

Republic of the Philippines Western Mindanao State University COLLEGE OF COMPUTING STUDIES Department of Information Technology Zamboanga City



Socio-Economic Research and Data Analytics Center Website with Content Management System

In partial fulfillment of the requirements in IT 138 – IT Elective 3

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Date of Submission:

March 11, 2023



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CHAPTER 1 - PROJECT OVERVIEW

1.1 PRODUCT OVERVIEW

The Socio-Economic Research Data Analyst Center (SERDAC) is a corporation that specializes in providing research and data analysis services for socioeconomic issues. SERDAC, as a research-oriented corporation, collects, analyzes, and provides data for clients from various disciplines such as government agencies, non-profit organizations, academic institutions, and private companies.

Moreover, one of the problems of WMSU SERDAC is the lack of an effective and efficient way to display their services and data analysis and so forth using a website. This issue may hinder their business growth because clients and visitors may prefer to experience and see a more user-friendly website. further, a website that can be also easily manage by the company.

The proposed solution for WMSU SERDAC is to develop a website with Content Management System (CMS) that will allow them to manage their website content more efficiently. This will enable them to showcase their services, projects, and trainings, data analysis results in a clear and organized manner. Additionally, the CMS will provide a user-friendly interface that will allow guests and clients to easily navigate through the website and find the information they need.

Some of the features that will be included in the project system are user management, content creation and management, content organization, media library, and forms and surveys, etc. These features will enable SERDAC to efficiently manage their website content and enhance the user experience for their clients and visitors. This will result in increased client/customer's satisfaction and growth for the company.

1.2 PROJECT SITE

The Western Mindanao State University (WMSU) is a public research university based in Zamboanga City, Philippines, that has earned its reputation as a leading academic institution in the region. Established in May 2022, WMSU-SERDAC is located at University Research Center, Western Mindanao State University, Zamboanga City and is run by a project team led by Dr. Teresita A. Narvaez, WMSU Vice President for Research Extension Services and External Linkages and WESMAARRDEC Director.



The center aims to provide policymakers, clients, and stakeholders with reliable data that can help them make informed decisions about regional development and governance. In addition, the center is committed to providing capacity-building initiatives, including training programs for researchers and data analysts. This will help develop a sustainable research culture in the region, contributing to long-term development.

The project's main objective is to become a catalyst for positive change in the region, providing evidence-based research and analysis that can help shape policies and programs to improve the socio-economic conditions of people in the area. The WMSU Satellite Socio-Economic Research and Data Analytics Center is envisioned to be a crucial partner for policymakers and stakeholders, providing them with the necessary data and insights they need to make informed decisions that will lead to sustainable development. The project's ultimate goal is to contribute to the development of the region by creating a culture of research and analysis that will support informed decision-making for years to come.

1.3 Background of the client

The company's client leader name is Anabel Eniquez Gamorez. She graduated from Mindanao State University, Iligan Institute of Technology back in the year of 2019 with a degree of Doctor of Philosophy in Mathematics. She lives in Cawit, Zamboanga City. She finished her primary school at Cawit Elementary School in the year 1995.

In the year 2010 to 2012, she became a treasurer in the Mathematics and Statistics Department Program Adviser in Mathematics Program. Then in September 2020 to august 2020 she became a department head in the Department of Mathematics and Statistics. She started working as an Assistant Professor II from July 2019 to November 3, 2020, and was promoted to Assistant Professor IV.

The company's science research specialist name is Moh. Shanizee A. Sarabi. He graduated from the University of Connecticut, United States of America major in Social Entrepreneurship and Economic Development back in the year 2022. He lives in Our Lady of Fatima Subdivision, Boalan, Zamboanga City. Back in the year 2021 he took an online education

From January 2022 to May 2022, he was a research analyst intern in Western Mindanao Agriculture, Aquatic, and Natural Resources Research and Development Consortium. Then in September 2022, he became a science research specialist in Socio-Economic Research and Data Analyst Center.





1.4 COMPANY OF THE CLIENT

1.4.1 PRODUCT SUMMARY

With the Socio-Economic Research Data analyst Center Content Management System, organizations, and researchers in the field of socio-economic research can efficiently manage their data and content. Our product offers a range of features and modules including user management, content creation and management or CMS, content organization, media library, forms, and surveys.

The primary goal of our product is to make data collection, analysis, and sharing in the field of socioeconomic research easier. Our target audience consists of clients, guests, researchers, and organizations who need to manage and analyze complex data sets and projects. Our product offers an easy-to-use interface, with intuitive features that help admin users to efficiently manage their data and content.

By using our product, the organization can streamline their research processes, manage appointments, posts, contents, trainings, data repositories, and make better decisions based on accurate and up-to-date data, and so forth. Our product also offers features to ensure that data is protected from unauthorized access. We believe that our product will provide significant value to the socio-economic research community, and we are excited to bring this innovative solution to our client.

1.4.2 List of Features

- Content Management:
 - o Create, edit, and delete posts and pages
 - Categorize content with categories.
 - Add media to content (e.g., images, videos, audio)
- User Management:
 - Create and manage user
 - Assign different user roles and permissions
- Content Organization:
 - Create and manage taxonomies (e.g., categories, tags)
- Media Library:
 - Upload and manage images, videos, and other media files
- Search Functionality:
 - o Implement a search bar or search page
 - Enable content search across the CMS
- Login/Logout:
 - Secure login with username and password
 - logout functionality to protect user data
- Admin Panel





CHAPTER 2 – THE COMPANY

2.1. COMPANY PROFILE

ZENO A COMPANY THAT ADVISES US "TO GIVE UP WHAT WE WANT SO THAT OTHERS CAN HAVE WHAT THEY NEED", A COMPANY THAT IS WILLING TO TAKE THE RISK AND ALL THE EFFORTS JUST TO PROVIDE THE BEST FOR THE CLIENTS. ALSO, WHEN IT IS REVERSED, IT BECOMES "ONEZ," WHICH MEANS THAT OUR COMPANY WILL WORK AS ONE, AND AS A TEAM TO PROVIDE PROMISING AND FINER SERVICES TO OUR CLIENTS EVEN IF IT MEANT LEAVING OUR DESIRE BEHIND.

"Clients/customers our first priority".

2.2. COMPANY LOGO



2.3. COMPANY VISION

To become the leading center in providing high-quality products and good services against other companies.

2.4. COMPANY MISSION

Provide customers with a positive experience, efficient services, and practical products that will make their lives easier and produce lasting solutions. Offering branded products and services of the highest caliber and value, enhancing the lives of customers around the world.

2.5. COMPANY GOALS

The company's list of goals will provide direction on how and what can be done to achieve these objectives:

- Deliver high quality products, fast and reliable services to customers.
- Build good relationship between clients and co-workers

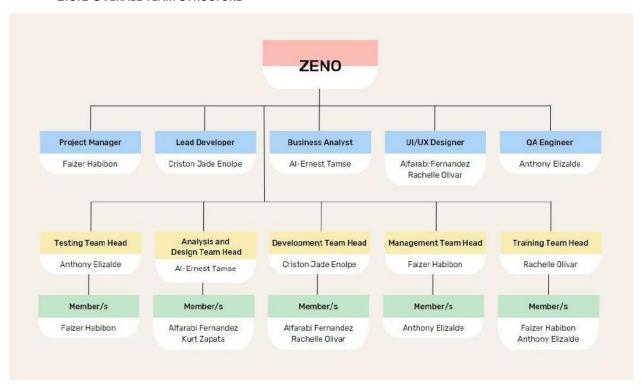




- Building mutual trust
- Maintaining consistency and quality work w/ the development progress from start to finish
- •Creating tools that is trustworthy, accurate, and efficient by employing the right strategies for software engineering. Provide long term (or lasting) solutions that will improve the quality of lives of our clients.

2.6 COMPANY ORGANIZATIONAL STRUCTURE

2.6.1 OVERALL TEAM STRUCTURE



2.6.2. MANAGEMENT TEAM

Head: Faizer Habibon Member: Anthony Elizalde

2.6.3. ANALYSIS AND DESIGN TEAM

Head: Al-Ernest Tamse Member: Alfarabi Fernandez Member: Kurt Zapata

2.6.4. DEVELOPMENT TEAM

Head: Criston Jade Enolpe Member: Alfarabi Fernandez Member: Rachelle Olivar





2.6.5. TESTING TEAM

Head: Anthony Elizalde Member: Faizer Habibon

2.6.6. TRAINING TEAM

Head: Rachelle Olivar Member: Faizer Habibon Member: Anthony Elizalde

2.7. COMPANY POLICY

2.6.1 MEETINGS

i. Meeting will be scheduled weekly

ii. Team members should arrive on time

iii. Member/s should inform other members if there are any conflict in the scheduled meeting ahead of time

2.6.2 FUNDING

Funding will be collected from contributions and penalty charges.

2.6.3 LIST OF OFFENSES AND PENALTIES

Nature of Offense	Penalty of Offense
1. Attending the scheduled meeting late	1st offense: Warning 2nd offense: ₱20.00 fine 3rd offense: Name of offender will be forwarded to the teacher
2. Failure to attend the meeting	1st offense: Warning 2nd offense: ₱50.00 fine 3rd offense: Name of offender will be forwarded to the teacher
3. Late submissions of assigned work	1st offense: Warning 2nd offense: ₱50.00 fine 3rd offense: Name of offender will be forwarded to the teacher
4. Failure to inform in case of emergency absences	1st offense: Warning 2nd offense: ₱50.00 fine
5. Inactivity in the group	1st offense: Warning 2nd offense: Name of offender will be forwarded to the teacher





6. Refusal to cooperate in the group	1st offense: Warning 2nd offense: Name of offender will be forwarded to the teacher
7. Abusive and vulgar language	1st offense: Warning 2nd offense: ₱100.00

2.8. COMPANY AGREEMENT

See Appendix A.

2.9. CLIENT AGREEMENT

See Appendix B.



CHAPTER 3 – PROJECT PLAN AND SCHEDULE

3.1. ACTION PLAN

#	Activity	Time Estimates			Required	Dependencies	Person in Charge			
	, .c,	Duration	Start	End	Resources	Dependenties	. c.30 c.1a.8c			
	Phase 1 – Planning and Data Gathering									
1.1	Create a Company				Internet, Laptop	-	ALL			
1.2	Design a Company Logo	1 Day	Jan 26,	Jan 26,	Internet, Laptop	1.1	Faizer A. Habibon			
1.3	Define Company Mission, Vision, and Goals		2023	2023	Internet, Laptop	1.1	Faizer A. Habibon & Al-Ernest Tamse			
1.4	Define Company Organizational Structure	1 Day	Jan 27, 2023	Jan 27, 2023	Internet, Laptop	1.1	Anthony Elizalde			
1.5	Define Company Policies and Penalties	1 Day	Jan 28, 2023	Jan 28, 2023	Internet, Laptop	1.4	Rachelle Olivar			
1.6	Establish Promote Company		Jan 29, Jan 29,	Jan 29,	Internet, Laptop	1.5	Kurt Zapata			
1.7	Identify Data Collection method	1 Day	2023	2023	Internet, Laptop	1.5	Al-Ernest Tamse			
1.8	Create Questionnaire for Interview	1 Day	Jan 30, 2023	Jan 30, 2023	Internet, Laptop	1.7	Rachelle Olivar & Al-Ernest Tamse			
1.9	Interview Client	1.5	Jan 31, 2023	Jan 31, 2023	Internet, Laptop, Network Device	1.8	ALL			
1.10	Close Deal with Client	- 1 Day	Jan 31, 2023	Jan 31, 2023	Internet, Laptop, Network Device	1.8	ALL			





			•	•			1
1.11	Conduct Initial Data		Jan 31,	Jan 31,	Internet, Laptop	1.8	ALL
	Gathering		2023	2023	internet, Laptop		ALL
1.12	Transcribe and Analyze	4 D	Jan 29, Jar	Jan 29,	lake merk lanke a	1.8	Al Fancet Temps
	Collected Data	1 Day	2023	2023	Internet, Laptop		Al-Ernest Tamse
1.13	Propose Initial Solution for		Jan 31,	Jan 29,		1.8	
	the Project	2 Day	2023	2023	Internet, Laptop		ALL
			Feb 27,	Feb 28,	Internet, Laptop,		
1.14	Create Project Action Plan	2 Days	2023	2023	Network Device	1.13	Rachelle Olivar & Faizer Habibon
					Network Device		
1.15	Determine Project	1 Day	Feb 28,	Feb 28,	Internet, Laptop	1.14	Al-Ernest Tamse
	Milestones and Deliverables	100,	2023	2023	meernet, Laptop	2.21	7 ii Emese rumse
1.16	Create Work Breakdown				Internet, Laptop	1.15	Rachelle Olivar
	Structure				internet, Laptop	1.13	Ractielle Olivai
1.17	Create and Online Project	4 D	Mar. 1,	Mar. 1, Mar. 1, 2023	Internet, Laptop	1.16	Dealt all a Oliver
	Board	1 Day	2023 20				Rachelle Olivar
	Create and online Gannt				Internet, Laptop	1.16	Rachelle Olivar
1.18	Chart						
1.19	Create Activity Network		Mar. 4,	Mar. 4,		1.16	
	, Diagram	1 Day	2023	2023	Internet, Laptop		Anthony Elizalde
1.20	Determine Project Critical	1 Day	Mar. 5,	Mar. 1,	Internet, Laptop	1.16	Al-Ernest Tamse & Anthony
	Path and Slack Time		2023	2023			Elizalde
1.21	Collate Project	1 Day	Mar. 6,	Mar. 6,	Internet Lenten	1.18	Faizer A. Habibon
	Documentation for Phase 1	1 Day	2023	2023	Internet, Laptop	1.10	raizei A. Habiboli
				Phase	2 - Analysis		
					- Allalysis		
2.1		1 Day	Mar. 1,	Mar. 1,	Internet, Laptop	1.19	Faizer A. Habibon
2.1	Determine Project Cost	_ Duy	2023	2023	пистись, шаркор	1.15	raizer / a riabibon
2.2	Conduct Foosibility	2 Days			Internet, Laptop	2.1	ALL
	Conduct Feasibility	,			, , ,		





		1			Г	1	T
2.3	List Initial Project				Internet, Laptop	2.1	ALL
	Requirements						, ,==
2.4	Determine Hardware				Internet Lenten	2.1	Faizer A. Habibon
2.4	Requirements				Internet, Laptop		Faizer A. Habiboii
	Determine Software		Mar. 1,	Mar. 2,		2.1	
2.5	Requirements		2023	2023	Internet, Laptop		ALL
	Determine Network					2.1	
2.6	Requirements				Internet, Laptop		ALL
	Determine Database					2.1	
2.7	Requirements				Internet, Laptop		Criston Jade Enolpe
	Identify Software						
2.8	Specifications				Internet, Laptop	2.6	Criston Jade Enolpe
	Specificacións	2 Days	Mar. 2,	Mar. 3,		2.6	
2.9	List Product Features	2 Days	2023	2023	Internet, Laptop		Faizer A. Habibon
2.10					Internet, Laptop	2.6	AL-Ernest Tamse
2.10	List Product Attributes				miternet, Euptop		/Limest runise
2.11	Create Product Mockups	1 Day	Mar. 3,	Mar. 3,	Internet, Desktop	2.9	Rachelle Olivar & Kurt Zapata &
2.11	create i roddet wioekups	1 Day	2023	2023	Laptop	2.3	Faizer Habibon
2.12	Finalize Documentation for	4.0	Mar. 4,	Mar. 4,	latera et leuter	2.40	Faizer A. Habibon
2.12	Phase II	1 Day	2023	2023	Internet, Laptop	2.10	Faizer A. Habibon
			•	Dhara	2. Danier		
				Phase	3 - Design		
	Determine System				Internet, Desktop		
3.1	•				Laptop	2.11	Rachelle Olivar
	Architecture					2.44	
3.2		2 Days	Feb. 6,	Feb. 7,	Internet, Desktop	2.11	AL-Ernest Tamse
J.2	Create Business Use Case		2023	2023	Laptop		AL LINESCIAINSE
					Internet, Desktop	2.11	
3.3	Create Context and Data				Laptop		AL-Farabi Fernandez
	Flow						





3.4	Design System Models	2 Days	Feb. 7,	Feb. 7, Feb. 8,	Feb. 7, Feb	Feb. 8,	Feb. 7, Feb. 8,	Feb. 7, Feb. 8,	Internet, Desktop Laptop	3.3	AL-Farabi Fernandez & Rachelle Olivar
3.5	Design User Interface	2 Days	2023	2023	Internet, Desktop Laptop	3.3	AL-Farabi Fernandez				
3.6	Create Product Prototype	2 Days	Feb. 8, 2023	Feb. 10, 2023	Internet, Desktop Laptop	3.5	AL-Farabi Fernandez				
3.7	Finalize Documentation for Phase III	1 Day	Feb. 13, 2023	Feb. 13, 2023	Internet, Laptop	3.6	Faizer A. Habibon				
	Phase 4 - Coding										
4.1	Write System Module 1 - Main Page Module				Internet, Desktop Laptop	3.7	AL-Farabi Fernandez				
4.2	Write System Module 1 - News, Services, Dara Repository, Gallery, About Us, Contact Us, Services Modules	3 Days	<i>'</i>	Feb. 16, 2023	Internet, Desktop Laptop	4.1	AL-Farabi Fernandez				
4.3	Get Feedback from a Consultant 1	1 Day	Feb. 17, 2023	Feb. 17, 2023	Internet, Laptop, Network Device	4.2	ALL				
4.4	Debug, Fix Bugs, and Update Modules	2 Days	Feb. 18, 2023	Feb. 20, 2023	Internet, Desktop Laptop	4.3	AL-Farabi Fernandez & Criston Jade Enolpe				
4.5	Write System Module 2 – Admin Dashboard Module	2 Days	Feb. 27, 2023	Feb. 28, 2023	Internet, Desktop Laptop	4.4	Criston Jade Enolpe				





4.6	Write System Module 3 – Content Management System	7 Days	Feb. 28, 2023	Mar. 6, 2023	Internet, Desktop Laptop	4.5	Criston Jade Enolpe	
4.7	Integrate System Modules	2 Days	Mar. 7, 2023	Mar. 7, 2023	Internet, Desktop Laptop	4.6	AL-Farabi Fernandez & Criston Jade Enolpe	
4.8	Get Feedback from Consultant 2	1 Day	Mar. 8, 2023	Mar. 8, 2023	Internet, Laptop, Network Device	4.7	ALL	
4.9	Debug, Fix Bugs, and Update Modules	2 Days	Mar. 9, 2023	Mar. 10, 2023	Internet, Desktop Laptop	4.8	AL-Farabi Fernandez & Criston Jade Enolpe	
4.10	Conduct Unit Testing	1 Day	Mar. 10, 2023	Mar. 10, 2023	Internet, Desktop Laptop	4.9	AL-Farabi Fernandez & Criston Jade Enolpe & Anthony Elizalde	
4.11	Finalize Product Design and Coding	2 Days	Mar. 10, 2023	Mar. 11, 2023	Internet, Desktop Laptop	4.10	AL-Farabi Fernandez & Criston Jade Enolpe	
	Phase 5 - Testing							
5.1	Create Testing Plan	2 Days	Mar. 12, 2023	Mar. 13, 2023	Internet, Laptop	4.11	ALL	
5.2	Create Test Cases	2 Days	Mar. 14, 2023	Mar. 15, 2023	Internet, Laptop	5.12	Anthony Elizalde	
5.3	Conduct Alpha Testing	2 Days	Mar. 16, 2023	Mar. 17, 2023	Internet, Laptop	5.1	ALL	





5.4	Conduct Beta Testing	2 Days	Mar. 18, 2023	Mar. 19, 2023	Internet, Laptop	5.2	ALL	
5.5	Fix System Errors	6 Days	Mar. 20, 2023	Mar. 26, 2023	Internet, Laptop	5.3	AL-Farabi Fernandez & Criston Jade Enolpe	
5.6	Conduct Software/Product Attributes Testing				Internet, Laptop	5.4	ALL	
5.7	Conduct User Acceptance Testing	6 Days	Mar. 27, 2023	Apr. 3, 2023	Internet, Laptop	5.5	ALL	
5.8	Create Migration Plan				Internet, Laptop	5.6	ALL	
5.9	Deploy System/Product to Client's Site	2 Days	Apr. 4, 2023	Apr. 5, 2023	Internet, Laptop	5.7	ALL	
	Phase 6 – Maintenance							
6.1	Create Product manual	2 Days	Apr. 6, 2023	Apr. 7, 2023	Internet, Laptop	5.8	ALL	
6.2	Gather and Analyze Customer Feedback	2 Days	Apr. 8, 2023	Apr. 9, 2023	Internet, Laptop	6.1	ALL	
6.3	Perform Corrective Maintenance	2 Days	Apr. 10, 2023	Apr. 11, 2023	Internet, Laptop	6.2	ALL	
6.4	Perform Perfective maintenance	2 Days	Apr. 12, 2023	Apr. 13, 2023	Internet, Laptop	6.3	ALL	
6.5	Perform Adaptive Maintenance	2 Days	Apr. 14, 2023	Apr. 15, 2023	Internet, Laptop	6.4	ALL	
6.6	Finalize Project Documentation	3 Days	Apr. 16, 2023	Apr. 19, 2023	Internet, Laptop	6.5	ALL	
6.7	Turn-over Project to Client	1 Day	Apr. 20,	Apr. 20 ,	Internet, Laptop	6.6	ALL	





3.2. NETWORK DIAGRAM

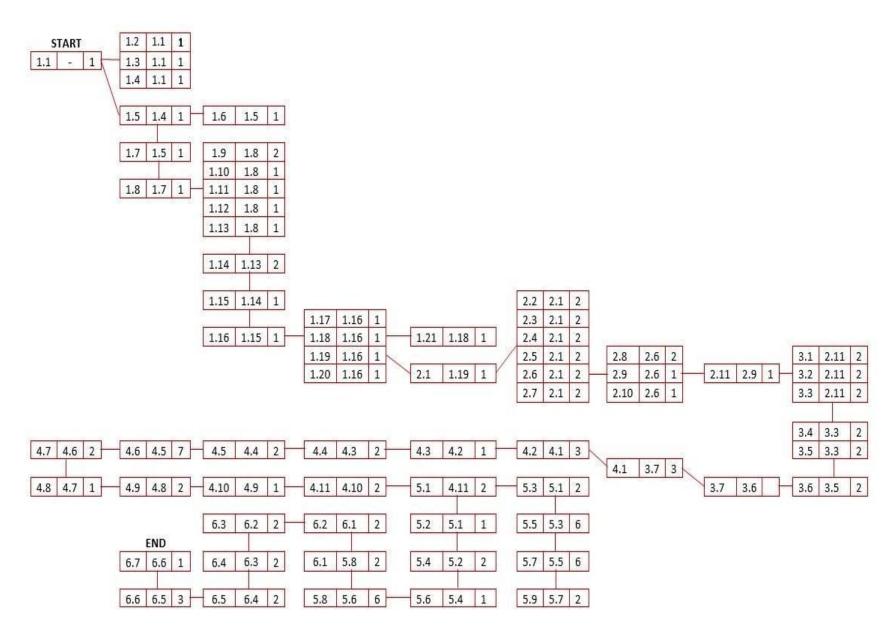
ACTIVITY	PREDECESSOR	DURATION
1.1	-	1
1.2	1.1	1
1.3	1.1	1
1.4	1.1	1
1.5	1.4	1
1.6	1.5	1
1.7	1.5	1
1.8	1.7	1
1.9	1.8	2
1.10	1.8	1
1.11	1.8	1
1.12	1.8	1
1.13	1.8	1
1.14	1.13	2
1.15	1.14	1
1.16	1.15	1
1.17	1.16	1
1.18	1.16	1
1.19	1.16	1
1.20	1.16	1
1.21	1.18	1
2.1	1.19	1
2.2	2.1	2
2.3	2.1	2
2.4	2.1	2
2.5	2.1	2
2.6	2.1	2
2.7	2.1	2
2.8	2.6	2
2.9	2.6	2

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ACTIVITY	PREDECESSOR	DURATION
2.10	2.6	2
2.11	2.9	1
2.12	2.10	1
3.1	2.11	2
3.2	2.11	2
3.3	2.11	2
3.4	3.3	2
3.5	3.3	2
3.6	3.5	2
3.7	3.6	1
4.1	3.7	3
4.2	4.1	3
4.3	4.2	1
4.4	4.3	2
4.5	4.4	2
4.6	4.5	7
4.8	4.6	2
4.9	4.7	1
4.10	4.8	2
4.11	4.9	1
5.1	4.11	2
5.2	5.1	2
5.3	5.1	2
5.4	5.2	2
5.5	5.3	6
5.6	5.4	6
5.7	5.5	6
5.8	5.6	6
5.9	5.7	2
6.1	5.8	2

ACTIVITY	PREDECESSOR	DURATION
6.2	6.1	2
6.3	6.2	2
6.4	6.3	2
6.5	6.4	2
6.6	6.5	3
6.7	6.6	1











3.3. ACTIVITY SLACK TIME

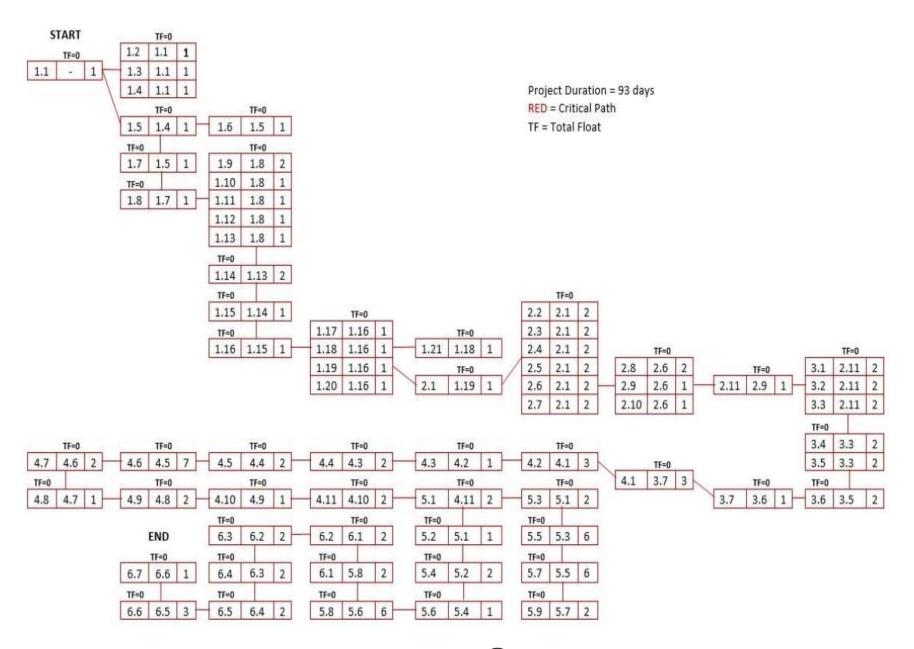
ACTIVITY	PREDECESSOR	DURATION
1.1	-	1
1.2	1.1	1
1.3	1.1	1
1.4	1.1	1
1.5	1.4	1
1.6	1.5	1
1.7	1.5	1
1.8	1.7	1
1.9	1.8	2
1.10	1.8	1
1.11	1.8	1
1.12	1.8	1
1.13	1.8	1
1.14	1.13	2
1.15	1.14	1
1.16	1.15	1
1.17	1.16	1
1.18	1.16	1
1.19	1.16	1
1.20	1.16	1
1.21	1.18	1
2.1	1.19	1
2.2	2.1	2
2.3	2.1	2
2.4	2.1	2
2.5	2.1	2
2.6	2.1	2
2.7	2.1	2
2.8	2.6	2
2.9	2.6	2

ACTIVITY	PREDECESSOR	DURATION
2.10	2.6	2
2.11	2.9	1
2.12	2.10	1
3.1	2.11	2
3.2	2.11	2
3.3	2.11	2
3.4	3.3	2
3.5	3.3	2
3.6	3.5	2
3.7	3.6	1
4.1	3.7	3
4.2	4.1	3
4.3	4.2	1
4.4	4.3	2
4.5	4.4	2
4.6	4.5	7
4.8	4.6	2
4.9	4.7	1
4.10	4.8	2
4.11	4.9	1
5.1	4.11	2
5.2	5.1	2
5.3	5.1	2
5.4	5.2	2
5.5	5.3	6
5.6	5.4	6
5.7	5.5	6
5.8	5.6	6
5.9	5.7	2
6.1	5.8	2

ACTIVITY	PREDECESSOR	DURATION
6.2	6.1	2
6.3	6.2	2
6.4	6.3	2
6.5	6.4	2
6.6	6.5	3
6.7	6.6	1











3.4. Project Milestone and Deliverables

MILESTONE	DELIVERABLES
Company Establishment	 Completed company profile including: Company name Company logo Company mission statement Company vision statement Company goals Company policies on meetings, funding, penalties and offenses Company organizational chart
Project Hunting Initial Data Gathering	 Completed initial interview with the client using pre-determined interview questions Signed client agreement form Conducted initial data gathering and transcribed/analyzed collected data Proposed initial solution for the project based on the data gathered
Project Plan	 Completed action plan including: Timeline for completing the project Roles and responsibilities of team members Detailed steps for completing the project Milestones and deliverables list with clear and specific objectives Wireframe design of the project
Network Diagram	Completed project critical path and slack time analysis
Project Cost	Product total funds
Project Requirements	 Completed list of hardware, software, network, and database requirements for the project Specifications for project features and attributes
Product Mockups	 Completed virtual design of software interface Completed design prototypes with specific objectives related to user experience and new requirements
Prototype Development	Completed initial prototype with feedback from the client and transcribed/analyzed collected data to improve the initial solution





	Completed final prototype with interpretation of the client's suggestions and any new requirements.
	System modules:
	Main Page module
	News
	Services
	Data repository
System Development	Gallery module/page
	➤ About us
	Contact us and services
	Content Management System
	Manage Post
	Manage images, etc.
	Admin dashboard
	 Unit testing, bug fixes, and module updates
Testing	Feedback from consultant
	Alpha and beta testing reports
	System testing and deployment



3.5. GANTT CHA

SERDAC Website with Content Management System

Company Name: ZENO Project Lead: Faizer A. Habibon Thu, 1/26/2023 Feb 6, 2023 Feb 13, 2023 Feb 20, 2023 Feb 27, 2023 Mar 6, 2023 Mar 13, 2023 1 Jan 23, 2023 Jan 30, 2023 Phase 1 Title Create a Company 1/26/23 1/26/23 1/26/23 1/26/23 Design a Company Logo Define Company Mission, Vision, and Goals 1/26/23 1/26/23 1/27/23 Define Company Organizational Structure 1/27/23 Define Company Policies and Penalties 1/28/23 1/28/23 1/29/23 1/29/23 Establish Promote Company 1/29/23 1/29/23 Identify Data Collection method Create Questionnaire for Interview 1/30/23 1/30/23 nterview Client 1/31/23 1/31/23 1/31/23 1/31/23 Close Deal with Client Conduct Initial Data Gathering 1/31/23 1/31/23 Franscribe and Analyze Collected Data 1/29/23 1/29/23 1/29/23 1/31/23 Propose Initial Solution for the Project 1/27/23 1/28/23 Create Project Action Plan Determine Project Milestones and Deliverables 1/28/23 1/28/23 Create Work Breakdown Structure 3/1/23 3/1/23 3/1/23 3/1/23 Create and Online Project Board 3/1/23 3/1/23 Create and online Gannt Chart Create Activity Network Diagram 3/4/23 3/4/23 Determine Project Critical Path and Slack Time 3/1/23 3/5/23 3/6/23 3/6/23 Collate Project Documentation for Phase 1 Phase 2 - Analysis etermine Project Cost 3/1/23 3/1/23 3/1/23 3/2/23 Conduct Feasibility 3/1/23 3/2/23 List Initial Project Requirements 3/1/23 3/2/23 Determine Hardware Requirements Determine Software Requirements 3/1/23 3/2/23 3/1/23 3/2/23 Determine Network Requirements 3/1/23 3/2/23 Determine Database Requirements Identify Software Specifications 3/2/23 3/3/23 List Product Features 3/2/23 3/3/23 3/2/23 3/3/23 List Product Attributes 3/3/23 3/3/23 Create Product Mockups Finalize Documentation for Phase II 3/4/23 3/4/23 Phase 3 - Design





	1	Jail 23, 2023 Jail 30, 2023 Feb 0, 2023 Feb 13, 2023 Feb 20, 2023 Feb 21, 2023 Mai 0, 2023 Mai 13, 2023
TASK	START	23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 31 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 12 23 14 15 12 12 13 14 15 16 17 18 19 20 20 21 22 23 24 25 26 27 28 11 23 14 15 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 11 23 14 15 12 12 13 14 15 16 17 18 19 20 21 22 23 24 12 22 23 24 12 23 14 15 12 13
Determine System Architecture	2/6/23	2/7/23
Create Business Use Case	2/6/23	2/7/23
Create Context and Data Flow	2/6/23	2/7/23
Design System Models	2/7/23	2/8/23
Design User Interface	2/7/23	2/8/23
Create Product Prototype	2/8/23	2/10/23
Finalize Documentation for Phase III	2/13/23	2/13/23
Phase 4 - Coding	3-4-	
Write System Module 1 - Main Page Module	2/13/23	2/16/23
Write System Module 1 - News, Services, Dara Repository, Gallery, About Us, Contact Us, Service Modules	2/13/23	2/16/23
Get Feedback from a Consultant 1	2/17/23	2/17/23
Debug, Fix Bugs, and Update Modules	2/18/23	2/20/23
Write System Module 2 – Admin Dashboard Module	2/27/23	2/28/23
Write System Module 3 – Content Management System	2/28/23	3/6/23
Integrate System Modules	3/7/23	3/7/23
Get Feedback from Consultant 2	3/8/23	3/8/23
Debug, Fix Bugs, and Update Modules	3/9/23	3/10/23
Conduct Unit Testing	3/10/23	3/10/23
Finalize Product Design and Coding	3/10/23	3/11/23
Phase 5 - Testing		
Create Testing Plan	3/12/23	3/13/23
Create Test Cases	3/14/23	3/15/23
Conduct Alpha Testing	3/16/23	3/17/23
Conduct Beta Testing	3/18/23	3/19/23
Fix System Errors	3/20/23	3/26/23
Conduct Software/Product Attributes Testing	3/27/23	4/3/23
Conduct User Acceptance Testing	3/27/23	4/3/23
Create Migration Plan	3/27/23	4/3/23
Deploy System/Product to Client's Site	4/3/23	4/4/23
Phase 6 - Maintenance		
Create Product manual	4/6/23	4/7/23
Gather and Analyze Customer Feedback	4/8/23	4/9/23
Perform Corrective Maintenance	4/10/23	4/11/23
Perform Perfective maintenance	4/12/23	4/13/23
Perform Adaptive Maintenance	4/14/23	4/15/23
Finalize Project Documentation	4/16/23	4/19/23
Turn-over Project to Client and Close the Project	4/20/23	4/20/23





CHAPTER 4 – PROJECT COST

4.1. COST OF PROJECT RESOURCE

4.1.1. EFFORT COST

Role	Person-in charge	Hourly Rate PHP	Hours/Day	Working Days	Effort Cost PHP
Project	Faizer A.	140	7	93	91,140
Manager	Habibon	140	,	33	31,140
Business	Al-ernest Tamse	130	7		84,630
Analyst	Al-efficat familise	130	,	93	04,030
UI/UX Designer	Rachelle Olivar &	135	7	93	175,770
OI/OX Designer	Kurt Zapata	155	,	33	1/3,//0
Front-end	Alfarabi	140	7	93	01 140
Developer	Fernandez	140	,	93	91,140
Back-end	Criston Jade	140	7	93	01 140
Developer	Enolpe	140	,	93	91,140
QA Engineer	Anthony Elizalde	130	7	93	84,630
		TOTAL			618,450 PHP

4.1.2. HARDWARE COST

		HARDWARE COST		
Item	Quantity	Unit	Unit Price	Total Cost
Server	1	1 unit	Free	-
Desktops	2	set	100,000 PHP	100,000 PHP
Laptops	5	set	150,000 PHP	150,000 PHP
	TO ⁻	TAL		250,000 PHP



4.1.3. SOFTWARE COST

SOFTWARE COST							
ltem	Quantity	Quantity Unit Unit Price		Total Cost			
Open-Source Content Management System	3	License	Free	Free			
Software for Development (HTML, CSS, JS, PHP, MySQL)	7	License	Free	FREE			
	0						

4.1.4. MISCELLANEOUS COST

MISCELLANEOUS				
Food Allowance	Php 32,550.00			
Transportation	Php 65,100.00			
Documentation	Php 14,000.00			
Utility	Php 100,000.00			
Total	Php 211,650.00			

4.1.5. OVERALL COST

Overall Cost				
Expenses	Total			
Effort Cost	PHP 618.45k			
Software Cost	PHP 250k			
Hardware Cost	0			
Miscellaneous	PHP 211.65k			
Total	PHP 1,080,100 M			



4.2. RETURN-ON-INVESTMENT

4.2.1 Development Cost

Category	Year 1	Year 2	Year 3	Total Cost
Effort Cost	PHP 618.45k	0	0	PHP 618.45k
Hardware Cost	PHP 250k	0	0	PHP 250k
Software Cost	0	0	0	0
Miscellaneous				
Cost	PHP 211.65k	0	0	PHP 211.65k
Total	PHP 1.0801M	0	0	PHP 1,080,100 M

4.2.2 Operational Cost

Operational Cost	Year 1	Year 2	Year 3
	PHP 20k	PHP 30k	PHP40k
Maintenance Costs			
Repairs	PHP 10k	PHP 15k	PHP 20k
Upgrades, Utility, & hosting	PHP 700k	PHP 700k	PHP 700k
Total	PHP 730k	PHP 745k	PHP 760k

4.2.3 Benefits

Benefit	Year 1	Year 2	Year 3
Increased online visibility and accessibility for SERDAC	PHP 200k	PHP 350k	PHP 500k
Improved customer satisfaction	PHP 100k	PHP 150k	PHP 200k
Efficient content management and updates	PHP 50k	PHP 100k	PHP 150k
Increased credibility and professionalism	PHP 50k	PHP 100k	PHP 150k
Total Yearly Benefits	PHP 400k	PHP 700k	PHP 1M



ROI = (Total Benefits - Total Costs) / Total Costs

Year 1:

- Total benefits = PHP 400k
- Total costs = PHP 1.0801M
- ROI = (PHP 400k PHP 1.0801M) / PHP 1.0801M = -0.38

Year 2:

- Total benefits = PHP 700k
- Total costs = PHP 1.0801M
- ROI = (PHP 700k PHP 1.0801M) / PHP 1.0801M = -0.116

Year 3:

- Total benefits = PHP 1M
- Total costs = PHP 1.0801M

ROI = (PHP 1M - PHP 1.0801M) / PHP 1.0801M = 0.148

Total ROI = (Year 1 ROI + Year 2 ROI + Year 3 ROI) / 3 = (-0.38 - 0.116 + 0.148) / 3 = 0.13 or 13%

Year	Total Costs	Total Benefits	ROI
1	PHP 1,810,100	PHP 400k	-0.38
2	PHP 1,810,100	PHP 700k	-0.116
3	PHP 1,810,100	PHP 1M	0.148

4.3. INTANGIBLE BENEFITS

- Increased customer satisfaction: Using a content management system can lead to improved information organization and accessibility, which can lead to faster response times and more accurate information delivered to customers.
- Improved employee productivity: By using a content management system, employees can spend less time seeking for information and more time focused on their primary activities
- Improved collaboration: A content management system may help teams and departments collaborate more effectively, enabling for faster and more effective communication.
- Better decision-making: Decision-makers can make more informed and strategic judgments with improved access to information.
- Reduced risk: A content management system may assist guarantee that all material is upto-date and accurate, decreasing the possibility of errors or inconsistencies.
- Increased scalability: A well-designed content management system can be easily scaled up or down as the needs of the business change, making it a flexible solution for future growth.



REFERENCES

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Examples. (n.d.). Company Contract Agreement. Retrieved March 12, 2023, from https://www.examples.com/business/agreement/company-agreement.html

TotalSem. (2014, December 30). What is Total Float (Total Slack) and how to calculate it in a network diagram [Video]. YouTube. https://www.youtube.com/watch?v=jmCc5VIMOro

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APPENDIX COVER PAGE

Appendix A Cover Page

Company Agreement

COMPANY AGREEMENT FORM

We, the undersigned, hereby understand and agree to the terms and conditions set forth in this Contract of Agreement for the SERDAC website project.

- I. Project Description: The SERDAC website project aims to create a website with a content management system for the Western Mindanao State University (WMSU) Satellite SERDAC using the skills and expertise of the 7 members of the team from the Institute of Computer Studies. The project will be done for academic purposes and no monetary compensation will be received.
- II. Policies and Completion: All team members are required to follow the policies set by the team. Failure to comply with the policies may result in penalties or dismissal from the project. The SERDAC website project must be completed by the agreed-upon deadline and submitted for grading. All team members are required to participate fully and contribute their skills and expertise to the project.

Signed this March 11, 2023, at the Western Mindanao State University, Normal Road, Baliwasan, Zamboanga City, Philippines,

Faizer A. Habibon
Project Manager

Al- Ernest Tamse Business Analyst Al-Farabi Fernandez Front-End Developer

> Rachelle Olivar UI/UX Designer

Anthony Elizalde

Quality Assurance Engineer

Noted by:

Ms. Pauleen Jean E. Gregana
Instructor



Criston Jade Enolpe

Kurt Zapata

UI/UX Designer

Lead Developer



Appendix B Cover Page

Client Agreement Form

CLIENT AGREEMENT FORM

Organization Name:	ZENO
Organization Address:	Normal Road, Baliwasan, Zamboanga City, Philippines
Project Working Title:	SERDAC Website with Content Management System
Project Description:	This is a web project that employs a content management system in which the administrator(s) can make modifications to the database, which will automatically alter the front-end view. The system project is split into two parts: the guest perspective view (guest website), which includes the homepage, services, datasets, galleries, enquiries, news, and the admin login. Furthermore, through the admin panel, admin(s) can make changes and manage anything related to its posts, admin users, inquiries, and so on. ZENO takes our clients' requests into account, so it has a general system that enables guests to look around the website and learn more about SERDAC. Through this project, they can now book an appointment online in our offered services, in addition, they can also request for full access to our preview files that are kept in our data repositories. The clients will have a safe and easy-to-use admin panel where only they and their authorized personnel are permitted to make changes to everything from their website to their database.

	Developer (Students)
1.	Enolpe, Criston Jade
2.	Elizalde, Anthony
3.	Fernandez, Alfarabi
4.	Habibon, Faizer A.
5.	Olivar, Rachelle
6.	Tamse, Al-Ernest
7.	Zapata, kurt



The undersigned hereby agreed to be their client and provide the necessary information and support to the above students to carry out an information system development project for our organization from the 2nd Semester S.Y 2022 – 2023 following the academic year of Western Mindanao State University.

The Client (Top-Management Member of the Organization):

Signature: (Can be digitally signed)	oul festie
Name of the Client:	Anabel E. Gambrez
Designation:	Project Leader
Office:	SERDAC - WMSU
Email:	anabel.gamorez @wmsu.edu.ph
Contact Number:	0917 1098164

The Contact Person (Top-Management Member or Employee of the Organization):

Signature: (Can be digitally signed)	H
Name of the Person:	JCY FFI M-SADUMA, BASCS
Designation:	107 Custer Combinator, WHIMAMREDER
Office:	WEIMAARROEC
Email:	felix. I way @ wm su. edn. ph
Contact Number:	690185111

Note: Upon successful completion of the project, the client should be able to issue a letter certifying the suitability and acceptance of the developed software for the organization.