

SULIT



SECP2523 DATABASE

SESSION 2024/2025 - SEMESTER 1

ALTERNATIVE ASSESSMENT REPORT: PHASE 2

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Case Study	Improvement of KKK Online System
System Name	Koperasi Kakitangan KADA (KKK) Online System
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3.0 SQL and Interface Implementation

3.1 SQL Statement (DDL & DML)

Data Definition Language (DDL)

1. tb_repayment

```
1  -- Table structure for table `tb_repayment`
2  --
3
4  CREATE TABLE `tb_repayment` (
5    `repaymentID` int(11) NOT NULL,
6    `repaymentAmount` double NOT NULL,
7    `penaltyAmount` double NOT NULL,
8    `repaymentStatus` enum('Tertunda','Dibayar','Terlewat') NOT NULL,
9    `repaymentDate` timestamp NULL DEFAULT current_timestamp(),
10   `dueDate` timestamp NOT NULL DEFAULT current_timestamp(),
11   `paymentType` enum('Kad Kredit','Tunai','Touch n Go') DEFAULT NULL,
12   `transactionFile` varchar(255) DEFAULT NULL,
13   `memberNo` int(11) NOT NULL,
14   `loanID` int(11) NOT NULL
15 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
16
17 -- Indexes for table `tb_repayment`
18 --
19 ALTER TABLE `tb_repayment`
20   ADD PRIMARY KEY (`repaymentID`),
21   ADD KEY `memberNo` (`memberNo`),
22   ADD KEY `loanID` (`loanID`);
23
24 -- Constraints for table `tb_repayment`
25 --
26 ALTER TABLE `tb_repayment`
27   ADD CONSTRAINT `tb_repayment_ibfk_1` FOREIGN KEY (`memberNo`)
28 REFERENCES `tb_member` (`m_memberNo`),
29   ADD CONSTRAINT `tb_repayment_ibfk_2` FOREIGN KEY (`loanID`)
30 REFERENCES `tb_loan` (`l_loanApplicationID`);
31
32 -- AUTO_INCREMENT for table `tb_repayment`
33 --
34 ALTER TABLE `tb_repayment`
35   MODIFY `repaymentID` int(11) NOT NULL AUTO_INCREMENT;
```

Result for tb_repayment

Server: 127.0.0.1 » Database: db_kkk » Table: tb_repayment

Table structure

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	repaymentID	int(11)		No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2	repaymentAmount	double		No	None			Change Drop More
<input type="checkbox"/>	3	penaltyAmount	double		No	None			Change Drop More
<input type="checkbox"/>	4	repaymentStatus	enum('Tertunda', 'Dibayar', 'Terlewat')	utf8mb4_general_ci	No	None			Change Drop More
<input type="checkbox"/>	5	repaymentDate	timestamp		Yes	current_timestamp()			Change Drop More
<input type="checkbox"/>	6	dueDate	timestamp		No	current_timestamp()			Change Drop More
<input type="checkbox"/>	7	paymentType	enum('Kad Kredit', 'Tunai', 'Touch n Go')	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	8	transactionFile	varchar(255)	utf8mb4_general_ci	Yes	NULL			Change Drop More
<input type="checkbox"/>	9	memberNo	int(11)		No	None			Change Drop More
<input type="checkbox"/>	10	loanID	int(11)		No	None			Change Drop More

☐ Check all
 With selected: Browse Change Drop Primary Unique Index Spatial Fulltext Add to central columns

2. tb_loan

```

1  -- Table structure for table `tb_loan`
2  --
3
4  CREATE TABLE `tb_loan` (
5    `l_loanApplicationID` int(11) NOT NULL,
6    `l_memberNo` int(11) NOT NULL,
7    `l_loanType` int(11) NOT NULL,
8    `l_appliedLoan` double NOT NULL,
9    `l_loanPeriod` int(11) NOT NULL COMMENT '(Years)',
10   `l_monthlyInstalment` double NOT NULL COMMENT '\r\n',
11   `l_loanPayable` double NOT NULL,
12   `l_bankAccountNo` int(11) NOT NULL,
13   `l_bankName` int(11) NOT NULL,
14   `l_monthlyGrossSalary` double NOT NULL,
15   `l_monthlyNetSalary` double NOT NULL,
16   `l_signature` varchar(50) NOT NULL,
17   `l_file` varchar(50) NOT NULL COMMENT '(Pengesahan Majikan)',
18   `l_status` int(11) NOT NULL,
19   `l_applicationDate` datetime DEFAULT NULL,
20   `l_approvalDate` timestamp NULL DEFAULT NULL,
21   `l_adminID` int(11) DEFAULT NULL COMMENT 'Admin who approved the
22   application'
23 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci;
24
25 -- Indexes for table `tb_loan`
26 --
27 ALTER TABLE `tb_loan`
28   ADD PRIMARY KEY (`l_loanApplicationID`),
29   ADD KEY `l_loanType` (`l_loanType`),
30   ADD KEY `l_adminID` (`l_adminID`),
31   ADD KEY `l_status` (`l_status`),
32   ADD KEY `l_memberNo` (`l_memberNo`),
33   ADD KEY `l_bankName` (`l_bankName`);
34
35 -- Constraints for table `tb_loan`
36 --
37 ALTER TABLE `tb_loan`
38   ADD CONSTRAINT `tb_loan_ibfk_1` FOREIGN KEY (`l_loanType`)
39   REFERENCES `tb_ltype` (`lt_lid`),

```

```

40 ADD CONSTRAINT `tb_loan_ibfk_2` FOREIGN KEY (`l_status`) REFERENCES
41 `tb_status` (`s_sid`),
42 ADD CONSTRAINT `tb_loan_ibfk_3` FOREIGN KEY (`l_memberNo`)
43 REFERENCES `tb_member` (`m_memberNo`),
44 ADD CONSTRAINT `tb_loan_ibfk_4` FOREIGN KEY (`l_bankName`)
45 REFERENCES `tb_lbank` (`lb_id`);
46
47 -- AUTO_INCREMENT for table `tb_loan`
48 --
49 ALTER TABLE `tb_loan`
50 MODIFY `l_loanApplicationID` int(11) NOT NULL AUTO_INCREMENT;
51

```

Result for tb_loan

Server: 127.0.0.1 » Database: db_kkk » Table: tb_loan									
Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers									
Table structure Relation view									
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1 l_loanApplicationID	int(11)			No	None		AUTO_INCREMENT	Change Drop More
<input type="checkbox"/>	2 l_memberNo	int(11)			No	None			Change Drop More
<input type="checkbox"/>	3 l_loanType	int(11)			No	None			Change Drop More
<input type="checkbox"/>	4 l_appliedLoan	double			No	None			Change Drop More
<input type="checkbox"/>	5 l_loanPeriod	int(11)			No	None	(Years)		Change Drop More
<input type="checkbox"/>	6 l_monthlyInstalment	double			No	None			Change Drop More
<input type="checkbox"/>	7 l_loanPayable	double			No	None			Change Drop More
<input type="checkbox"/>	8 l_bankAccountNo	int(11)			No	None			Change Drop More
<input type="checkbox"/>	9 l_bankName	int(11)			No	None			Change Drop More
<input type="checkbox"/>	10 l_monthlyGrossSalary	double			No	None			Change Drop More
<input type="checkbox"/>	11 l_monthlyNetSalary	double			No	None			Change Drop More
<input type="checkbox"/>	12 l_signature	varchar(50)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	13 l_file	varchar(50)	utf8mb4_general_ci		No	None	(Pengesahan Majikan)		Change Drop More
<input type="checkbox"/>	14 l_status	int(11)			No	None			Change Drop More
<input type="checkbox"/>	15 l_applicationDate	datetime			Yes	NULL			Change Drop More
<input type="checkbox"/>	16 l_approvalDate	timestamp			Yes	NULL			Change Drop More
<input type="checkbox"/>	17 l_adminID	int(11)			Yes	NULL	Admin who approved the application		Change Drop More

Data Manipulation Language (DML)

1. Retrieve loan details for a specific member, identified by \$memberNo(3), from the tb_loan table in the database.

```

1 SELECT
2     l_loanType,
3     l_appliedLoan,
4     l_loanPeriod,
5     l_monthlyInstalment,
6     l_loanPayable,
7     l_status,
8     l_applicationDate,
9     l_loanApplicationID
10 FROM
11     tb_loan
12 WHERE
13     l_memberNo = 3;

```

Result

Server: 127.0.0.1 » Database: db_kkk » Table: tb_loan

Showing rows 0 - 13 (14 total, Query took 0.0018 seconds.)

SELECT l_loanType, l_appliedLoan, l_loanPeriod, l_monthlyInstalment, l_loanPayable, l_status, l_applicationDate, l_loanApplicationID FROM tb_loan WHERE l_memberNo = 3;

Number of rows: 25 Filter rows: Search this table Sort by key: None

		l_loanType	l_appliedLoan	l_loanPeriod (years)	l_monthlyInstalment	l_loanPayable	l_status	l_applicationDate	l_loanApplicationID
<input type="checkbox"/>	Edit Copy Delete	3	15000	2	677.5	16260	1	2025-12-03 00:00:00	3
<input type="checkbox"/>	Edit Copy Delete	1	50	2	5	0	4	2025-01-01 00:00:00	9
<input type="checkbox"/>	Edit Copy Delete	1	50	2	5	15	3	2025-01-02 00:00:00	10
<input type="checkbox"/>	Edit Copy Delete	1	6000	4	146	7008	1	2025-01-21 17:17:48	11
<input type="checkbox"/>	Edit Copy Delete	1	6000	4	146	7008	1	2025-01-21 17:19:47	12
<input type="checkbox"/>	Edit Copy Delete	1	6000	4	146	7008	1	2025-01-21 19:15:54	13
<input type="checkbox"/>	Edit Copy Delete	1	6000	4	146	7008	1	2025-01-21 19:16:53	14
<input type="checkbox"/>	Edit Copy Delete	1	6000	4	146	7008	1	2025-01-21 19:17:22	15
<input type="checkbox"/>	Edit Copy Delete	3	2500	4	60.83	2920	1	2025-01-21 20:14:03	16
<input type="checkbox"/>	Edit Copy Delete	3	2500	4	60.83	2920	1	2025-01-21 20:15:40	17
<input type="checkbox"/>	Edit Copy Delete	3	2500	4	60.83	2920	1	2025-01-21 20:16:18	18
<input type="checkbox"/>	Edit Copy Delete	3	2500	4	60.83	2920	3	2025-01-21 20:20:21	19
<input type="checkbox"/>	Edit Copy Delete	3	2500	4	60.83	2920	1	2025-01-21 21:21:50	20
<input type="checkbox"/>	Edit Copy Delete	3	123	3	3.85	138.5	0	2025-01-22 10:42:08	30

- Retrieves detailed loan repayment information, including amounts, penalties, and statuses, for a specific member, \$memberNo (3) with optional filtering by \$loanID (11) and sorted by the most recent loans.

```

1 SELECT
2     l.l_loanApplicationID AS 'ID Pinjaman',
3     lt.lt_desc AS 'Jenis Pinjaman',
4     r.repaymentID AS 'ID Pembayaran',
5     r.repaymentAmount AS 'Ansuran Pinjaman (RM)',
6     r.penaltyAmount AS 'Jumlah Penalti (RM)',
7     SUM(r.repaymentAmount) + SUM(r.penaltyAmount) AS 'Jumlah Bayaran
8 (RM)',
9     r.repaymentDate AS 'Tarikh Bayaran',
10    r.repaymentStatus AS 'Status Bayaran'
11 FROM
12     tb_loan l
13 INNER JOIN
14     tb_ltype lt ON l.l_loanType = lt.lt_lid
15 LEFT JOIN
16     tb_repayment r ON r.loanID = l.l_loanApplicationID
17 WHERE
18     l.l_memberNo = '3'
19
20     -- If a specific loanID is provided, filter results by loanID
21     AND (l.l_loanApplicationID = '3' OR '$loanID' IS NULL)
22
23 GROUP BY
24     l.l_loanApplicationID,
25     lt.lt_desc,
26     r.repaymentDate,
27     r.repaymentStatus

```

```

28
29 ORDER BY
30     1.1_loanApplicationID DESC;

```

Result

Server: 127.0.0.1 » Database: db_kkk

Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers Tracking Designer Central columns

Show query box

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total, Query took 0.0020 seconds.)

```

SELECT 1.1_loanApplicationID AS 'ID Pinjaman', lt.lt_desc AS 'Jenis Pinjaman', r.repaymentID AS 'ID Pembayaran', r.repaymentAmount AS 'Ansuran Pinjaman (RM)', r.penaltyAmount AS 'Jumlah Penalti (RM)', SUM(r.repaymentAmount) + SUM(r.penaltyAmount) AS 'Jumlah Bayaran (RM)', r.repaymentDate AS 'Tarikh Bayaran', r.repaymentStatus AS 'Status Bayaran' FROM tb_loan l INNER JOIN tb_ltype lt ON 1.1_loanType = lt.lt_id LEFT JOIN tb_repayment r ON r.loanID = 1.1_loanApplicationID WHERE 1.1_memberNo = '3' -- If a specific loanID is provided, filter results by loanID AND (1.1_loanApplicationID = '11' OR '11' IS NULL) GROUP BY 1.1_loanApplicationID, lt.lt_desc, r.repaymentDate, r.repaymentStatus ORDER BY 1.1_loanApplicationID DESC;

```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

ID Pinjaman	Jenis Pinjaman	ID Pembayaran	Ansuran Pinjaman (RM)	Jumlah Penalti (RM)	Jumlah Bayaran (RM)	Tarikh Bayaran	Status Bayaran
11	Al-Bai	1	120	5	125	2024-06-11 18:26:39	Terlewat
11	Al-Bai	2	120	0	120	2024-06-10 18:31:56	Dibayar
11	Al-Bai	3	120	0	240	NULL	Tertunda

Show all | Number of rows: 25 | Filter rows: Search this table

3. Updates the repayment details:

- \$repaymentDate (timestamp)
- \$transactionFile (butir_pembayaran_3.pdf)
- \$paymentType (Touch n Go)
- \$status (Terlewat)
- \$jumlahPenalti (10.00)

in the tb_repayment table for a specific repayment record identified by \$repaymentID (3)

```

1 UPDATE tb_repayment
2 SET
3     repaymentDate = 'timestamp',
4     transactionFile = 'butir_pembayaran_3.pdf',
5     paymentType = 'Touch n Go',
6     repaymentStatus = 'Terlewat',
7     penaltyAmount = '10.00'
8 WHERE
9     repaymentID = '3';

```

Result

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	repaymentID	repaymentAmount	penaltyAmount	repaymentStatus	repaymentDate	dueDate	paymentType	transactionFile	memberNo	loanID
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	120	5	Terlewat	2024-06-11 18:26:39	2024-05-28 18:26:39	Kad Kredit	butir_pembayaran_1.pdf	3	11
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	120	0	Dibayar	2024-06-10 18:31:56	2024-06-26 18:31:56	Tunai	NULL	3	11
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	120	10	Terlewat	2025-01-24 01:12:49	2024-07-28 18:31:56	Touch n Go	butir_pembayaran_3.pdf	3	11
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	300	0	Tertunda	NULL	2024-08-26 21:35:26	NULL	NULL	3	16
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	120	0	Tertunda	NULL	2024-08-27 21:46:18	NULL	NULL	3	11

Check all | With selected: ☐ Edit ☐ Copy ☐ Delete ☐ Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

- Shows the paymentType column in the tb_repayment table and retrieves its possible ENUM values.

```
1 SHOW COLUMNS FROM tb_repayment LIKE 'paymentType';
```

Result

Your SQL query has been executed successfully.					
SHOW COLUMNS FROM tb_repayment LIKE 'paymentType';					
<input type="checkbox"/> Profiling [Edit inline] [Edit] [Create PHP code] [Refresh]					
Extra options					
Field	Type	Null	Key	Default	Extra
paymentType	enum('Kad Kredit','Tunai','Touch n Go')	YES		NULL	

- Retrieve data about loans and their associated repayments for a specific member, \$memberNo (3).

```
1 SELECT
2     l.l_loanApplicationID,
3     m.m_name,
4     l.l_appliedLoan,
5     l.l_loanPeriod,
6     r.repaymentAmount,
7     r.repaymentDate
8 FROM
9     tb_loan l
10 INNER JOIN
11     tb_member m ON l.l_memberNo = m.m_memberNo
12 INNER JOIN
13     tb_repayment r ON l.l_loanApplicationID = r.loanID
14 WHERE
15     m.m_memberNo = '3';
```

Result

✓ Showing rows 0 - 4 (5 total, Query took 0.0017 seconds.)

```
SELECT l.l_loanApplicationID, m.m_name, l.l_appliedLoan, l.l_loanPeriod, r.repaymentAmount, r.repaymentDate
FROM tb_loan l JOIN tb_member m ON l.l_memberNo = m.m_memberNo JOIN tb_repayment r ON l.l_loanApplicationID = r.repaymentID WHERE m.m_memberNo = 3;
```

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP code](#)] [[Refresh](#)]

☐ Show all | Number of rows: 25 ▼ Filter rows:

Extra options

l_loanApplicationID	m_name	l_appliedLoan	l_loanPeriod	repaymentAmount	repaymentDate
11	Ravi Kumar	6000	4	120	2024-06-11 18:26:39
11	Ravi Kumar	6000	4	120	2024-06-10 18:31:56
11	Ravi Kumar	6000	4	120	2025-01-24 01:12:49
16	Ravi Kumar	2500	4	300	NULL
11	Ravi Kumar	6000	4	120	NULL

☐ Show all | Number of rows: 25 ▼ Filter rows:

6. Retrieves member details along with their loan information by performing a left join between the tb_member and tb_loan tables based on \$memberNo (3).

```
1 SELECT
2     m.m_memberApplicationID,
3     m.m_name,
4     l.l_loanApplicationID,
5     l.l_appliedLoan
6 FROM
7     tb_member m
8 LEFT JOIN
9     tb_loan l ON m.m_memberNo = l.l_memberNo
10 WHERE
11     m.m_memberNo = '3';
```

Result

✓ Showing rows 0 - 13 (14 total, Query took 0.0004 seconds.)

SELECT m.m_memberApplicationID, m.m_name, l.l_loanApplicationID, l.l_appliedLoan FROM

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 ▼ Filter rows: Search this table

Extra options

m_memberApplicationID	m_name	l_loanApplicationID	l_appliedLoan
1005	Ravi Kumar	3	15000
1005	Ravi Kumar	9	50
1005	Ravi Kumar	10	50
1005	Ravi Kumar	11	6000
1005	Ravi Kumar	12	6000
1005	Ravi Kumar	13	6000
1005	Ravi Kumar	14	6000
1005	Ravi Kumar	15	6000
1005	Ravi Kumar	16	2500
1005	Ravi Kumar	17	2500
1005	Ravi Kumar	18	2500
1005	Ravi Kumar	19	2500
1005	Ravi Kumar	20	2500
1005	Ravi Kumar	30	123

7. Inserts a new repayment record into the tb_repayment table with details such as the repayment amount, penalty amount, status, due date, payment type, transaction file, member number, and loan ID.

```

1  INSERT INTO tb_repayment (
2      repaymentAmount,
3      penaltyAmount,
4      repaymentStatus,
5      dueDate,
6      paymentType,
7      transactionFile,
8      memberNo,
9      loanID
10 )
11 VALUES (
12     '100.00',
13     '0.00',
14     'Dibayar',
15     '2024-11-25 00:00:00',
16     'Tunai',
17     'butir_pembayaran_6.pdf',
18     '3',
19     '16'
20 );

```

Result

<input type="checkbox"/> Show all	Number of rows: 25	Filter rows: Search this table	Sort by key: None
Extra options			
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	repaymentID	repaymentAmount	penaltyAmount
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	120	0
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	120	10
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	300	0
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	120	0
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	18	100	0
<input type="checkbox"/> Check all With selected: <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete <input type="checkbox"/> Export			
<input type="checkbox"/> Show all	Number of rows: 25	Filter rows: Search this table	Sort by key: None

- Retrieves the member's name, loan application ID, applied loan amount, and total repayment amount by joining the tb_member, tb_loan, and tb_repayment tables, grouped by member and loan, and ordered by member name.

```

1 SELECT
2     m.m_name,
3     l.l_loanApplicationID,
4     l.l_appliedLoan,
5     SUM(r.repaymentAmount) AS total_repaid
6 FROM
7     tb_member m
8 JOIN
9     tb_loan l ON m.m_memberNo = l.l_memberNo
10 JOIN
11     tb_repayment r ON l.l_loanApplicationID = r.loanID
12 GROUP BY
13     m.m_name,
14     l.l_loanApplicationID,
15     l.l_appliedLoan
16 ORDER BY
17     m.m_name;

```

Result

Showing rows 0 - 1 (2 total, Query took 0.0018 seconds) [m_name: RAVI KUMAR... - RAVI KUMAR...]			
SELECT m.m_name, l.l_loanApplicationID, l.l_appliedLoan, SUM(r.repaymentAmount) AS total_repaid FROM tb_member m JOIN tb_loan l ON m.m_memberNo = l.l_memberNo JOIN tb_repayment r ON l.l_loanApplicationID = r.loanID GROUP BY m.m_name, l.l_loanApplicationID, l.l_appliedLoan ORDER BY m.m_name;			
<input type="checkbox"/> Profiling <input type="checkbox"/> Edit inline <input type="checkbox"/> Edit <input type="checkbox"/> Explain SQL <input type="checkbox"/> Create PHP code <input type="checkbox"/> Refresh			
<input type="checkbox"/> Show all	Number of rows: 25	Filter rows: Search this table	
Extra options			
m_name	l_loanApplicationID	l_appliedLoan	total_repaid
Ravi Kumar	11	6000	480
Ravi Kumar	16	2500	400
<input type="checkbox"/> Show all	Number of rows: 25	Filter rows: Search this table	

3.2 Interface Implementation


1. Loan Payment History Dashboard

Papan Pemuka Pembayaran Pinjaman							
No.	Jenis Pinjaman	Jumlah Permohonan (RM)	Tempoh Pinjaman (Tahun)	Ansuran Bulanan (RM)	Tunggakan (RM)	Tarikh Tamat Pinjaman	Tindakan
1	Baik Pulih Kenderaan	15,000.00	2	677.50	16,260.00	2025-12-03 00:00:00	Rekod
2	Al-Bai	50.00	2	5.00	0.00	2025-01-01 00:00:00	Rekod
3	Al-Bai	50.00	2	5.00	15.00	2025-01-02 00:00:00	Rekod
4	Al-Bai	6,000.00	4	146.00	7,008.00	2025-01-21 17:17:48	Rekod
5	Al-Bai	6,000.00	4	146.00	7,008.00	2025-01-21 17:19:47	Rekod
6	Al-Bai	6,000.00	4	146.00	7,008.00	2025-01-21 19:15:54	Rekod
7	Al-Bai	6,000.00	4	146.00	7,008.00	2025-01-21 19:16:53	Rekod
8	Al-Bai	6,000.00	4	146.00	7,008.00	2025-01-21 19:17:22	Rekod
9	Baik Pulih Kenderaan	2,500.00	4	60.83	2,920.00	2025-01-21 20:14:03	Rekod

2. After click 'Rekod', it will retrieve loan repayment information for a member who had log in, \$memberNo (3) by \$loanID (11).

Rekod Pembayaran Pinjaman								
Rekod Pembayaran Pinjaman								
Masukkan ID Pembiayaan:		<input type="text"/>	Lihat Rekod					
No.	ID Pinjaman	Jenis Pinjaman	Ansuran Pinjaman (RM)	Jumlah Penalti (RM)	Jumlah Bayaran (RM)	Tarikh Bayaran	Status Bayaran	Tindakan
1	11	Al-Bai	120	5	125	2024-06-11 18:26:39	Terlewat	
2	11	Al-Bai	120	0	120	2024-06-10 18:31:56	Dibayar	
3	11	Al-Bai	120	10	130	2025-01-24 01:12:49	Terlewat	
4	11	Al-Bai	120	0	0.00		Tertunda	Bayaran

3. After click 'Bayaran', it will retrieve loan type and monthly instalment from tb_repayment by \$loanID (11).


[Laman Utama](#)
[Profil](#)
[Pinjaman](#)
[Log Keluar](#)

Butir-Butir Pembiayaan

Jenis Pembiayaan

Al-Bai

Ansuran Bulanan

RM 120.00

Jumlah Penalti

RM 0.00

Jenis Pembayaran

--Pilih Jenis Pembayaran--

Muat Naik Butiran Pembayaran

Choose File No file chosen

*Fail yang dibenarkan adalah dalam format PDF sahaja. Sila pastikan saiz fail tidak melebihi 5MB.

RM 0.00

Jenis Pembayaran

--Pilih Jenis Pembayaran--

--Pilih Jenis Pembayaran--
Kad Kredit
Tunai
Touch n Go

Simpan

ALAMAT
Peti Surat 127,
Bandar Kota Bharu
15710 Kota Bharu
Kelantan


HUBUNGI KAMI
Telefon: 09-1234567
Email: info@kada.gov.my

IKUTI KAMI




WAKTU OPERASI
Ahad - Rabu: 08:00 - 17:00
Khamis: 08:00 - 15:30
Jumaat: Rehat
Sabtu: Rehat

4. Update information into tb_repayment by \$repaymentID (4).


[Laman Utama](#)
[Profil](#)
[Pinjaman](#)
[Log Keluar](#)

RM 0.00

Jenis Pembayaran

--Pilih Jenis Pembayaran--

Muat Naik Butiran Pembayaran

Choose File No file chosen

*Fail yang dibenarkan adalah dalam format PDF sahaja. Sila pastikan saiz fail tidak melebihi 5MB.

Simpan

ALAMAT
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Jumaat: Rehat
Sabtu: Rehat

5. Information update successfully.

The screenshot shows a web application interface with a blue header bar containing navigation links: "Laman Utama", "Profil", "Pinjaman", and "Log Keluar". Below the header, there is a table titled "Papan Pemuka Pembayaran Pinjaman". The table has the following columns: "No.", "Jenis Pinjaman", "Jumlah Permohonan (RM)", "Tempoh Pinjaman (Tahun)", "Ansuran Bulanan (RM)", "Tunggakan (RM)", "Tarikh Tamat Pinjaman", and "Tindakan". The table contains 9 rows of data. A modal window is overlaid on the table, displaying a green checkmark icon, the text "Berjaya!", and "Maklumat anda telah berjaya disimpan!". An "OK" button is at the bottom of the modal.

No.	Jenis Pinjaman	Jumlah Permohonan (RM)	Tempoh Pinjaman (Tahun)	Ansuran Bulanan (RM)	Tunggakan (RM)	Tarikh Tamat Pinjaman	Tindakan
1	Baik Pulih Kenderaan	15,000.00			00	2025-12-03 00:00:00	Rekod
2	Al-Bai	50.00				2025-01-01 00:00:00	Rekod
3	Al-Bai	50.00				2025-01-02 00:00:00	Rekod
4	Al-Bai	6,000.00			0	2025-01-21 17:17:48	Rekod
5	Al-Bai	6,000.00			0	2025-01-21 17:19:47	Rekod
6	Al-Bai	6,000.00			0	2025-01-21 19:15:54	Rekod
7	Al-Bai	6,000.00	4	146.00	7,008.00	2025-01-21 19:16:53	Rekod
8	Al-Bai	6,000.00	4	146.00	7,008.00	2025-01-21 19:17:22	Rekod
9	Baik Pulih Kenderaan	2,500.00	4	60.83	2,920.00	2025-01-21 20:14:03	Rekod

4.0 Conclusion and Reflection

4.1 Conclusion

The Loan Repayment Module has successfully enhanced loan repayment management by allowing users to check repayment history and upload transaction files to make payments, reducing errors and saving time. However, it has several limitations, such as only supporting PDF files for uploads and requiring users to properly format their files. Future improvements to the module might include more file format compatibility, verification that uploaded files are accurate, and tools to assist users stay on track, like automated reminders and payment predictions. With these improvements, the module would be even more effective and user-friendly for everyone involved.

4.2 Reflection

The KKK Online System project aims to replace manual management procedures with an online platform, increasing efficiency and offering real-time data access to members and administrators. I responsible for Loan Module, which handles loan applications, repayment plans, and calculations of dynamic interest. Other team members contributed to the development of system functionalities by working on modules such as the Admin Approval, Admin Updating, User, and Member modules. We worked together to improve the system by simplifying procedures, enhancing communication, and assuring more efficient.

At the start of the project, I felt overwhelmed and confused where to begin. We had trouble understanding KADA's project requirements during our first discussions, which made it challenging to proceed. I felt more understood when we done many meetings as the project went on, but there were many challenges to overcome. Our progress was delayed by technical issues and the need to frequently reinstall PhpMyAdmin. Additionally, balancing this project with other projects and tests increased stress, making it more difficult to stay on track and complete tasks perfectly.

Despite these challenges, there were many positive aspects to the project. I learned how to retrieve, insert, and update data while gaining practical experience in the database design and website integration. However, the quality of our work was limited by time limitations and technical issues, especially during the testing phase. Better planning and organization would have prevented mistakes caused by the database system's problems and the lack of time.

In reflecting on this project, I've realized the value of time management, effective planning, and clear communication. I came to the realization that balancing different tasks can be

challenging, and I need to better manage my time so that I can complete each task very well. In order to make sure that every part of a project is finished to the greatest possible standard, I will give priority going forward to early testing, frequent backups, and improved time management. I've learned a lot from this experience that I'll use in my next projects, and I now understand how important proactive problem-solving and thorough preparation.