Siswa"					
3. Enter the required input						
4. Click	"Tambah"					
5. Logout by clicking the top right menu and click "Keluar" button						
Expected Result						
1. Should	1. Should be able to logged in as Admin					
2. Should	2. Should be able to view the "Tambah Akun Siswa" Page					
3. Should	3. Should be able to input all the required fields					
4. Should	be able to create the stud	dent account with the provided input				

Actual Result

- 1. Successfully logged in as Admin
- 2. Successfully view the "Tambah Akun Siswa" Page

5. Should be able to logged out from the sytem

- 3. Successfully input all the required fields
- 4. Successfully create the student account with the provided input
- Successfully logged out from the system

Table 5.4 Teacher Marking Stud

	1 able 5.4	Teacher Warking Student
Tester Name	YULIANA	
Date	23 June 2023	
Module	Report Module	
	W 7	Transference + proces

- 1. Login with Teacher Account
- 2. Click "Penilaian"
- 3. Select the filter to view the desired student
- 4. Click the "Nilai" button
- 5. Input the required field
- 6. Click the "Save" button
- 7. Logout by clicking the top right menu and click "Keluar" button

Expected Result

- 1. Should be able to logged in as Teacher
- 2. Should be able to view the "Penilaian" Page
- 3. Should be able to view the desired student
- 4. Should be able to view the input mark page
- 5. Should be able to save the mark for the student
- 6. Should be able to logged out from the system

Actual Result

- 1. Successfully logged in as Teacher
- 2. Successfully view the "Penilaian" Page
- 3. Successfully view the desired student
- 4. Successfully view the input mark page
- 5. Successfully save the mark for the student
- 5. Successfully logged out from the system



Conclusion



Conclusion

Achievement of Project Objectives

- The system has been successfully developed.
- The system also implements all the required function stated in PSM 1.
- The system has been implemented in a test environment such as User Acceptance Testing to ensure its proper functioning and fixing bugs as much as possible.



Conclusion

Suggestions for Future Improvement

- Integrated payment system for tuition payment, so that the payment system is more efficient and secure
- Integration with third party LMS (Learning Management System)
- Integration with email services such as notification.



Thank You





