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SISTEM PEMANTAUAN PROJEK ZON 5
(SPPZ5)

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SCHOOL OF COMPUTING
COLLEGE OF ARTS AND SCIENCES

**SISTEM PEMANTAUAN PROJEK ZON 5
(SPPZ5)**

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This report is prepared to fulfill the requirement of
STIX3912 Practicum

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“In the Name of Allah, the Most Beneficent, the Most Merciful”

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EXECUTIVE SUMMARY

Sistem Pemantauan Projek Zon 5 (SPPZ5) is an online report system where KEDA staff will record all project participant. This web-based system is used to replace paper-based report which is currently used by KEDA staff. SPPZ5 will keep track of all the participant involve with the project under KEDA. This web application was developed by using Rapid Application Development (RAD) methodology that consist of incremental process because of the short time needed for developing process. Hence, SPPZ5 is a web-based system that is easy to use and there is no need of user manual.

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ABBREVIATION

KEDA	Lembaga Kemajuan Wilayah Kedah
PSKT	Pembangunan Semula Kawasan Terbiar
RAD	Rapid Application Development
SOC	School of Computing
SPPZ5	Sistem Pemantauan Projek Zon 5
UML Diagram	Unified Modeling Language Diagram
UUM	Universiti Utara Malaysia

CHAPTER 1 INTRODUCTION

This chapter introduces details about the organization background and an overall observation of the entire organization that provided an industrial training opportunity whereas shows the organization background, organization history and structure, vision and mission, organization activities and summary for chapter 1.

1.1 Organization Background

The internship placement was at the Kedah Regional Development Authority (KEDA). KEDA's sole purpose is to assist in speeding up the growth of the socio economy and infrastructure under KEDA operational territory.

1.1.1 Organization History and Structure

KEDA was established on 28 May 1981 under Act 249, Kedah Regional Development Authority Act 1981 with the intention to assist in speeding up the growth of the socio economy and infrastructure under KEDA operational territory. KEDA operational territory covered an area of 8,279 sq km which is 89% of the whole state of Kedah. As a Federal Government agency under Ministry of Rural Development (KPLB), KEDA is responsible in many aspects of development including poverty eradication programme, traditional village development and housing for the poor people programme (PPRT), development of small and medium industries as well as entrepreneurship programme, skills training, development of human capital, infrastructures and social amenities. In the 10th Malaysian Budget Plan, the main focus of KEDA development programme includes regional development and towards self dependency (*biaya diri*). The regional development programme covers physical development, economy and human capital especially at the less developed areas in the rural and remote regions. On the other hand, towards achieving the self dependency (*biaya diri*), KEDA has put up the initiative to establish a subsidiary under it. (KEDA Background, n.d.).

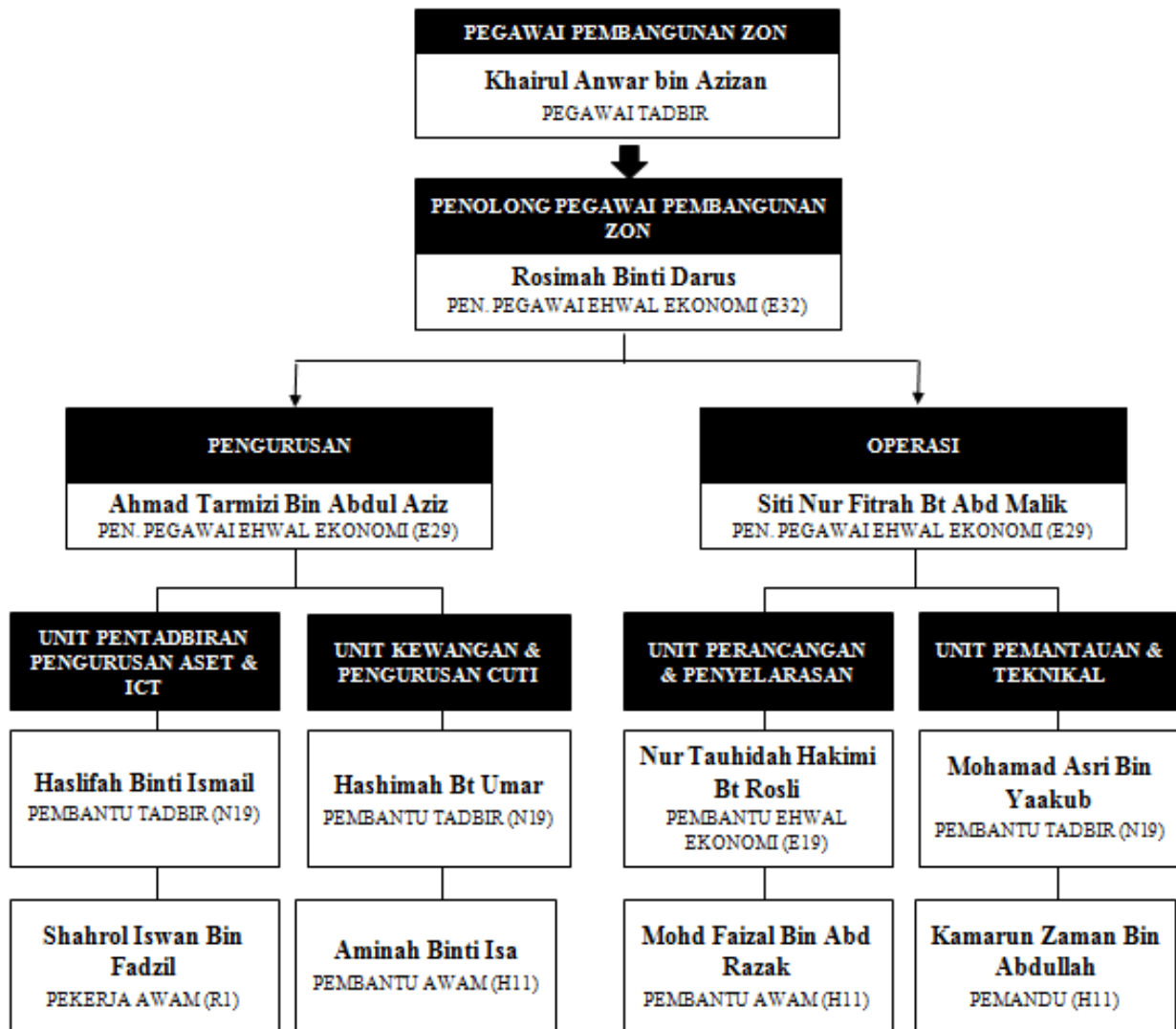


Figure 1.1 : Organization Chart KEDA Zon 5, Baling

Figure 1.1 shows the organization structure of KEDA Baling consists of 12 persons that is responsible for managing the administration of KEDA Baling Zon 5 .

1.1.2 Mission and Vision

Below is KEDA mission and vision (“Mission and Vision”, n d):

Mission

Work on fully utilizing the human capital and economy as well as developing the rural areas to

establish a more robust socioeconomic and competitive in line with the national development policies..

Vision

To become a major development agency in developing and strengthening the people's socioeconomic status and the target groups mainly and the Kedah state in general.

1.2 Organization Activities

KEDA is responsible in assisting in planning, implementing and monitoring development and trust projects under The Ministry of Rural Development (KPLB). Thus, KEDA is accountable in coordinating and implementing human capital and institutional capital development projects or activities within Baling district. Considering there are a lot of project and activities within Baling district, KEDA help plans, organize and coordinate assistance and community activities in the operating area. Furthermore, KEDA assist in the collection of rent, revenue at the district and zone level. Finally, KEDA will provide progress report on project implementation and development activities to management. (KEDA Zon Office, n.d).

1.3 Summary

In conclusion, KEDA was established to help accelerate economic growth and social infrastructure under KEDA's operating territory. KEDA shall be responsible for the development of rural areas and ensuring that rural residents can generate a steady income to create a more robust socio-economic and competitive in line with national development policies.

CHAPTER 2

PROJECT DESCRIPTION

This chapter cover details of *Sistem Pemantauan Projek Zon 5 (SPPZ5)* project whereas shows the project background, project problem statement, project objective, project scope, the significance of project, weakness and recommendation and summary for chapter 2.

2.1 Project Background

In the 10th Malaysian Budget Plan, KEDA which is one of the statutory bodies involve with the development programmed which includes regional development and towards self-dependency (*biaya diri*). The regional development programmed covers physical development, economy and human capital, especially at the less developed areas in the rural and remote regions. KEDA, on the other hand, has taken the initiative to create a subsidiary under it in order to achieve self-sufficiency (*biaya diri*). Finally, KEDA provides management with a progress update on project execution and growth activities.

KEDA's involvement with the development programmed requires them to keep track and details regarding all the ongoing project. Currently, KEDA is using multiple system in storing project record and also still using traditional method which is time consuming and tedious not to mention the lost of records due to unmanageable record keeping. In addition, KEDA can generate reports from information that has been stored in the system. Therefore, by developing SPPZ5, KEDA can record all information related to projects carried out efficiently and in an orderly manner.

2.2 Project Problem Statement

The main problem begins when the KEDA staff faces a problem in collecting project data among their colleagues. KEDA Zone 5 are still using the conventional manual system to record and store data and information for projects. This however has proven to be an inefficient process in collecting and storing information. Furthermore, this process does not help in creating a clear and convincing report to the KEDA Zone 5 in managing the data. Thus, without having a proper online system, it is hard for KEDA staff to manage data within their office. As we know, KEDA Zone 5 involved in many projects, but the manual system they used is time-consuming and tedious. With the continuous update regarding the project, it will make the workforce less efficient. A few problem need to be solve :

- i. Still using a manual system to record all the project and program they are involved.
- ii. Do not have an online system to record the latest data.
- iii. Do not have any systematic management system to record all of the project and program they are involved.

2.3 Project Objective

The main objective of this project is to design and develop a system for KEDA Zone 5. In order to meet the main objective, the following objectives need to be achieved:

- i. To identify requirements for staff in managing data.
- ii. To design the interface for *Sistem Pemantauan Projek Zon5*.
- iii. To develop *Sistem Pemantauan Projek Zon5* within KEDA Zone 5.
- iv. To test the usability and functionality of *Sistem Pemantauan Projek Zon5*

2.4 Project Scope

There are two scopes for these projects that are restricted to be followed in developing this system.

i. Target User

The target user for the *Sistem Pemantauan Projek Zon5* is the staff who are involved as a supervisor in villages.

ii. Functionality

The main function of *Sistem Pemantauan Projek Zon5* (SPPZ5) is to provide a platform for staff to manage their data and information. Staff can use SPPZ5 to create a new program and update all data in one place and able to view the latest community details. This system also has the essential function such add, update and delete the record.

2.5 Significance of Project

Among the significance that can be obtained when using this system:

- i. *Sistem Pemantauan Projek Zon5* will help the supervisor from KEDA to record the community details more easily and systematically.
- ii. Community supervisor can know their latest update for their program.
- iii. Can merge all the program and project in KEDA Zone 5.

2.6 Weakness and Recommendation

When the SSPZ5 is being used, weakness of the system come out such as report cannot be display in statistics. Therefore, our backup plan is to display all participant in the report section. They can search the report when they enter the participants name or their identical card. Furthermore, the recommendation that can be make is this system should be updated for more advance in future.

2.7 Summary

SPPZ5 is a web-based application, mainly developed to remove manual system that use paper- based. The problem happens when every program still uses a paper-based system that will waste their time. Therefore, this system used offline web-based to help staff KEDA easy to key in the participants information and manage the report.

CHAPTER 3

METHODOLOGY AND RESULT

This chapter cover details of project methodology and results that shows on each phase. The development methodology that is used for SPPZ5 development are Rapid Application Development (RAD). RAD is an agile type of development methodology.

3.1 Overall Phases

Methodology that suitable for this project is Rapid Application Development (RAD). The purpose of using this methodology is because it is suitable for a short-term project where as this project developing process duration for 6 months (Lucidchart Content Team, 2020). Besides that, it eliminates the needs to make a documentation on diagrams such as use case diagram, and sequence diagram. Figure 3.1 shows the overall process of RAD methodology.

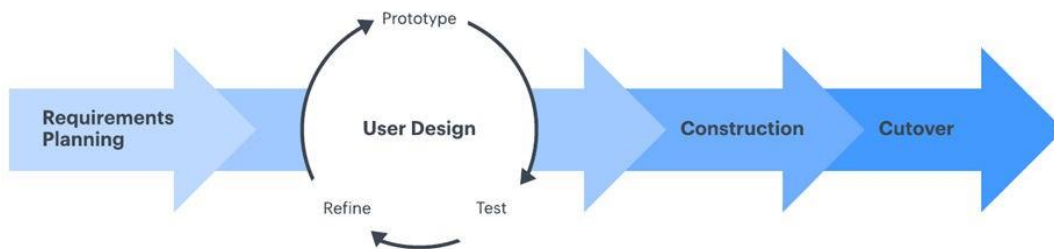


Figure 3.1: Rapid Application Development (RAD) Methodology.

RAD phases consist of requirement planning, user design, construction and cutover. For this project, user design phase and construction phase are combined because after requirements planning phase, SPPZ5 straightly been build by front-end and back-end because time constraints for development process.

3.2 Description of each phase

This part will elaborate more on each phases of RAD methodology, starting with requirement planning until the end of development process.

Phase 1 : Requirement Planning

This is the phase where the process of requirement gathering, and requirement analysis are done. First, all the requirements were collected on supervisor project, Puan Rosimah bt Darus and staffs, Puan Nur Fitrah bt Abd Malik and Puan Nur Tauhidah Hakimi bt Rosli. The meeting is conducted informal via face-to-face for two(2) times because to gather the requirement fast and then straightly develop SPPZ5. After the requirement gathering was held, the requirement is straight fully analyzed for to make sure there are no time wasted on requirements. When requirements are almost fixed, it goes to phase 2. Besides that, after the requirement analysis process is done, the outcome is a functional and non-functional table of requirements. But, for this type of methodology, the requirements can be change incrementally. Therefore, the functional and non-functional shows on tables are the last fixed requirements after SPPZ5 are finished. (see Appendix C for further details)

Phase 2 : User design

After Requirement Planning, User Design Phase takes place. During this phase the UML diagram constructed are Use Case, Sequence and Class Diagram (see Appendix D for UML Diagram). Unified Modeling Language (UML) diagram was constructed to give a better view of the system flow. After UML Diagram has been prepared , prototype was constructed for SPPZ5. KEDA's staff work hand in hand to ensure their needs are being met at every step in the process. Below is the prototype iteration developed.

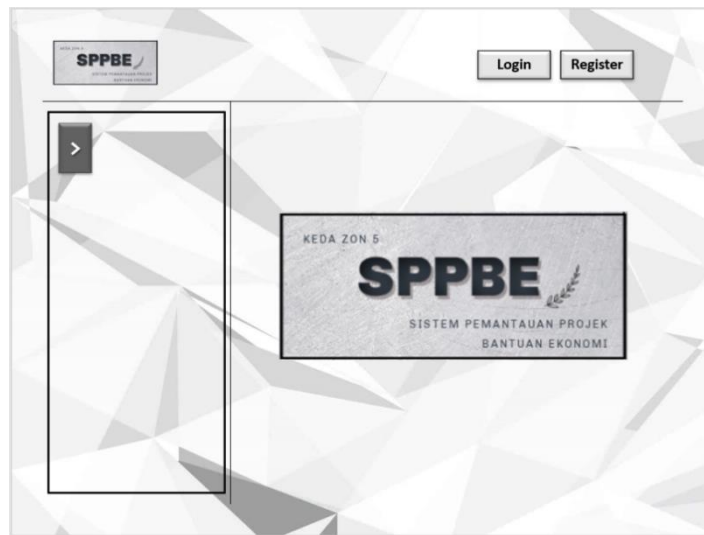


Figure 3.2 : Homepage for SPPZ5 prototype

Figure 3.2 shows the homepage of SPPZ5. This page comprises of two (2) buttons which are login and register.

Figure 3.3 : Register page for SPPZ5 prototype

Figure 3.3 shows the Register page. New users must fill in the required detail to create a new account.

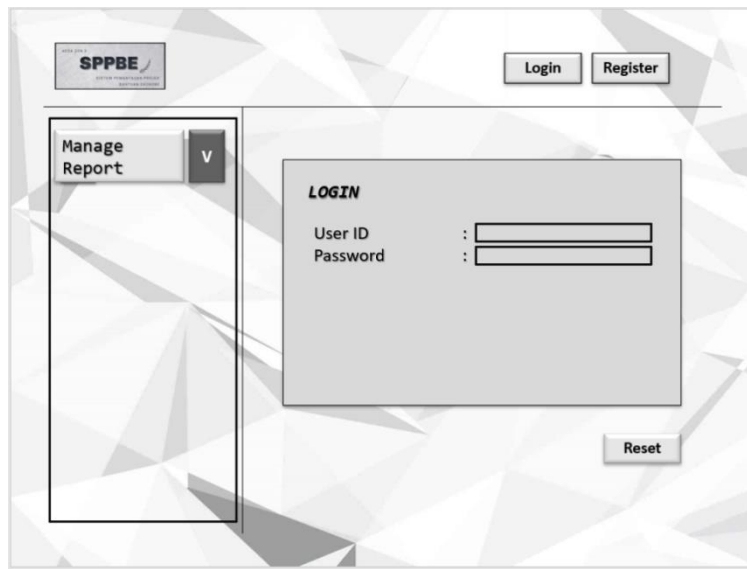


Figure 3.4 : Login page for SPPZ5 prototype

Figure 3.4 shows login page for SPPZ5 that prompt user to fill in user ID and password.

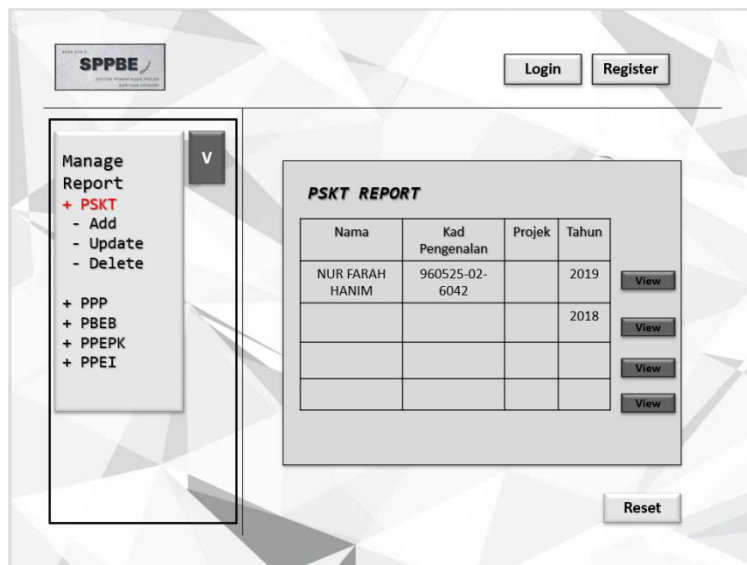


Figure 3.5 : Manage Report page for SPPZ5 prototype

Figure 3.5 shows the Manage Report page. This page allows user to add, update and delete project.

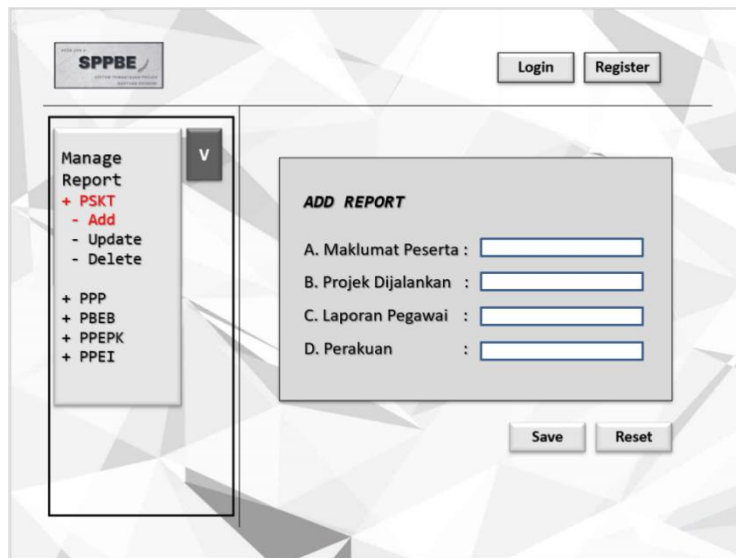


Figure 3.6: Add Project page for SPPZ5 prototype

Figure 3.6 shows the Add Report page. This page allows user to add new Report.

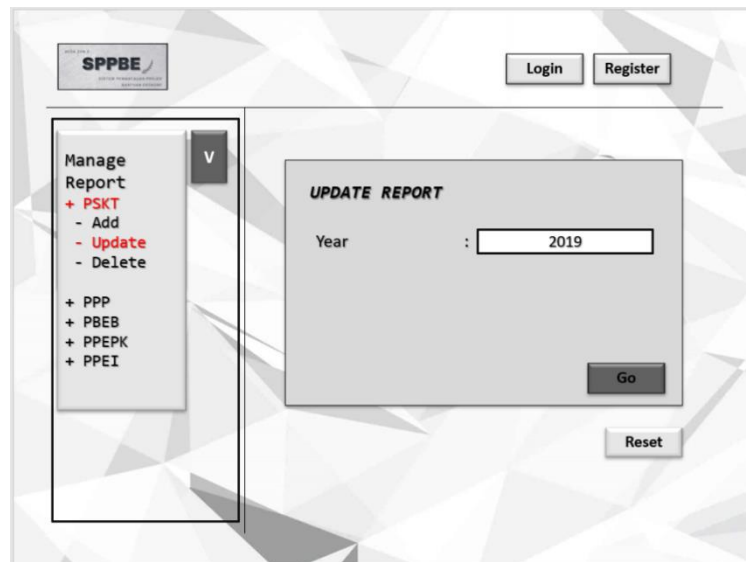


Figure 3.7 : Update Project page for SPPZ5 prototype

Figure 3.7 shows the Update Project page. This page allows user to update report base on the date searched.

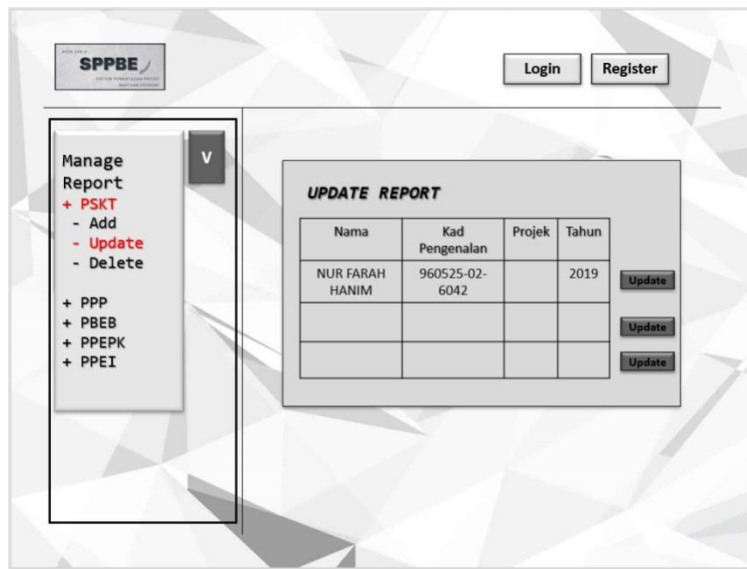


Figure 3.8: Update Project page for SPPZ5 prototype

Figure 3.8 shows the Update Report page after clicking the Submit button. This page view report that can be updated base on the date searched.

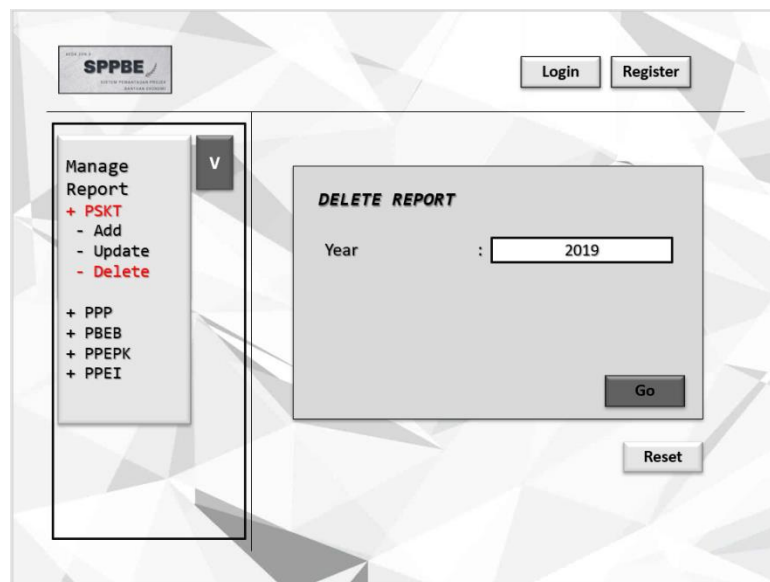


Figure 3.9 : Delete Project page for SPPZ5 prototype

Figure 3.9 shows the Delete Project page. This page allows user to delete report base on the date searched.

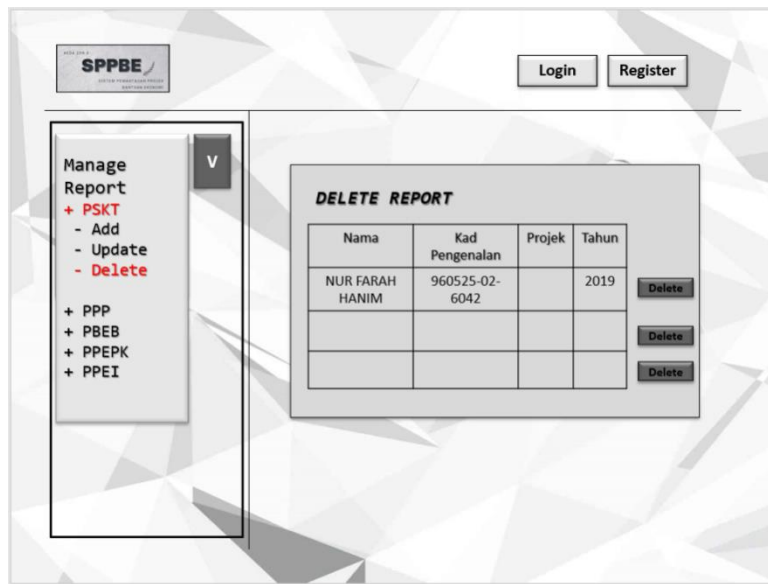


Figure 3.10 : Delete Project page for SPPZ5 prototype

Figure 3.10 shows the Delete Report page after clicking the Submit button. This page view report that can be deleted base on the date searched.

Phase 3 : Construction

This phase explain how the development process started. Actually, this is a separated process, but because of time constraints (see Appendix B for Gantt Chart). Without any further delay SPPZ5 continues to undergo development process on front-end and back-end. Therefore, for example, when one page successfully build on its interface design, the construction of the controller whereas the back-end code is also successfully to be build and be accepted. Each of the interface is design and developed based on the UML diagram The interface design will be elaborated on the next page.



Figure 3.11 : Homepage for SPPZ5

Figure 3.11 shows the homepage of SPPZ5. This page on the left side comprises of two button which are

login and register. For user who already registered can proceed with clicking the Login button. While for new user they can click the Register button which will direct them to registration page.

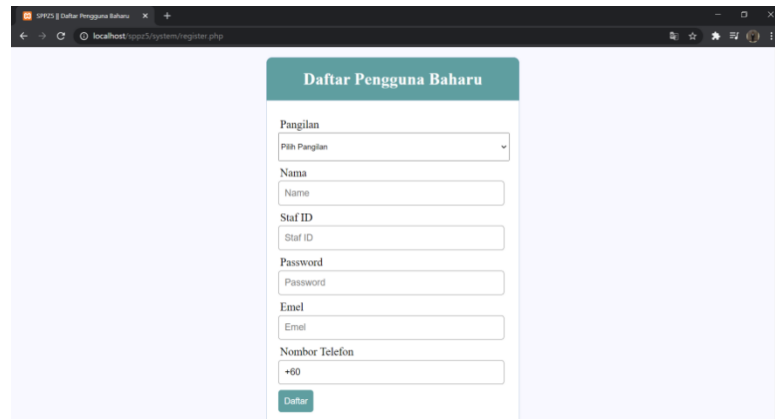


Figure 3.12 : Register Page for SPPZ5

Figure 3.12 shows the Register page. New users must fill in the required detail to create a new account. After filling up all the required details user can proceed by clicking button 'Daftar' to continue.

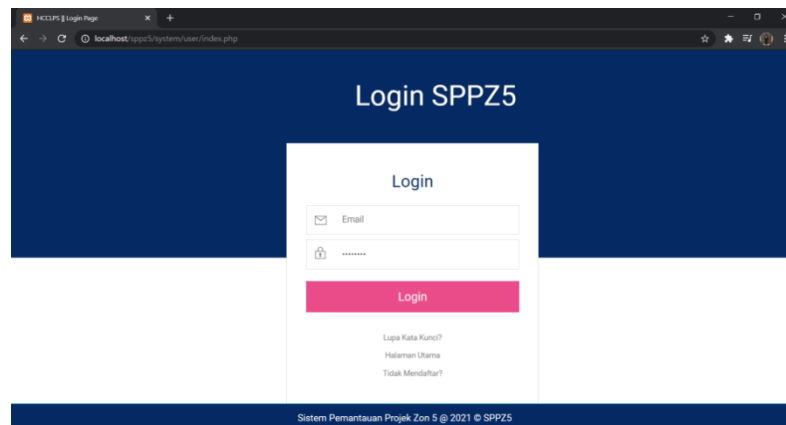


Figure 3.13: Login Page for SPPZ5

Figure 3.13 shows login page for SPPZ5. After completing the registration, users need to fill in their ID and password and click button 'Login' to enter into the system.

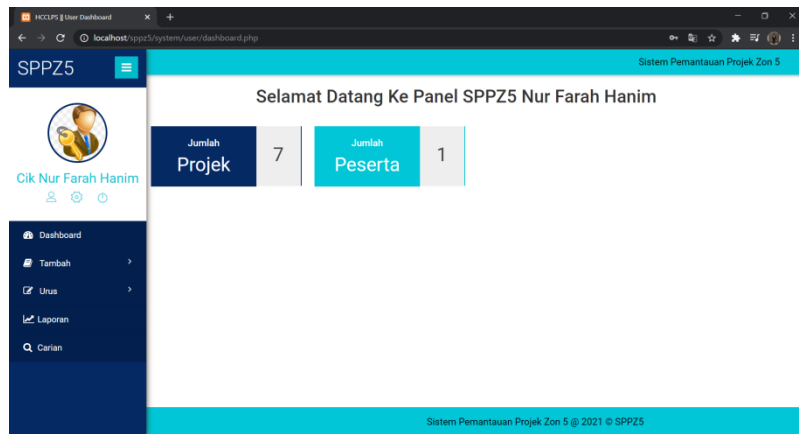


Figure 3.14 : Dashboard Page for SPPZ5

Figure 3.14 shows the main page of the system. In this page, the system will show the total project that is available. The system also display the total participant involve with the project.

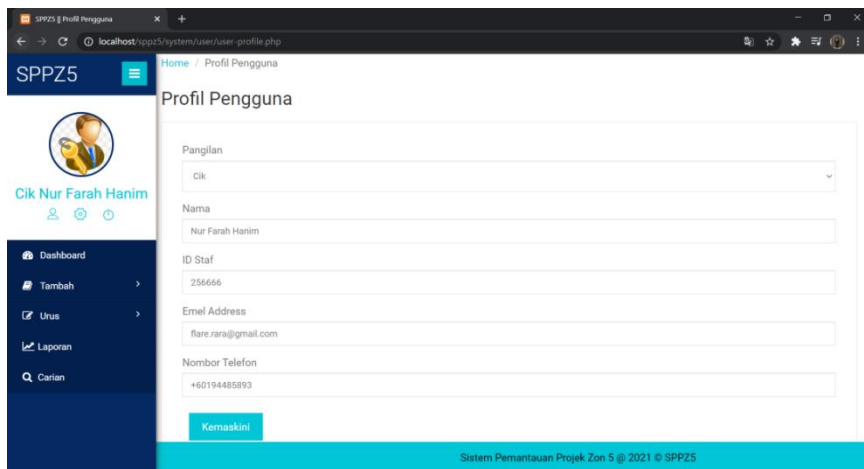


Figure 3.15 : Profile Page for SPPZ5

Figure 3.15 shows profile page of the system. Users may click on the 'Profil' button to view the profile page. This page will show details of the user and user can also update their details.

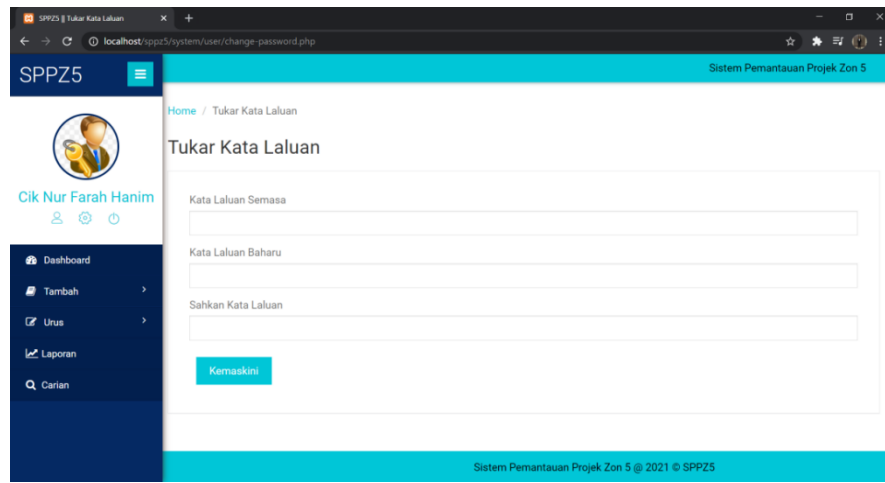


Figure 3.16 : Setting Page for SPPZ5

Figure 3.16 shows the setting page. This page allows the user to update their previous password.

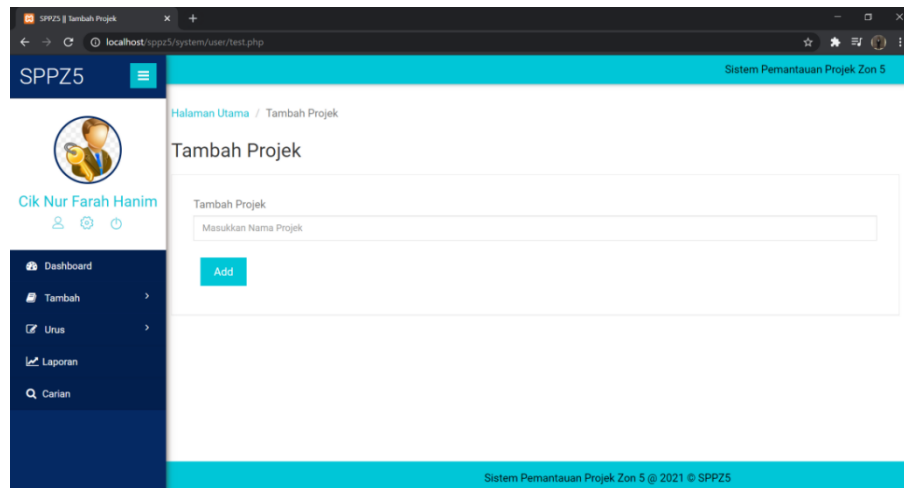


Figure 3.17 : Add Project Page for SPPZ5

Figure 3.17 shows the 'Tambah Projek' page. This page allows user to add new project, user need to click 'Tambah' and choose 'Tambah Projek'. This will display the page 'Tambah Projek' which the user need to fill to add new project.

Figure 3.18 : Add Participants Page for SPPZ5

Figure 3.18 shows the 'Tambah Peserta' page. This page allows user to add new participant involve with the project. Detail of participant is comprises of four (4) section which is Section A, B, C and D. User need to click 'Tambah' and choose 'Tambah Peserta'. This will display the page 'Tambah Peserta' which the user need to fill details of participant. After filling all the details user can proceed by clicking 'Tambah' to add participant.

Figure 3.19 : Add Participants Page for SPPZ5

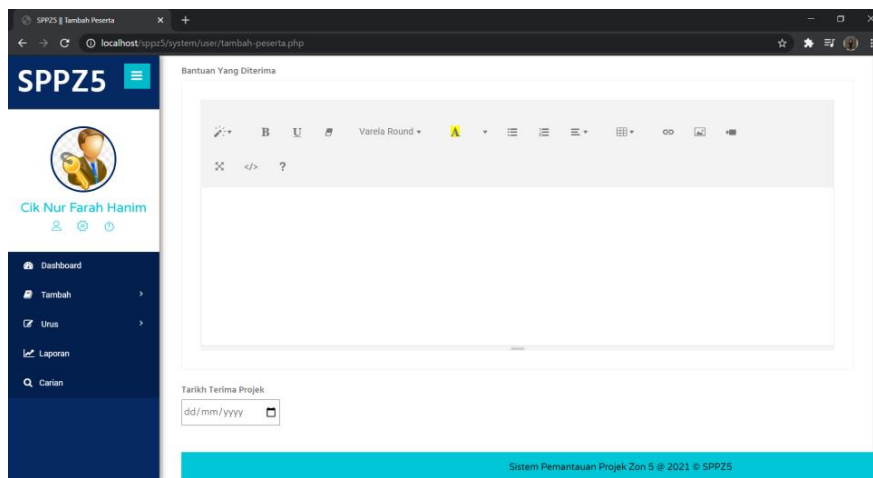


Figure 3.20 : Add Participants Page for SPPZ5

Figure 3.19 and 3.20 shows Section B of participant details for 'Tambah Peserta' page. This page prompts user to enter details of the project carried out and support received.

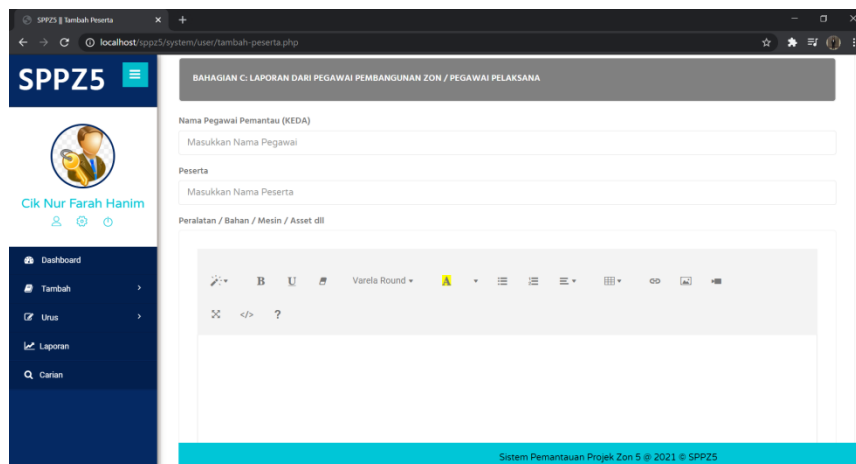


Figure 3.21 : Add Participants Page for SPPZ5

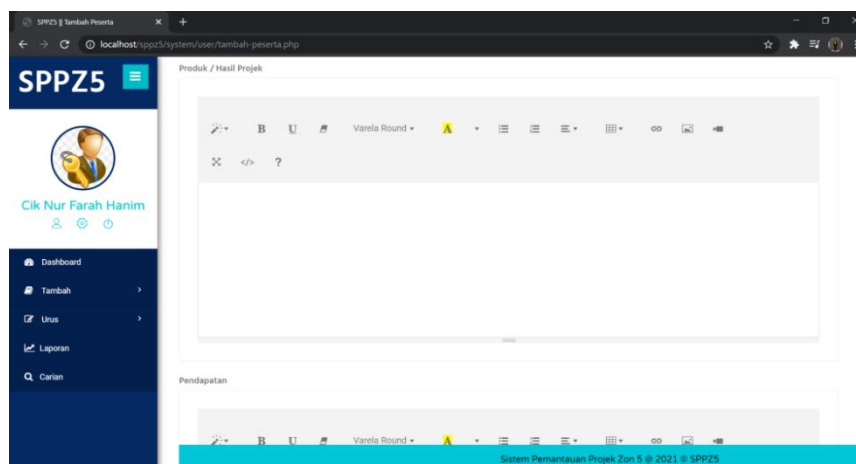


Figure 3.22 : Add Participants Page for SPPZ5

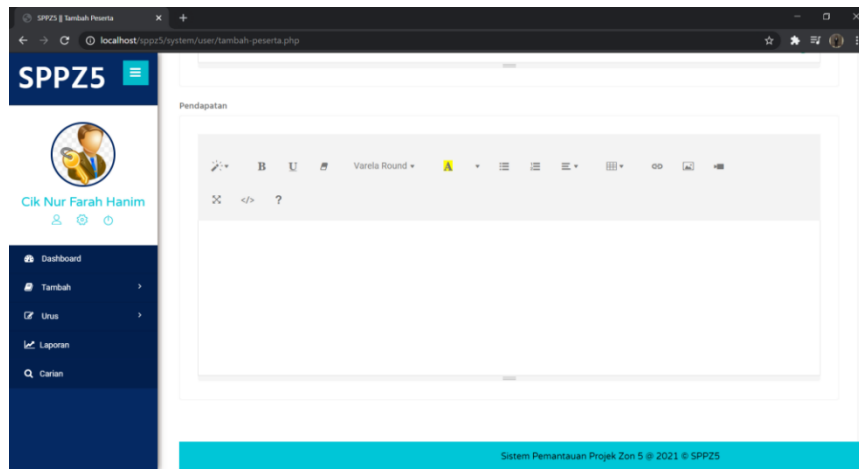


Figure 3.23 : Add Participants Page for SPPZ5

Figure 3.21, 3.22 and 3.23 shows Section C of participant details for 'Tambah Peserta' page. This page prompts user to enter details of report given by the zone development officer.

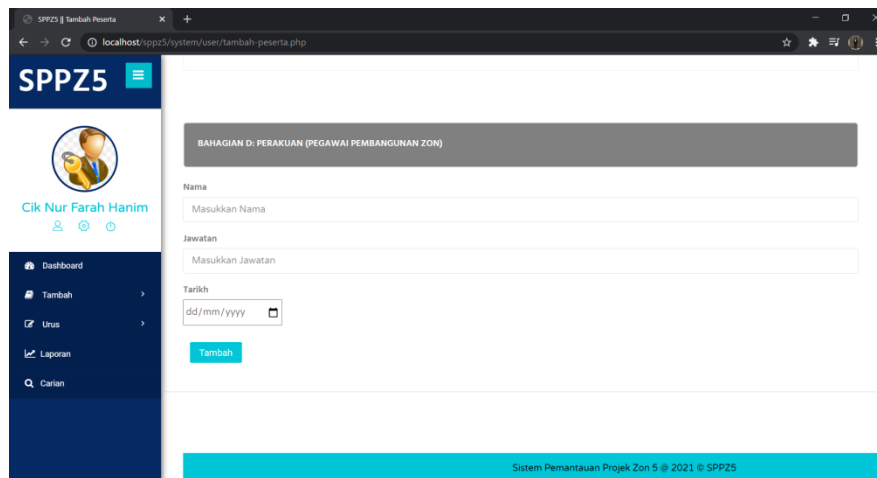


Figure 3.24 : Add Participants Page for SPPZ5

Figure 3.24 shows Section D of participant details for 'Tambah Peserta' page. This page prompts user to enter details of the officer who certified this participant details.

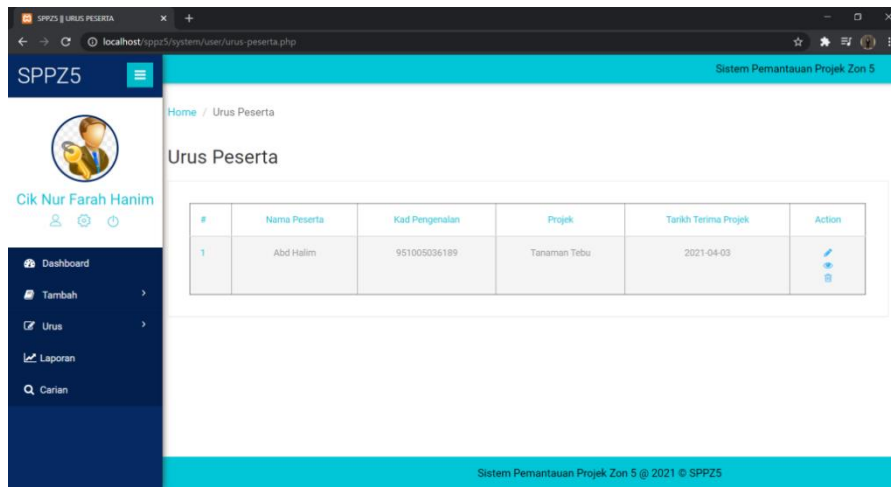


Figure 3.25 : Update Participants Page for SPPZ5

Figure 3.25 shows the 'Urus Peserta' page. This page allows user to manage the participant details which is update, view and delete.

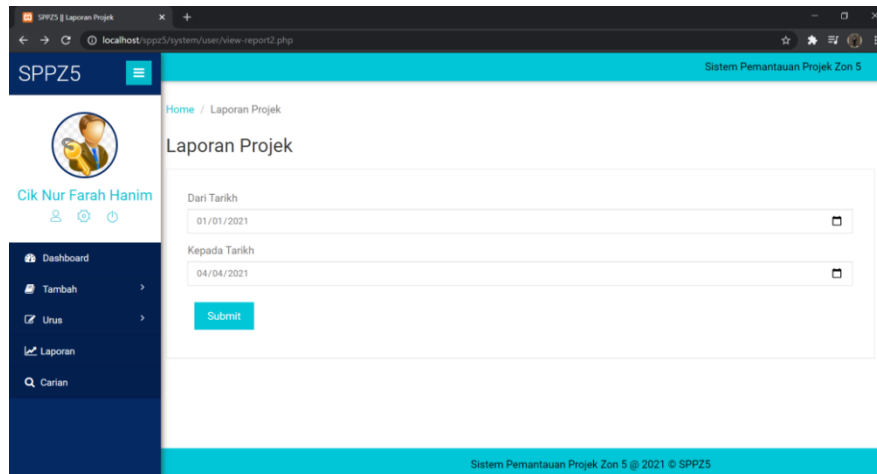


Figure 3.26 : Project Report Page for SPPZ5

Figure 3.26 shows the 'Laporan Projek' page. This page allows user to search specific participant based on the date KEDA received participant project. User must select the date and click on Submit button.

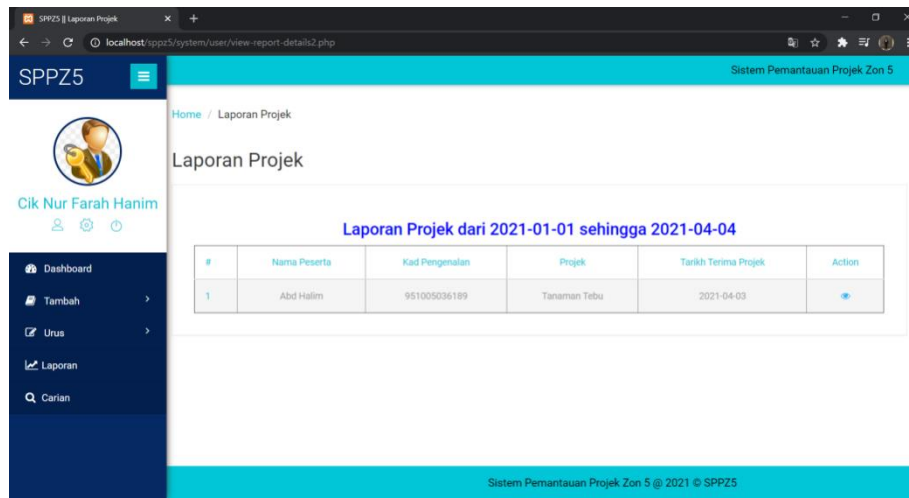


Figure 3.27 : Project Report Page for SPPZ5

Figure 3.27 shows the 'Laporan Projek' page after clicking the Submit button. This page will show the participant involve with the project from the date that has been selected. User can also view the participant details.

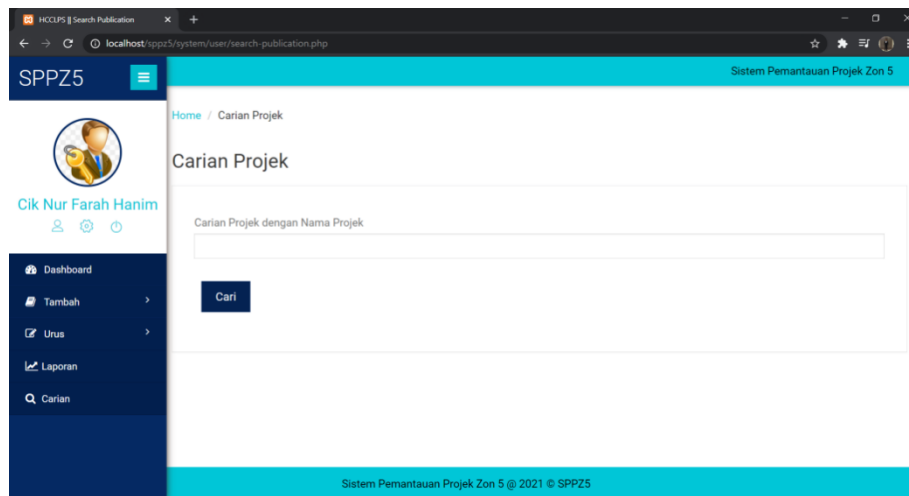


Figure 3.28 : Search Project Page for SPPZ5

Figure 3.28 shows the 'Carian Projek' page. This page will allow user to search for available project. User must enter the project name and click on button 'Cari'.

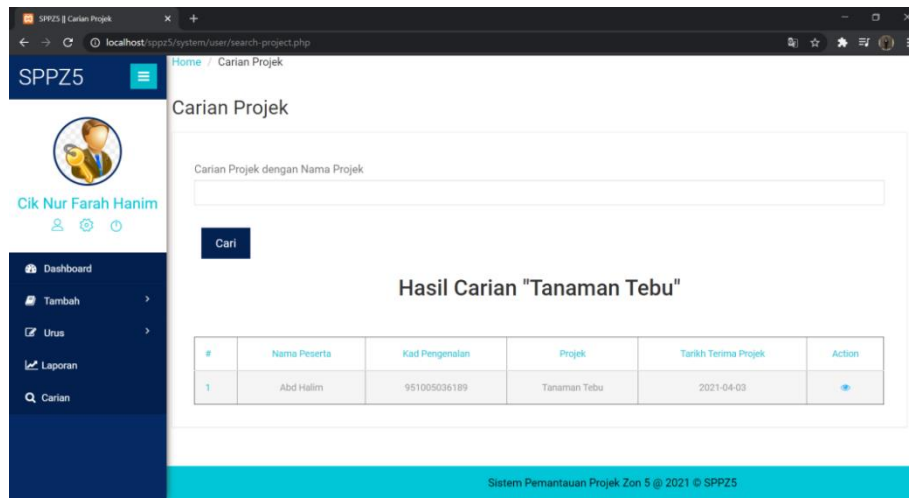


Figure 3.29 : Search Project Page for SPPZ5

Figure 3.29 shows the 'Carian Projek' page after clicking the 'Cari' button. This page will show the details of the project that has been searched.

Phase 4 : Cutover

After SPPZ5 is successfully developed, the cutover phase was implemented. During this phase SPPZ5 was tested as a whole and installed into KEDA's workstation. Before the testing can be conducted, training were given to KEDA staff to understand how the system works (refer to Appendix F). The testing done to the system is the usability test (see Appendix E for usability test questionnaire). KEDA staff and supervisor were asked to test the system. Reviews from the staff were recorded (refer to Appendix E). In term of ease of use, the majority of KEDA staff feels the SPPZ5 is very easy to use. While for completion of task, SPPZ5 perform very well in completing the task. Furthermore, the system usefulness is very good as it meet all the needs of KEDA staff. The feedback received from KEDA staff on the ease of use shows the system is easy to operate. Finally, the satisfaction of the system received from KEDA staff is very satisfied. Also during this phase feedback from the staff and supervisor is collected for future improvement and reference (see Appendix E for feedback).

3.3 Summary

When developing a system, whether it is a web-based application or mobile-based application, the key to a successful development is to find a suitable methodology that can greatly support the development process. For SPPZ5 development process, it is clearly shown that RAD is the most suitable methodology to use because the requirements changed incrementally and RAD allows changes of requirement. Also due to the time constraint to developed SPPZ5, RAD is suitable to be implemented as it

reduces the development time. Therefore, RAD is the suitable development methodology for SPPZ5.

CHAPTER 4

CONCLUSION

Practicum is one of the best methods for students to gain knowledge and being exposed to the real-world working environments. Lots of history of practicum students shows that they are never being nervous, when they started to involve with industries after they graduate, because they already faced similar situation when they involved with practicum. By doing so, a lot of university will give an outcome with a student that are mature and can make sure that they can survive well on industries.

Universiti Utara Malaysia (UUM) is one of the best universities in Malaysia. Inside UUM we have a School of Computing (SOC) which is school that I study. Every practical student from SOC need to come out with one IT project because of requirements for graduates. Hence, I decide to start my practicum at KEDA Zon 5, Baling. KEDA responsible in assisting in planning, implementing and monitoring development and trust projects under The Ministry of Rural Development (KPLB). Considering there are a lot of project and activities within Baling district. Therefore, SPPZ5 is one of the projects that I develop for my practicum on KEDA. Basically, SPPZ5 is a short form name for *Sistem Pemantauan Projek Zon 5* for KEDA Zon 5, Baling.

SPPZ5 is a web-based application that can be achieved through offline by each supervisor of that particular program. This is to make sure that each supervisor program can updated the data and view the participant progress. SPPZ5 is developed by development methodology called Rapid Application Development (RAD). This type of agile methodology is suitable for SPPZ5 because the short time needed for development process which takes only 1 weeks. RAD eliminates the need of documentation and just straight to development process. By doing so, developer of SPPZ5 which is me, can come out fast with the outcome needed.

Moreover, although SPPZ5 is just a simple web-based application, but it got two type of user, which are supervisor program and admin. We already know that supervisor of the program and Admin parts are same, it can do such as insert a new participant, update the participant data, delete the participant, and view participant data.

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APPENDICES

Appendices shows five appendix such as Appendix A elaborates overall experiences for practicum, Appendix B show SPPZ5 Gantt Chart, Appendix C show SPPZ5 UML diagram.

Appendix A : Overall Experiences

1. Other Assignments in the Organization

Although SPPZ5 was a web-based application that was successfully built, there were also other tasks and assignments that needed to have been done such as updating e-Profil KEDA's data for all villages under KEDA supervision using Microsoft Excess. Other tasks were designing brochures for events organized by KEDA and lastly was preparing the PSKT form for the use of KEDA officer.

2. List of Task

i. Updated e-Profil KEDA's Data

LEMBAGA KEMAJUAN WILAYAH KEDAH
PEJABAT KEDA ZON 5 BALING
e-PROFIL KELUARGA
DESA KEDA BANDAR

ROHANA BINTI ZAINAL ABIDIN **No 1, DESA KEDA BANDAR** **MUKIM SIONG**

Kod: 05 Kod Negeri: 02 Kod Daerah: 05 Kod Mukim: 01 Kod Desa: 55 Tahun Banci: 2020 No Siri: DK020501551

BAHAGIAN A BAHAGIAN B BAHAGIAN C BAHAGIAN D BAHAGIAN E BAHAGIAN F BAHAGIAN G BAHAGIAN H

Maklumat Ketua Isi Rumah (KIR)

Nama: ROHANA BINTI ZAINAL ABIDIN

No KP: 650624-02-5586 Peng. Khas: TIADA

T. Lahir: 19-Mar-65 Kecacatan: TIADA

Umur: 56 Agama: ISLAM

Jantina: PEREMPUAN Bangsa: MELAYU

Pendidikan: Sekolah Rendah Status: IBU TUNGGAL

Pekerjaan: Alamat: No 1, DESA KEDA BANDAR

Pendapatan: Poskod: 09100

Tel Rumah: Bandar: BALING

No HP: No Siri: DK020501551

UNTUK KEGUNAAN PENYELIA

Nama Penyelia: ROSIMAH BINTI DARUS

Catatan:

Pertubuhan Dan Jawatan:

Pertubuhan	Jawatan
*	

Carian: No KP: No Siri: Table Save Refresh Close

Figure A.1 : e-Profil KEDA

ii. Designed Brochure

SENARAI PEMBEKALAN DARIPADA BERJAYA CORPORATION GROUP

BIL.	GROUP	DELIVER TO BALING (UNIT)
1	MESIN JAHIT TEPI INDUSTRI 2531D001-4 (DP)	2
2	MESIN JAHIT LURUS INDUSTRI	14
3	26" MESIN PENEKAN STIM ELEKTRONIK	2
	TOTAL	18



**MAJLIS PENYERAHAN DAN
PENGHARGAAN RAKAN STRATEGIK
KEMENTERIAN PEMBANGUNAN LUAR
BANDAR (KPLB)**

**TARIKH : 15 APRIL 2021 (KHAMIS)
TEMPAT : PEJABAT KEMAS DAERAH BALING**

RAKAN STRATEGIK KPLB:-



Figure A.2 : Brochure KEDA

**NAIK TARAF BENGKEL JAHITAN DI PEJABAT KEMAS DAERAH BALING
MENGUNAKAN PERUNTUKAN TENAGA NASIONAL BERHAD (TNB)**

NAIK TARAF PEJABAT KEMAS BALING YANG PERTAMA

KERJA-KERJA TERLIBAT
BILIK A (BILIK JAHITAN LAMA)

- i) PEMASANGAN PINTU SLIDING.
- ii) PEMASANGAN TILE YANG BARU.
- iii) PEMASANGAN MATA SOKET DI DINDING.
- iv) PEMASANGAN PINTU JERJI BESI.

BILIK B (BILIK JAHITAN BARU)

- i) PEMASANGAN PINTU SLIDING.
- ii) PEMASANGAN MATA SOKET DI LANTAI.
- iii) PEMASANGAN MATA SOKET DI DINDING.
- iv) PEMASANGAN PENGHAWA DINDING 1HP.
- v) PEMASANGAN PINTU JERJI BESI.
- vi) PEMASANGAN KIPAS DINDING.

KOS PROJEK : RM 19,991.72

NAIK TARAF PEJABAT KEMAS BALING YANG KEDUA

KERJA-KERJA YANG TERLIBAT

- i) MEMBEKAL DAN MEMASANG KABEL SUB MAIN DI DALAM TRUNKIN KELULU.
- ii) MEMASANG DISTRIBUTION BOARD (DB) YANG BARU

KOS PROJEK : RM 7,980.00

**SENARAI PEMBEKALAN PERALATAN BENGKEL JAHITAN PEJABAT
KEMAS DAERAH BALING MENGUNAKAN PERUNTUKAN
TENAGA NASIONAL BERHAD (TNB)**

BIL.	PERKARA	UNIT
1.	KERUSI STOOL	20
2.	MEJA POTONG	2
3.	MEJA BANQUET	2
4.	KERUSI GURU	1
5.	MEJA GURU/ LACI	1
6.	PAPAN PUTIH	1
7.	KOMPUTER RIBA (LAPTOP)	1
8.	SET PA SISTEM	1
9.	LCD PROJEKTOR	1
10.	PATUNG HIASAN (DEWASA)	3
11.	MESIN POTONG KAIN	2
12.	MESIN JAHIT TEPI HALUS	1
13.	GUNTING KAIN	20
14.	SET PEMBARIS MENJAHIT & PITA UKUR	20
15.	STEAM IRON (SILVER STAR)	3
16.	IRON BOARD	3
17.	IRON STAND STEAM (PHILIPS)	2
18.	ALMARI PAMER	1
19.	ALMARI FAIL BESI	1
20.	ALMARI FAIL BERKACA	1
21.	MEJA	1
22.	MESIN BALUT BUTANG/ MESIN KETIP BUTANG	3
23.	PATUNG HIASAN (KANAK-KANAK)	2
24.	BENANG JAHIT TEPI (25 HITAM 25 PUTIH)	50
25.	KABINET BENANG	1
26.	KERTAS KERAS	50M
27.	KERTAS MINYAK	50M
28.	MESIN SULAM	1
29.	PAPAN TANDA	1

JUMLAH PERUNTUKAN = RM39,559.00

Figure A.3 : Brochure KEDA

iii. Prepared form for *Pembangunan Semula Kawasan Terbiar* (PSKT)

PROJEK PEMBANGUNAN SEMULA KAWASAN TERBIAR (PSKT)

PROFIL PESERTA	
NAMA PESERTA	: MOHAMAD SHAIFUL BIN HASHIM
ALAMAT PESERTA	: 165 TAMAN MELATI KUALA KETIL, KEDAH DARUL AMAN
NO KAD PENGENALAN	: 830306-02-5351
UMUR	: 38
JENIS PROJEK	: PERNIAGAAN MENGETUK, MENGECAT, MEMBAIKI KENDERAAN DAN WELDING
JENIS BANTUAN DITERIMA	: ALATAN PERNIAGAAN
PENDAPATAN SEBELUM	: RM 1,300.00
PENDAPATAN SELEPAS	: RM 1,450.00



Figure A.4 : PSKT Form

3. Practicum Problem

Although practicum is the best way for students to gain knowledge on a real-world experience, but there is some sort of problem that appeared when students when for practical. Students will never gain experience on their field of study if they choose a wrong practical placement. It is mean that wrong placement that teach and make students to do a work that not complaints with students' field of study.

Besides that, practicum will be a messy experience if there is no someone from practicum placement to teach practical student about the job that need to be done. Students that went for practical want to learn something new and gain an experience that they can't get from Universiti, but, if there is no guidance from practical placement, it will be useless for students to do practical. Although students can learn by themselves, but every knowledge need to have a teacher for to teach because to maintain on a true path knowledge and not on the wrong path knowledge.

Moreover, other practicum problems are sometimes, practical student can be misused by staff from practical placement. From this experience, it is unfair because practical students want to do their job scope and not being misused by others. Some of misused are such as mix water for staff, get printed document from printing room, complete staff jobs and so on.

4. Practicum Effectiveness

Increase experience and knowledge to fresh graduates

In term of experience and knowledge, fresh graduates always in the lower level, compare to workers that gain more experience and knowledge in industries. By doing practicum, fresh graduates can increase their experiences and knowledge in a real-world environment of industries. Maybe fresh graduates gain just a tiny amount of it, but, that tiny amount of experience and knowledge become a startup for them to gain more by each day by day. For example, now I know how real world of works and how to convince the client that some function can never be done.

Increase fresh graduates trustability

Industries tend to open a job interview in need with years of experience. This shows that industries don't acknowledge fresh graduates' ability to perform in jobs given. To increase trustability in fresh graduates, practicum is one of the best methods to make sure that fresh graduates gain something valuable that build up their individual personality so that they can survives later. For my experience, when I do the job scope given to me, I do the best for that job, so that higher-ups know that I am capable to do something that gave an outcome to them.

5. Practicum Objective Achievement

Relate the theoretical understanding of the learned as well as be able to apply in the organization in which they are located

Things that I learned from semester 1 until semester 6 is the most valuable because when I am doing my practicum, all the skills that needed to work on the job given is already in my mind. I just need to apply it for the good ways. Besides that, critical thinking is the most precious because you need to think the consequences

of every work that you need to do. This type of judgment always been taught at class so that to increase our mind activity to get high quality outcome and the best methods of solution solving.

6. Learning Outcome during Practicum

Being exposed to work environment

Via internship, students can indirectly experience and appreciate the actual working environment situation. The experience may be gained for potential job use. Experience that I got such as work in development team, increase my knowledge on how to manage times for each process.

Communication Performance

Good contact during practicum can be fostered. Communication that takes place can improve student's communication skill whereas increase their self confidence like I did when I do my practical.

Exercising positive work practices

Each enterprise or entity has to have ethics or laws. Students in the company who attend practicum must comply with the laws and protocol. Students have to carry out the assigned assignments correctly and on time. Students should be prepared from time to time to get guidance. By doing this, I become a disciplines person that always set a positive mindset when working.

7. Recommendation and Suggestion

Practicum is one of the best methods that gave a big impact on fresh graduate's credibility and its exposed students to real-world environments. During my practicum, I got a lot of experiences that really tech me on how to be patients, how to communicate so that people understand what I want to convey to them and others valuable experiences. With 6 months of doing a practicum, it is not enough because just for a short time, just a tiny amount of knowledge that students can get. I am really sure that if the longer period of practicum is better because by doing so, they also can develop a connection with industrial people. This can help them to increase their networking on people and can help them to thrive in the future.

Appendix B : SPPZ5 Gantt Chart

Note: This Gantt Chart follow the methodology of Rapid Application Development (RAD).

Table B.1: Gantt Chart for SPPZ5

TASK	OCT	NOV	DEC	JAN	FEB	MAC	APR
Requirement Planning							
User Design							
Construction Phase							
Cutover Phase							

Appendix C : Requirement Gathering

For the tables, it consists of number, requirement id, requirement description and priority. In the priority column, the following short hands are used:

- M – mandatory requirements (something the system must do)
- D – desirable requirements (something the system preferably should do)
- O – optional requirements (something the system may do)

Below shows table on functional requirements for Participants and Admin, and non- functional requirements.

No.	Requirement ID	Requirement Description	Priority
	SPPZ5_01	REGISTER	
1.	SPPZ5_01_01	A new admin or user must register before login into SPPZ5	M
2.	SPPZ5_01_02	System must display a page that allow admin or user to key in their site login details: a) User ID b) Password	M
3.	SPPZ5_01_03	System must display a page that allow admin or user to key in their details: a) Title b) Name c) User ID d) Password e) Email f) Phone number	M
	SPPZ5_02	LOGIN TO THE SYSTEM	

4.	SPPZ5_02_01	Admin or user must login into SPPZ5 by key in the user ID and password.	M
5.	SPPZ5_02_02	The SPPZ5 must verify the ID and password of admin or user.	M
6.	SPPZ5_02_03	If the user forget password, user have to key in their email and user ID to recover their ID and password.	M
	SPPZ5_03	MANAGE PROJECT REPORT	
7.	SPPZ5_03_01	Admin and user shall add, update, delete and view reports.	D
8.	SPPZ5_03_02	Add Project Report	O
9.	SPPZ5_03_02_01	Admin and user can add report. System must display a page that allow admin and user to choose the project and key in the report information. <i>a) Projek Pembangunan Semula Kawasan Terbiar (PSKT)</i> <i>b) Projek Bantuan Ekonomi Belia/ Beliawanis (PBEB)</i> <i>c) Projek Peningkatan Ekonomi Petani Kedah (PPEPK)</i> <i>d) Program Pemerkasaan Ekonomi Institusi Luar Bandar (PPEI)</i> <i>e) Program Peningkatan Pendapatan (PPP)</i>	O
10.	SPPZ5_03_03	Update Project Report	O
11.	SPPZ5_03_03_01	Admin and user can update publication. System must display a page that allow admin and user to choose the project and update report information: Project title :	O

		<i>a) Projek Pembangunan Semula Kawasan Terbiar (PSKT)</i> <i>b) Projek Bantuan Ekonomi Belia/ Beliawanis (PBEB)</i> <i>c) Projek Peningkatan Ekonomi Petani Kedah (PPEPK)</i> <i>d) Program Pemerkasaan Ekonomi Institusi Luar Bandar (PPEI)</i> <i>e) Program Peningkatan Pendapatan (PPP)</i>	
12.	SPPZ5_03_04	Delete Project Report	O
13.	SPPZ5_03_04_01	Admin and user can delete report. System must search or select the deleted report. System must display a page that allow admin and user to delete the report. Project title : <i>a) Projek Pembangunan Semula Kawasan Terbiar (PSKT)</i> <i>b) Projek Bantuan Ekonomi Belia/ Beliawanis (PBEB)</i> <i>c) Projek Peningkatan Ekonomi Petani Kedah (PPEPK)</i> <i>d) Program Pemerkasaan Ekonomi Institusi Luar Bandar (PPEI)</i> <i>e) Program Peningkatan Pendapatan (PPP)</i>	O
14.	SPPZ5_03_05	View Project Report	O
15.	SPPZ5_03_05_01	Admin and user can view the report. System must display a page that allow admin and user to view the report. Project title : <i>a) Projek Pembangunan Semula Kawasan</i>	O

		<i>Terbiar (PSKT)</i> <i>b) Projek Bantuan Ekonomi Belia/ Beliawanis (PBEB)</i> <i>c) Projek Peningkatan Ekonomi Petani Kedah (PPEPK)</i> <i>d) Program Pemerkasaan Ekonomi Institusi Luar Bandar (PPEI)</i> <i>e) Program Peningkatan Pendapatan (PPP)</i>	

Table C.1 : SPPZ5 Functional Requirements

No.	Requirement ID	Requirement Description	Priority
	SPPZ5_05	Operational	
25.	SPPZ5_05_01	The system should work on any browser or device.	M
26.	SPPZ5_05_02	The system should be available for use 24 hours per day, 365 days per year.	M
	SPPZ5_06	Performance	
27.	SPPZ5_06_01	Any interaction between the user and the system should not exceed 3 seconds.	M
	SPPZ5_7	Security	
28.	SPPZ5_07_01	Only user can access and modify their personal information.	M
	SPPZ5_8	Cultural and Political	

29.	SPPZ5_08_01	Include the KEDA logo.	O
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Table C.2: SPPZ5 Non-Functional Requirements



Figure C.1 : Requirement Gathering

Appendix D : SPPZ5 UML Diagram and Specification

1. Use case diagram

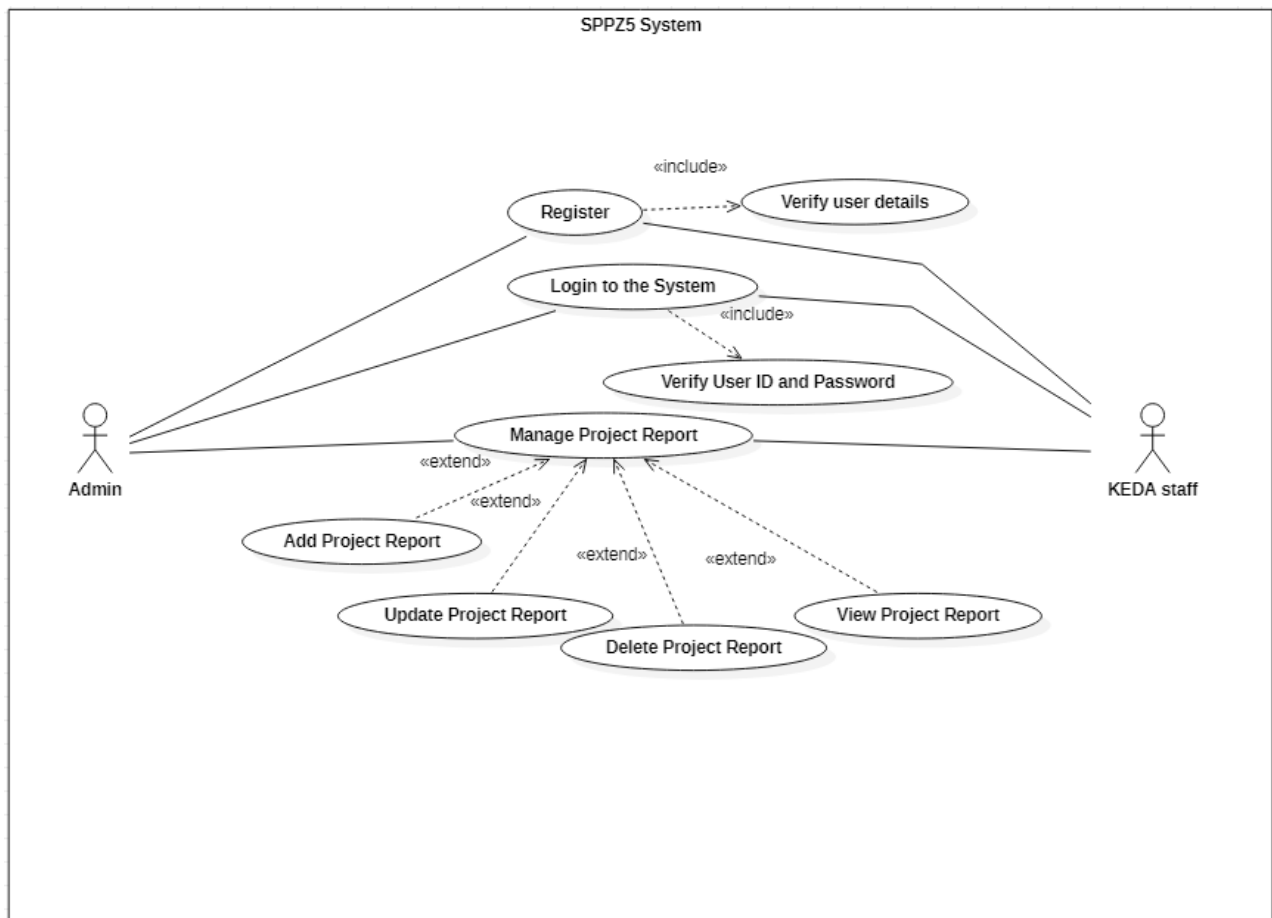


Figure D.1 : Use case diagram SPPZ5

2. Use case specification

a) Use Case : Register (SPPZ5_01)

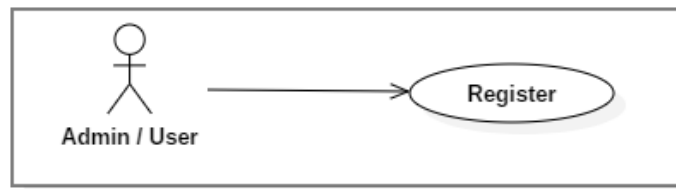


Figure D.2 : Register

Brief Description

This use case is initiated by the admin or user. This use case will enable the admin or user to register to the system

Pre-Conditions

The system must display a page that allow user to key in their details.

Characteristic Of Activation

On admin or user demand

Flow Of Events

i. Basic Flow (SPPZ5_01_01)

- This use case begins when the new admin or user clicked on "Register" button.
- The system will display Register page on screen.
- The admin or user will key in their details.
- Invalid [E1] message will be display if the admin or user entered the wrong details.

ii. Alternative Flow

Not applicable.

iii. Exceptional Flow

Process invalid [E1]

The system shall display the message " Process failed" if the page failed to execute the process.

The system will reload the page again to allow the admin or user redo the process.

Post-Conditions

Not applicable.

Rule(S)

Not applicable.

Constraint(S)

Only staff KEDA can register to the system.

b) Use Case : Login To The System (SPPZ5_02)

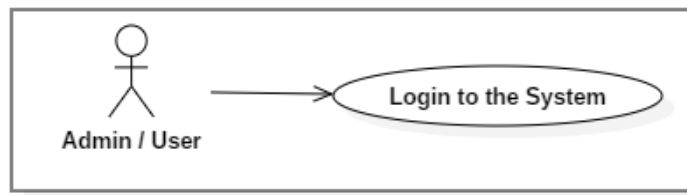


Figure D.3 : Login

Brief Description

This use case is initiated by the admin or user. This use case will enable the admin or user to login to the system

Pre-Conditions

The system must verify admin or user ID and password

Characteristic Of Activation

On admin or user demand

Flow Of Events

i. Basic Flow (SPPBE_02_01)

- This use case begins when the admin or user clicked on "Login" button.
- The system will display Login page on screen.

- The admin or user will key in their ID and password.
- Invalid [E1] message will be display if the admin or user entered the incorrect details.

ii. Alternative Flow

Not applicable.

iii. Exceptional Flow

Process invalid [E1]

The system shall display the message " Process failed" if the page failed to execute the process.

The system will reload the page again to allow the admin or user redo the process.

c) Post-Conditions

- The admin or user can login into the system
- The admin can take control of admin part in the system
- The user can access SPPBE system

d) Rule(S)

The admin or user needs to register before login.

e) Constraint(S)

Only registered user can login into the system

c) Use Case : Manage Project Report (SPPZ5_03)

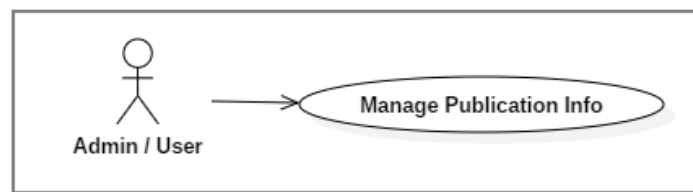


Figure D.4 : Manage Report

Brief Description

This use case is initiated by the admin or user. This use case will enable the admin or user to add, update, delete and view the report.

Pre-Conditions

The system must verify admin or user ID and password

Characteristic Of Activation

On admin or user demand

Flow Of Events

i. Basic Flow (SPPZ5_03_01)

- This use case begins when the admin or user clicked on "Manage Report" button.
- The system will display Manage Report page on screen.
- The admin or user can select option either to add [A1] or update [A2] or delete [A3] or view [A4] report.
- Invalid [E1] message will be display if the admin or user entered the wrong information.

ii. Alternative Flow

Add Project Report [A1] (SPPBE_03_02)

- .The admin or user shall click on Add Report button. The system shall validate the process and display the "Add Report" page.
- The system will generate a new ID for the admin or user to add new report record.
- The admin or user shall add new report information that will be divide into four category which are:
 - *Bahagian A : Maklumat Peserta*
 - *Bahagian B : Projek Yang Dijalankan dan Bantuan Yang Diterima*
 - *Bahagian C : Laporan Dari Pegawai Pelaksana*
 - *Bahagian D : Perakuan (Pegawai Pembangunan Zon)*
- The system must save and display the report information.

Update Project Report [A2] (SPPBE_03_03)

- .The admin or user shall click on Update Report button. The system shall search and validate the process and display the "Update Report" page.
- The admin or user shall update new report information that will be divide into four category which are:
 - *Bahagian A : Maklumat Peserta*
 - *Bahagian B : Projek Yang Dijalankan dan Bantuan Yang Diterima*
 - *Bahagian C : Laporan Dari Pegawai Pelaksana*
 - *Bahagian D : Perakuan (Pegawai Pembangunan Zon)*
- The system must save and display the report information.

Delete Project Report [A3] (SPPBE_03_04)

- The admin or user shall click delete button. The system shall allow the process and display the "Delete Report" page.
- The admin or user must key-in report ID
- The system will search and display the report.
- The admin or user shall delete the report record.
- The system must display the confirmation message for delete, and delete the information from the report file in the database.

View Project Report [A4] (SPPBE_03_05)

- The admin or user shall click view button. The system shall allow the process and display the "View Report" page.
- The admin or user must key-in report ID
- The system will display the report.

iii. Exceptional Flow

Process invalid [E1]

The system shall display the message " Process failed" if the page failed to execute the process. The system will reload the page again to allow the admin or user redo the process.

Post-Conditions

The publication file will be update based on the action performed by the admin or user.

Rule(S)

Not applicable.

Constraint(S)

Only registered admin or user can add, update, delete or view the report.

3. Sequence diagram

This part shows all the sequence diagram for SPPZ5 that consist of Register, Login , Update, Delete and View.

a. Register sequence diagram

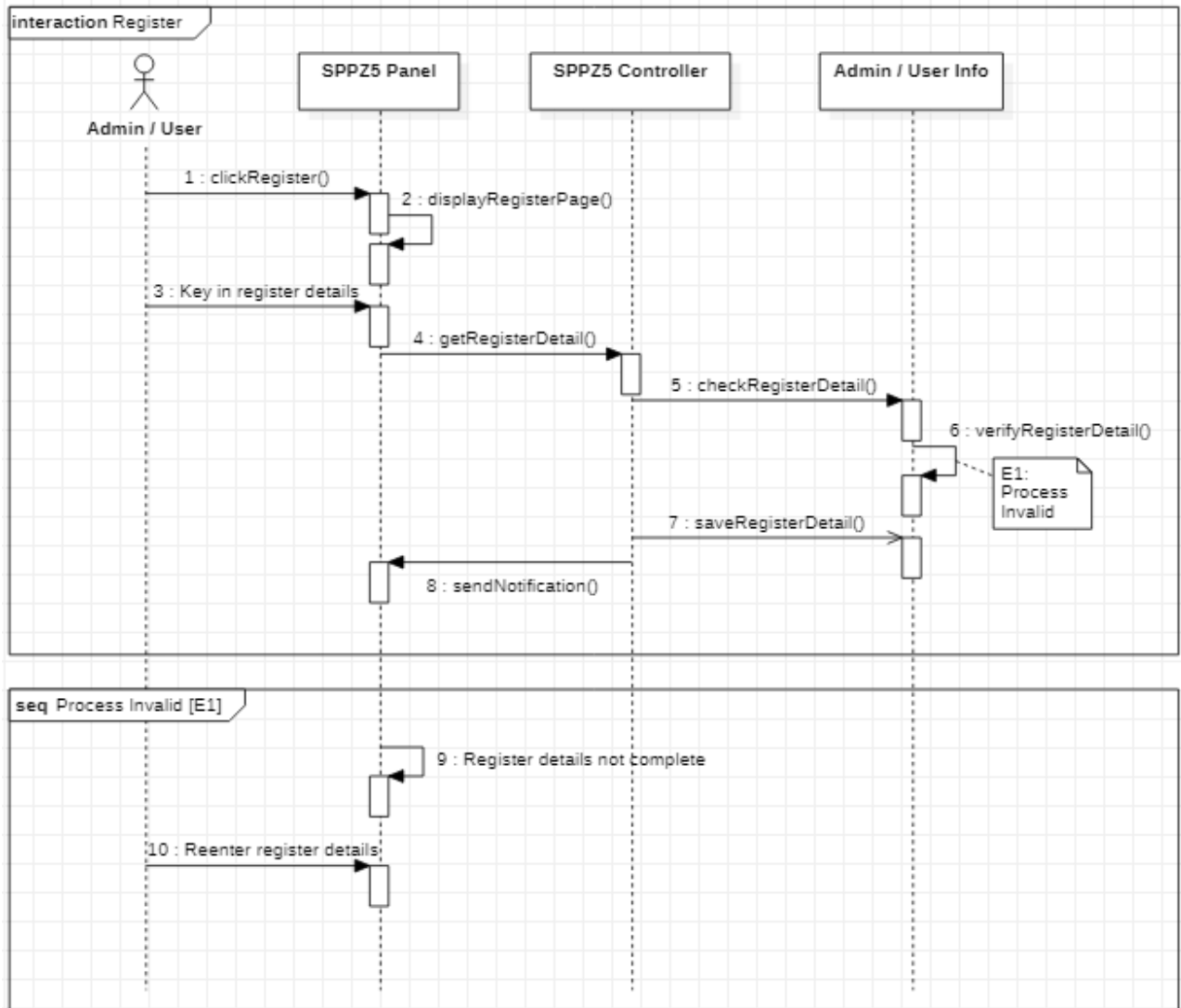


Figure D.5 : Register Sequence Diagram for SPPZ5

b. Login sequence diagram

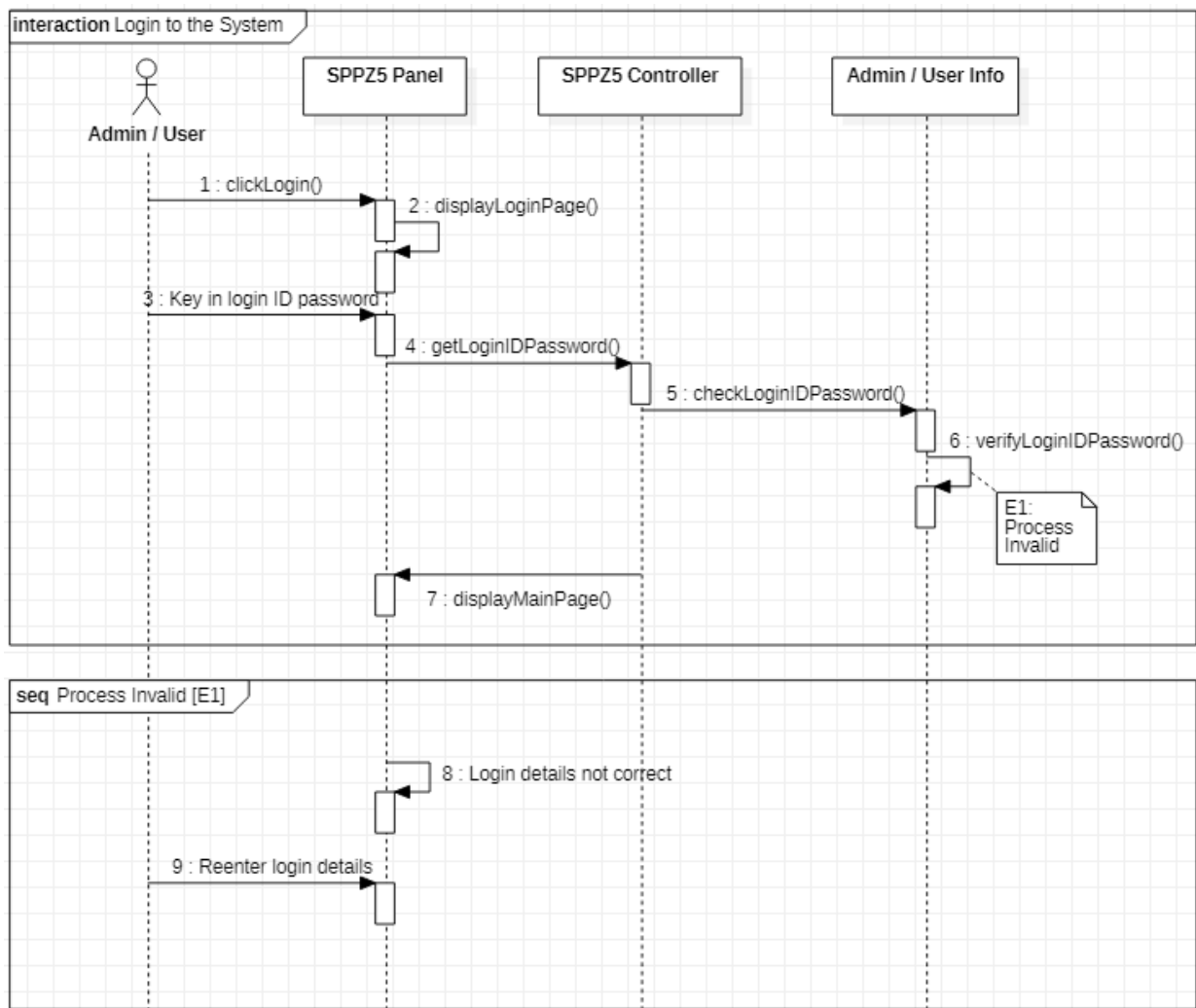


Figure D.6 : Login Sequence Diagram for SPPZ5

c. Manage and add report sequence diagram

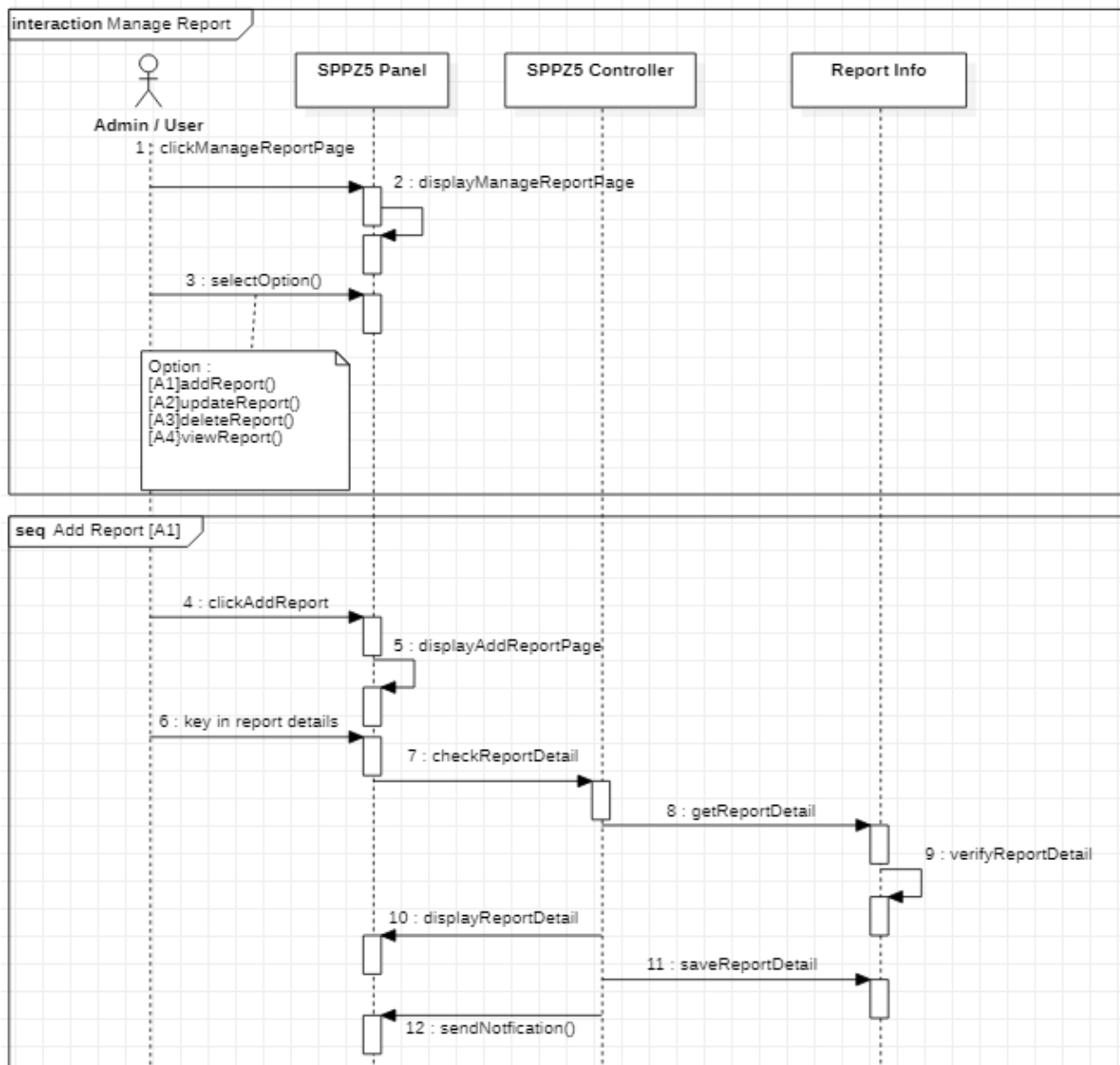


Figure D.7 : Manage Report and Add Report Sequence Diagram for SPPZ5

d. Update sequence diagram

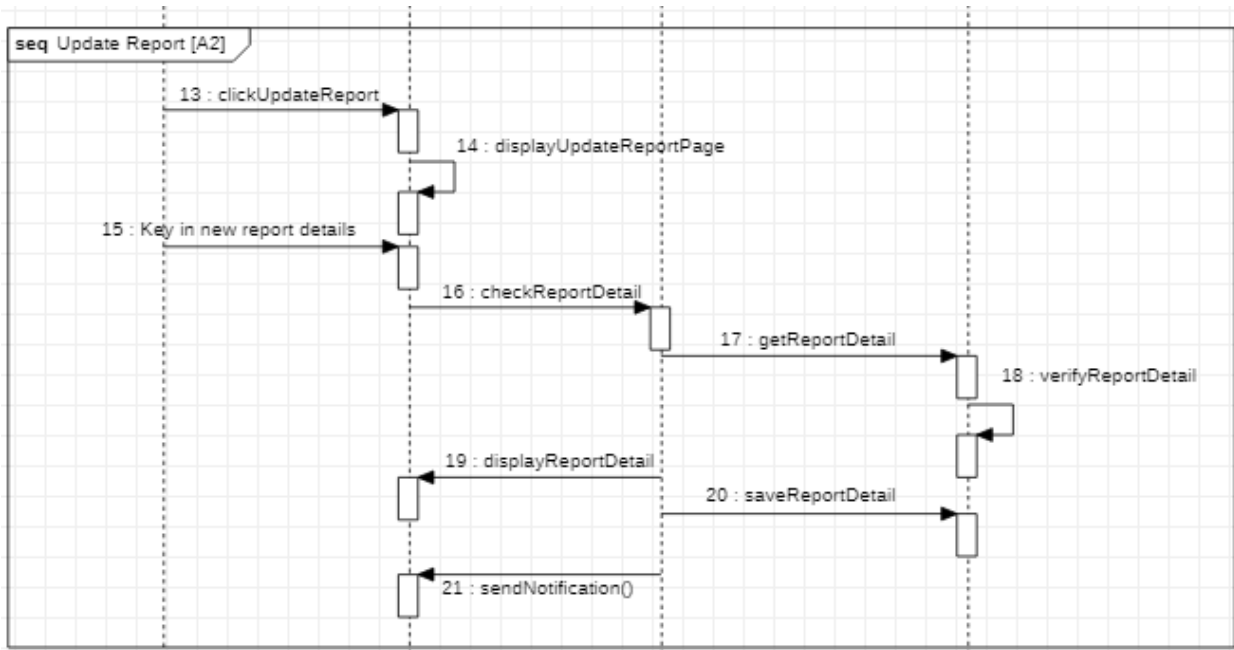


Figure D.8 : Update Sequence Diagram for SPPZ5

e. Delete sequence diagram

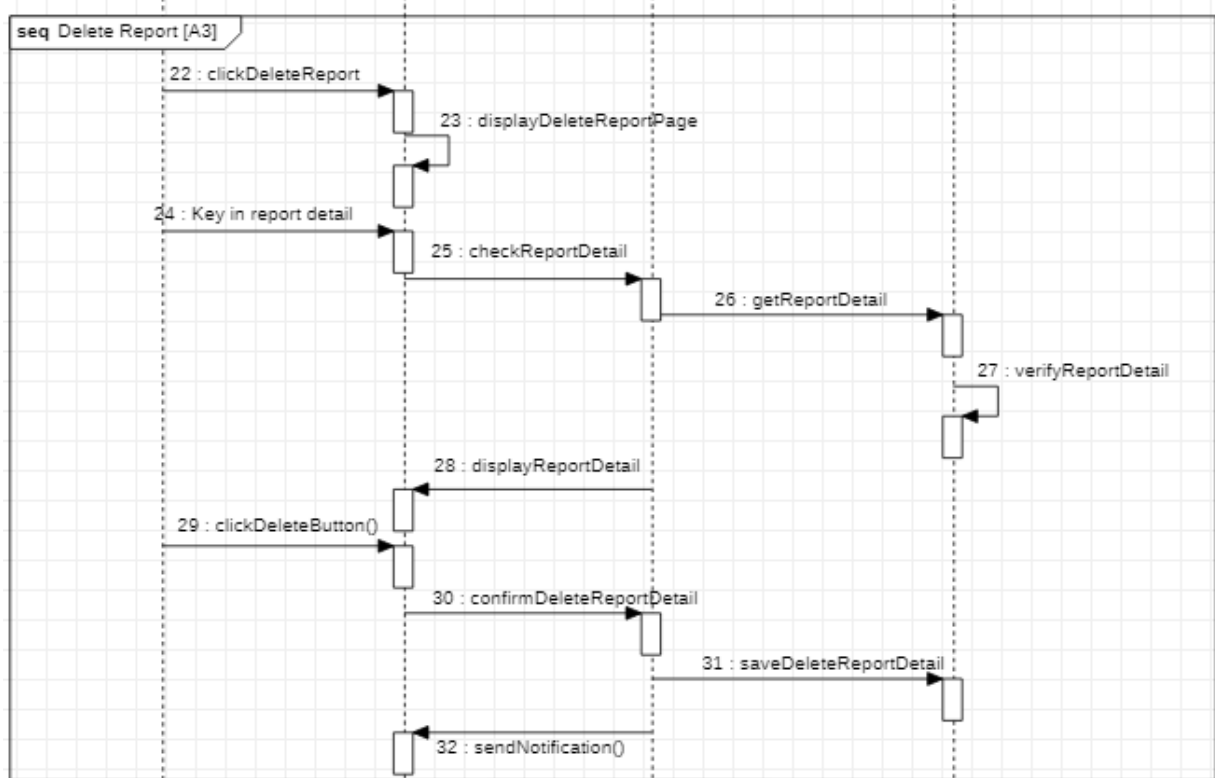


Figure D.9 : Delete Sequence Diagram for SPPZ5

f. View sequence diagram

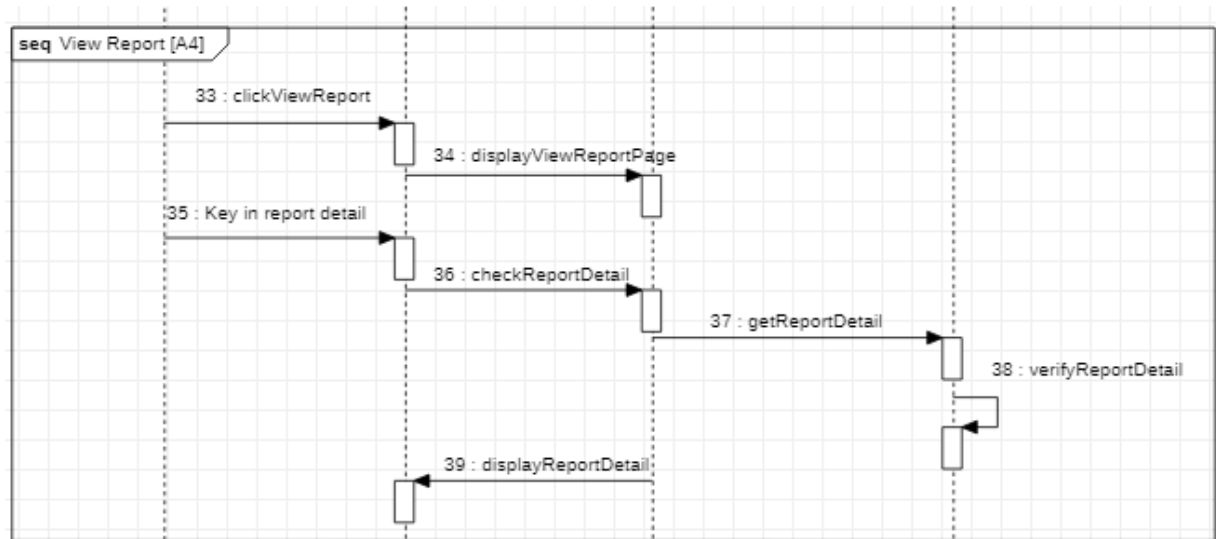


Figure D.10 : View Sequence Diagram for SPPZ5

4. Class diagram

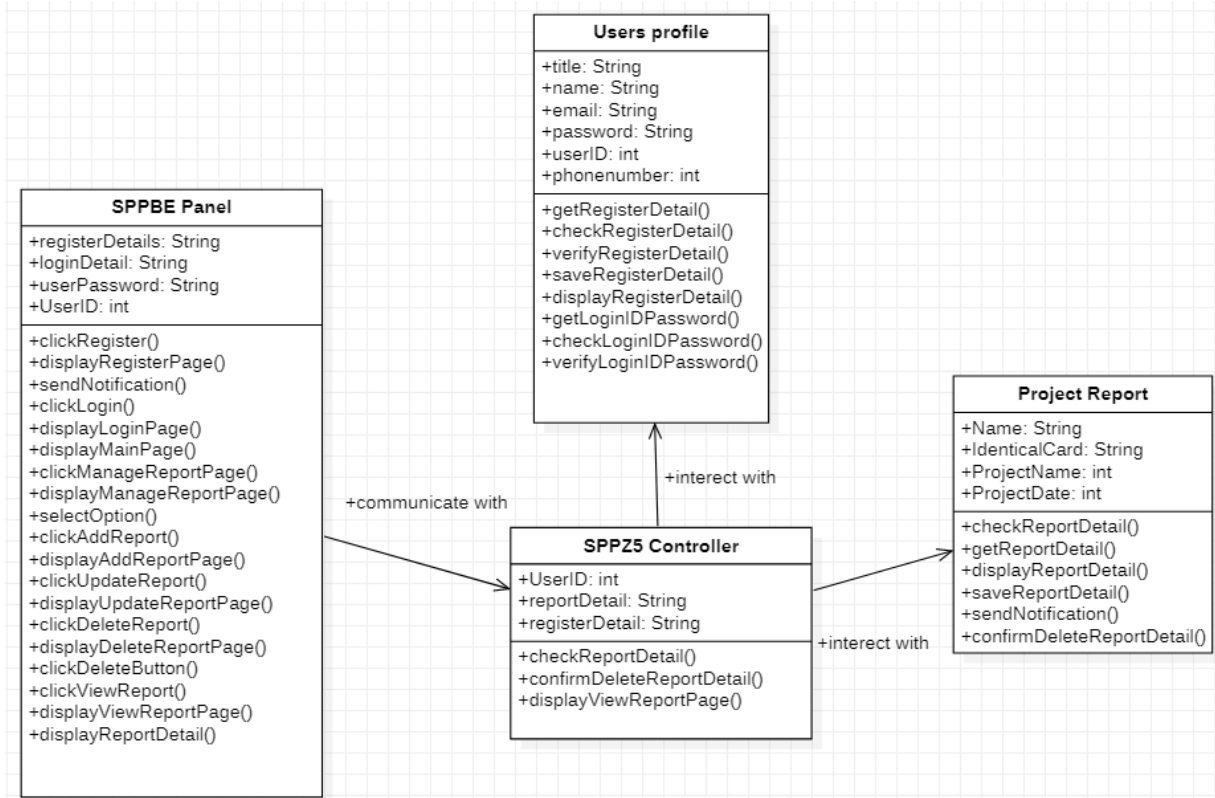



Figure D.11 : Class Diagram for SPPZ5

Appendix E : Testing Phase and Feedback

a. Questionnaires

POST-TASK QUESTIONNAIRE																										
 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">Pusat Pengajian Pengkomputeran <i>School of Computing</i> Universiti Utara Malaysia</div>																										
<p>My name is Nur Farah Hanim bt Abd Halim. Matric number 256666. I am last year student of University Utara Malaysia (UUM) from department School of Computing. To complete my studies, I have developed web-based system which is Sistem Projek Pemantauan Zon 5 (SPPZ5). This system actually to help KEDA's staff to manage their project systematically. I have a few questions to ask you about the SPPZ5.</p>																										
<p>Thank you for participating in this study. The purpose of the questionnaire is to collect opinions from the participants on the security, convenience and usability of the social network login in accessing the course portal. The implementation of social network login is through Open Authorization (OAuth) protocol.</p> <p><i>All of the answers you provide in this questionnaire will be kept confidential. The data will not identify any individual person and will be reported as a group.</i></p>																										
<p>Participant No: _____</p>																										
<p>Section A: Demography and Background Information <i>Please tick <input checked="" type="checkbox"/> on the relevant block or write down your response on the space provided.</i></p>																										
<p>A.1 Type : <input type="checkbox"/> Supervisor Project <input type="checkbox"/> Staff KEDA</p>																										
<p>A.2 Gender : <input type="checkbox"/> Male <input type="checkbox"/> Female</p>																										
<p>Section B: Traditional Login Facility <i>After executing each task, please rate your agreement with the following statements based on scale:</i></p>																										
<table border="1" style="margin: auto; border-collapse: collapse;"><thead><tr><th style="padding: 5px;">Strongly disagree</th><th style="padding: 5px;">Disagree</th><th style="padding: 5px;">Neutral</th><th style="padding: 5px;">Agree</th><th style="padding: 5px;">Strongly Agree</th></tr></thead><tbody><tr><td style="text-align: center; padding: 5px;">1</td><td style="text-align: center; padding: 5px;">2</td><td style="text-align: center; padding: 5px;">3</td><td style="text-align: center; padding: 5px;">4</td><td style="text-align: center; padding: 5px;">5</td></tr></tbody></table>						Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	1	2	3	4	5											
Strongly disagree	Disagree	Neutral	Agree	Strongly Agree																						
1	2	3	4	5																						
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 15%;"></th><th style="width: 65%;"></th><th style="width: 10%; text-align: center;">Strongly disagree</th><th style="width: 10%; text-align: center;">Disagree</th><th style="width: 10%; text-align: center;">Neutral</th><th style="width: 10%; text-align: center;">Agree</th><th style="width: 10%; text-align: center;">Strongly Agree</th></tr></thead><tbody><tr><td colspan="2" style="background-color: #f2f2f2; padding: 5px;">Please answer the questions based on the above tasks:</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="2" style="padding: 5px;">Overall, I am satisfied with the ease of completing this task.</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td></tr></tbody></table>								Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Please answer the questions based on the above tasks:							Overall, I am satisfied with the ease of completing this task.		1	2	3	4	5
		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree																				
Please answer the questions based on the above tasks:																										
Overall, I am satisfied with the ease of completing this task.		1	2	3	4	5																				

Overall, I am satisfied with the amount of time it took to complete this task.		1	2	3	4	5
Usefulness of SPPZ5 System						
B.1	SPPZ5 System enhances my effectiveness on accessing the project report.	1	2	3	4	5
B.2	SPPZ5 System helps to manage project report systematically.	1	2	3	4	5
B.3	SPPZ5 System makes it easier to access the project report.	1	2	3	4	5
B.4	SPPZ5 System enables me to accomplish tasks more quickly.	1	2	3	4	5
B.5	SPPZ5 System saves me time when I use it.	1	2	3	4	5
B.6	SPPZ5 System does everything I would expect it to do.	1	2	3	4	5
B.7	SPPZ5 System is useful in overall.	1	2	3	4	5
Ease of Use of SPPZ5 System						
B.8	SPPZ5 System is easy to use and user friendly	1	2	3	4	5
B.9	SPPZ5 System is easy to learn how to use it.	1	2	3	4	5
B.10	I can use SPPZ5 System without written instructions.	1	2	3	4	5
B.11	I don't notice any inconsistencies as I use SPPZ5 System	1	2	3	4	5
B.12	I can manage my project easily.	1	2	3	4	5
Satisfaction of SPPZ5 System						
B.13	I am satisfied with SPPZ5 System.	1	2	3	4	5
B.14	I would recommend SPPZ5 System to others staff.	1	2	3	4	5
B.15	SPPZ5 System works the way I want it to work.	1	2	3	4	5
Security of SPPZ5 System						
B.16	SPPZ5 System allows user to change their password at any time.	1	2	3	4	5
B.17	SPPZ5 System authenticates users.	1	2	3	4	5
B.18	SPPZ5 System is secure and makes my work easier.	1	2	3	4	5
B.19	I prefer to use SPPZ5 System.	1	2	3	4	5

Figure E.1 : Questionnaires for SPPZ5

b. Feedback

		Number of respondents	Percentage
Type	Supervisor Project	5	41.7%
	Staff KEDA	7	58.3%
Gender	Female	6	50%
	Male	6	50%

Table E.1 : Finding for Demographic

		Number of respondents	Percentage
Easy to complete task	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	3	25%
	Agree	4	33.3%
	Strongly Agree	5	41.7%
Time to complete task	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	5	41.7%
	Agree	4	33.3%
	Strongly Agree	3	25%

Table E.2 : Usability Test Evaluation

		Number of respondents	Percentage
Effectiveness accessing project report	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	2	16.7%
	Agree	6	50%
	Strongly Agree	4	33.3%
Help manage project report systematically	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	1	8.3%
	Agree	6	60%
	Strongly Agree	5	41.7%
Easier access project report information	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	1	8.3%
	Agree	6	50%

	Strongly Agree	5	41.7%
Accomplish task more quickly	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	4	33.3%
	Agree	4	33.3%
	Strongly Agree	4	33.3%
Save time	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	6	50%
	Strongly Agree	6	50%
Expecting system to do	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	5	41.7%
	Agree	4	33.3%
	Strongly Agree	2	16.7%
Useful in overall	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	8	66.7%
	Strongly Agree	4	33.3%

Table E.3 : Usefulness of SPPZ5

		Number of respondents	Percentage
Easy to used and user friendly	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	4	33.3%
	Agree	5	41.7%
	Strongly Agree	3	25%
Easy to learn	Strongly Disagree	0	0%

how to use	Disagree	0	0%
	Natural	3	25%
	Agree	7	58.3%
	Strongly Agree	2	16.7%
Can use without written instructions	Strongly Disagree	0	0%
	Disagree	3	25%
	Natural	3	25%
	Agree	4	41.7%
	Strongly Agree	2	16.7%
Don't notice inconsistencies	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	2	16.7%
	Strongly Agree	10	83.3%
Manage project report easily	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	4	33.3%
	Agree	8	66.7%
	Strongly Agree	0	0%

Table E.4 : Ease of Use of SPPZ5

		Number of respondents	Percentage
System satisfaction	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	10	83.3%
	Strongly Agree	2	16.7%
Recommend to SPPZ5 member	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	6	50%

	Strongly Agree	6	50%
System work as they want	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	6	50%
	Strongly Agree	6	50%

Table E.5 : Satisfaction of SPPZ5

		Number of respondents	Percentage
Allow change password anytime	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	0	0%
	Strongly Agree	12	100%
System authenticates users	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	6	50%
	Agree	5	41.7%
	Strongly Agree	1	8.3%
Secure and makes work easier	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	5	41.7%
	Agree	5	41.7%
	Strongly Agree	2	16.7%
Prefer to use SPPZ5 System	Strongly Disagree	0	0%
	Disagree	0	0%
	Natural	0	0%
	Agree	5	41.7%
	Strongly Agree	7	58.3%

Table E.6 : Security of SPPZ5

Appendix F Training Phase



Figure F.1 : Training phase for SPPZ5