



KHANHCA PAWNSHOP MANAGEMENT SOFTWARE

[SP19-PRO192-SI1301]

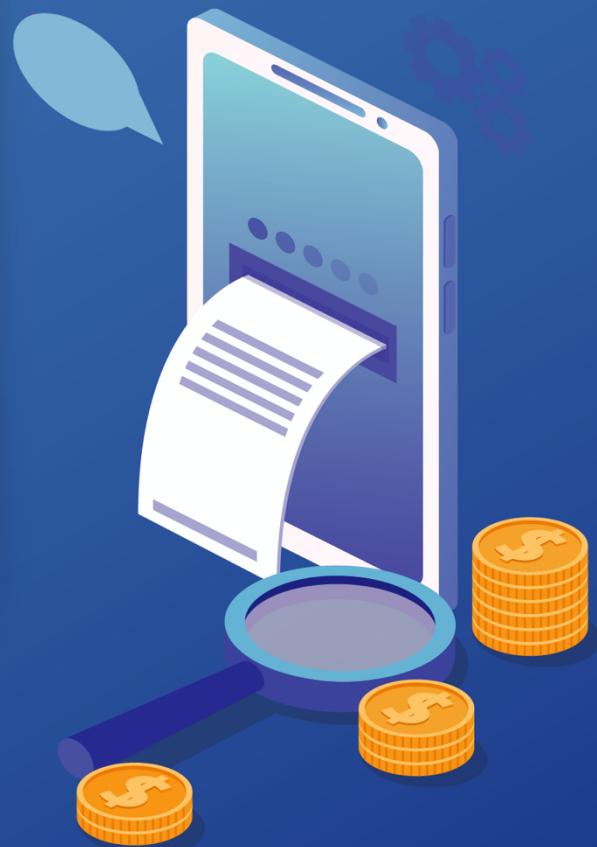
Members of Group 11:

Le Quoc Khoi | LEADER
CE130023

Nguyen Truong Thinh | SECRETARY
CE130214

Pham Ngoc Minh Hung
CE130339

Proposed supervisor:
M.Sc. Vo Hong Khanh



I. TABLE OF CONTENT

I. Table of content.....	2
II. Problem definition	3
III. User requirement	4
CRS Function	5
CRS Hardware/Software	7
CRS Acceptance Criteria.....	8
IV. Project details	9
V. Role & schedule.....	11
Role.....	11
Schedule	12
VI. Design	14
Data Modeling.....	14
Class Diagram	15
File Structure	17
User Interface	20
VII. Checklist	40

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.1
Effective Date	PROBLEM DEFINITION [Version 1]		Page No.3
24/01/2019	Prepared by Students		Approved by Teacher

II. PROBLEM DEFINITION

In current pawn shops in Vietnam, most of them manage pawn contracts with notebooks. This happens with some issues that must be resolved such as:

- Difficult to manage contracts if the number of contracts is large.
- Must be calculated by the hand-held calculator.
- Difficulty making reports at the end of the term.
- Cannot simultaneously execute multiple contracts at the same time.

To solve these issues, we offer to pawn shops to apply technology to their shop management.

The benefits when using the software:

- Accurately calculate complex interest rates, avoid errors in the manual calculation process.
- Managing a large of contracts, avoiding unnecessary errors when managing by notebooks.
- Closely monitor business activities from controlling revenue, expenses, and interest.
- Provide a variety of reports and diverse statistics to help owners quickly make immediate and quick decisions.
- Make multiple contracts simultaneously.
- Help save a lot of time when the software has solved a large amount of work automatically.
- Store data in many places, avoid data loss, ensure absolute safety data.
- Control employees, prevent fraud in employees.
- Access anytime, anywhere, use on any devices.

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.2
Effective Date		USER REQUIREMENT [Version 1]	Page No.4
15/02/2019		Prepared by Students	Approved by Teacher

III. USER REQUIREMENT

The requirement is to implement a contract management software at the pawnshop and produce the reports and statistics, namely:

- Login to the system must be allowed through login information as username and password.
- Add, view, update, delete contracts through the contract code, users can change the value of the properties of contract information such as interest rate form, holding amount, start date, holding product information, and customer information.
- Managing the store's cash flow, reporting accurate information on the amount of money pawn to customers.
- Managing customers' assets, reporting assets that have been matured.

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.2
Effective Date		USER REQUIREMENT CRS Function [Version 1] Prepared by Students	Page No.5-6 Approved by Teacher
15/02/2019			

CRS FUNCTION

Client/Project Undertaker: M.Sc. Vo Hong Khanh

1. Input:

Contract information:

- Contract ID
- Amount of money
- Interest rate form
 - 1. Date
 - Interest rate: %/day
 - Cycles: /day
 - 2. Week
 - Interest rate: %/week
 - Cycles: /week
 - 3. Month
 - Interest rate: %/month
 - Cycles: /month
- Start date pawn
- Status contract
- Property type:
 - 1. Motorcycles
 - License plate
 - Chassis ID
 - Engines ID
 - 2. Vehicle
 - Name
 - License plate
 - Chassis ID
 - Engines ID
 - 3. Device
 - IMEI
 - Name
 - Passcode
 - 4. Other
 - Type
 - Note
- Note



Customer information:

- Name
- ID/Passport
- Date range
- Issued by
- Phone number
- Address

2. Output:

- Display information of each contract
- Search for contracts under contract codes, names
- Asset statistics
- Statistics of spent funds, proceeds funds.

3. Overview of processes involved:

- Algorithm for calculating the interest amounts of customers in the situation of on-time payment, overdue payment situation.

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.2
Effective Date		USER REQUIREMENT CRS Hardware/Software [Version 1]	Page No.7
15/02/2019		Prepared by Students	Approved by Teacher

CRS HARDWARE/SOFTWARE

HARDWARE REQUIREMENT (minimal configuration)	HARDWARE REQUIREMENT (recommended configuration)	SOFTWARE REQUIREMENT
+ CPU: 500 MHz Intel Pentium III workstation or equivalent	+ CPU: 780 MHz Intel Pentium III workstation or equivalent	+ Window 7 or higher + JRE 1.7 or higher
+ RAM: 384 megabytes	+ RAM: 512 megabytes	
+ HDD: 100 megabytes of free disk space	+ HDD: 100 megabytes of free disk space	

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.2
Effective Date	15/02/2019	USER REQUIREMENT CRS Acceptance Criteria [Version 1] Prepared by Students	Page No.8 Approved by Teacher

CRS ACCEPTANCE CRITERIA

- Customers can add, update, view, delete the attributes listed in CRS Function.
- Customers can view reports on revenue, expenditure, and interest.
- Customers can view reports of received items with their status.

DESIGN PLAN	DOCUMENT NAME	SWD/FORM NO.3
Effective Date	PROJECT DETAILS [Version 1]	Page No.9-10
18/02/2019	Prepared by Students	Approved by Teacher

IV. PROJECT DETAILS

Client:

Name of customer/company: **Vo Hong Khanh**

Address: FPT University, Nguyen Van Cu street, An Binh ward, Ninh Kieu district, Can Tho city.

Email: khanhvohong@gmail.com

Phone number: 0976 755 191

About us:

Name of customer/company: **HKT Group**

Address: FPT University, Nguyen Van Cu street, An Binh ward, Ninh Kieu district, Can Tho city.

Email: khoilqce130023@fpt.edu.vn

Phone number: 0379 168 797

- Date of project plan:
 1. Start: Jan 23th, 2019
 2. End: March 25th, 2019
- Project Vision/Objective: The goal of this project is to improve the productivity of pawn shop staff by using management software.
- Project initiation/Requirement document:
 1. Customer and regarding of customer
 2. Product information
 3. Services information of company.
 4. Deliverables
 5. CRS document
 6. Design document
 7. Installation manual
 8. User Manual
 9. Maintenance Manual
 10. Code document (if client require)
- Plan:
 1. Review activities: Review 2 times in classroom.
 2. Testing activities: Test code, test program after done
 3. Demo activities: Demo 1 time in classroom
 4. Backup and recovery everytime at Github, Onedrive

- Major project milestones:
 - o Definition problem 24/01/2019-15/02/2019
 - o User requirement 15/02/2019-22/02/2019
 - o Analysis from 22/02/2019 to 27/02/2019
 - o Design from 27/02/2019 to 06/03/2019
 - o Coding from 08/03/2019 to 16/03/2019
 - o Testing from 17/03/2019 to 19/03/2019
 - o Maintenance from 20/03/2019 to 22/03/2019

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.4
Effective Date	Role & Schedule	Role [Version 1]	Page No.11
01/02/2019	Prepared by Students	Approved by Teacher	

V. ROLE & SCHEDULE

ROLE

NO.	MEMBER	ROLE	RESPONSIBILITIES
1	KhoiLQ	Group leader	
2	KhoiLQ, ThinhNT, HungPNH	Analysts	Define problem, input, output, process
3	KhoiLQ, ThinhNT, HungPNH	Designer	Design interface Design flowchart algorithm
4	KhoiLQ, ThinhNT, HungPNH	Coder	Program all functions for applications
5	KhoiLQ, ThinhNT, HungPNH	Tester	Testing all functions
6	KhoiLQ, ThinhNT, HungPNH	Maintenance	Check and backup data

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.4
Effective Date		ROLE & SCHEDULE	Page No.12-13
02/02/2019		Schedule [Version 1] Prepared by Students	Approved by Teacher

SCHEUDLE

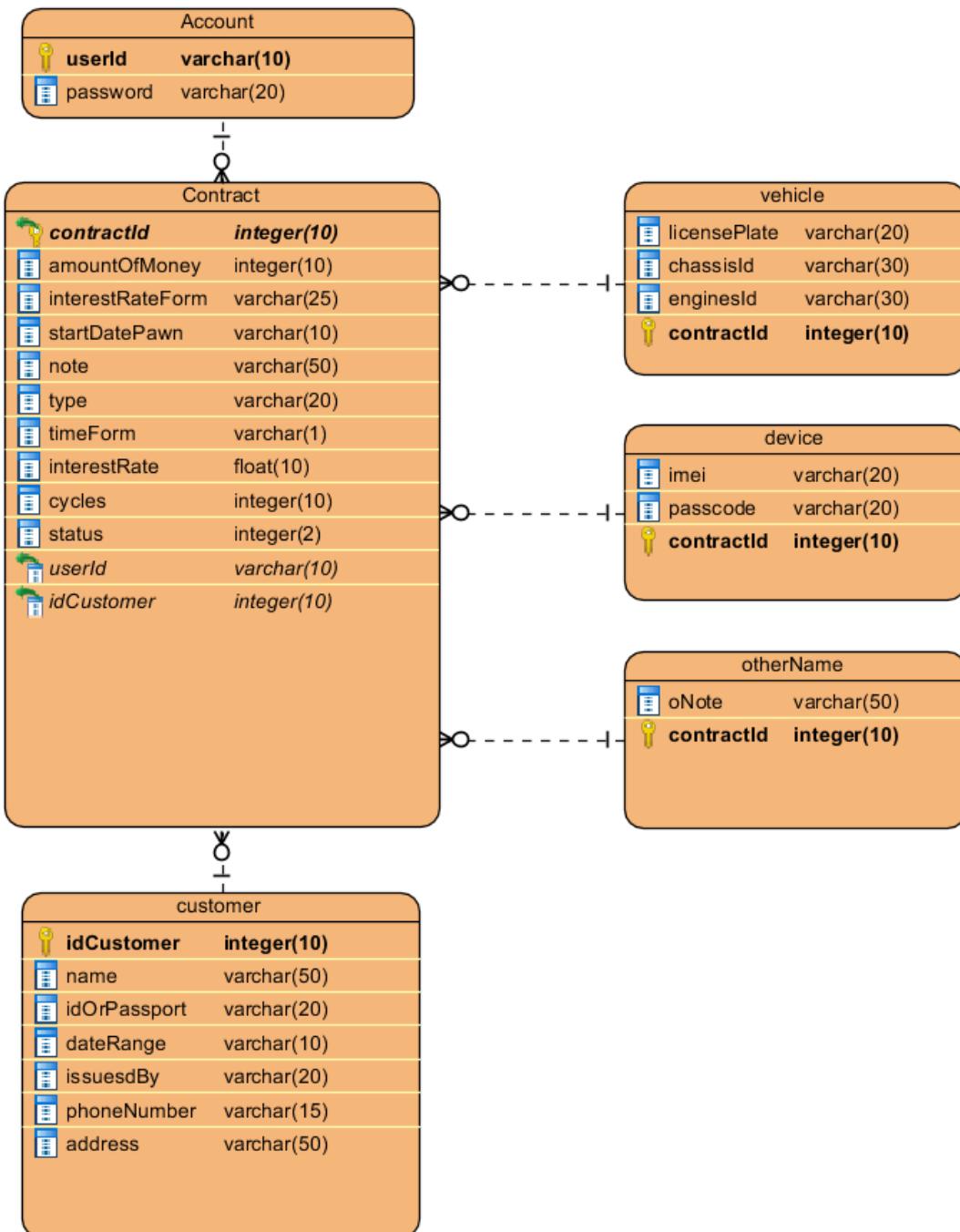
DOCUMENT NAME	PLANNED START DATE	ESTIMATED NUMBER OF DAYS COMPLETED	TEAM MATE NAMES
Problem Definition	13:00 24/01/2019	9	KhoiLQ, ThinhNT, HungPNM
User requirement	13:00 15/02/2019	7	KhoiLQ
Checking document	13:00 15/02/2019	1	KhoiLQ
Project detail	13:00 22/02/2019	2	KhoiLQ
Design Data Models	13:00 15/02/2019	14	KhoiLQ, ThinhNT, HungPNM
Design Class Diagram	13:00 01/03/2019	7	KhoiLQ, ThinhNT, HungPNM
Code Exceptions Class, Vehicle, Device, OtherName Class	13:00 08/03/2019	1	KhoiLQ
Code Account, Customer, Contract	13:00 11/03/2019	3	HungPNM
Code Managements Class	13:00 15/03/2019	4	KhoiLQ, ThinhNT, HungPNM
Code Application Class	13:00 18/03/2019	3	KhoiLQ, ThinhNT, HungPNM
Connect Classes	13:00 18/03/2019	1	KhoiLQ, ThinhNT, HungPNM
Testing	13:00 20/03/2019	1	KhoiLQ, ThinhNT, HungPNM
Complete Application	13:00 20/03/2019	1	KhoiLQ, ThinhNT, HungPNM

Presentation Preparation	13:00 22/03/2019	2	KhoiLQ, ThinhNT, HungPNM
Deadline	29/03/2019		

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.5A
Effective Date		DESIGN Data Modeling [Version 1]	Page No.14
15/02/2019		Prepared by Students	Approved by Teacher

VI. DESIGN

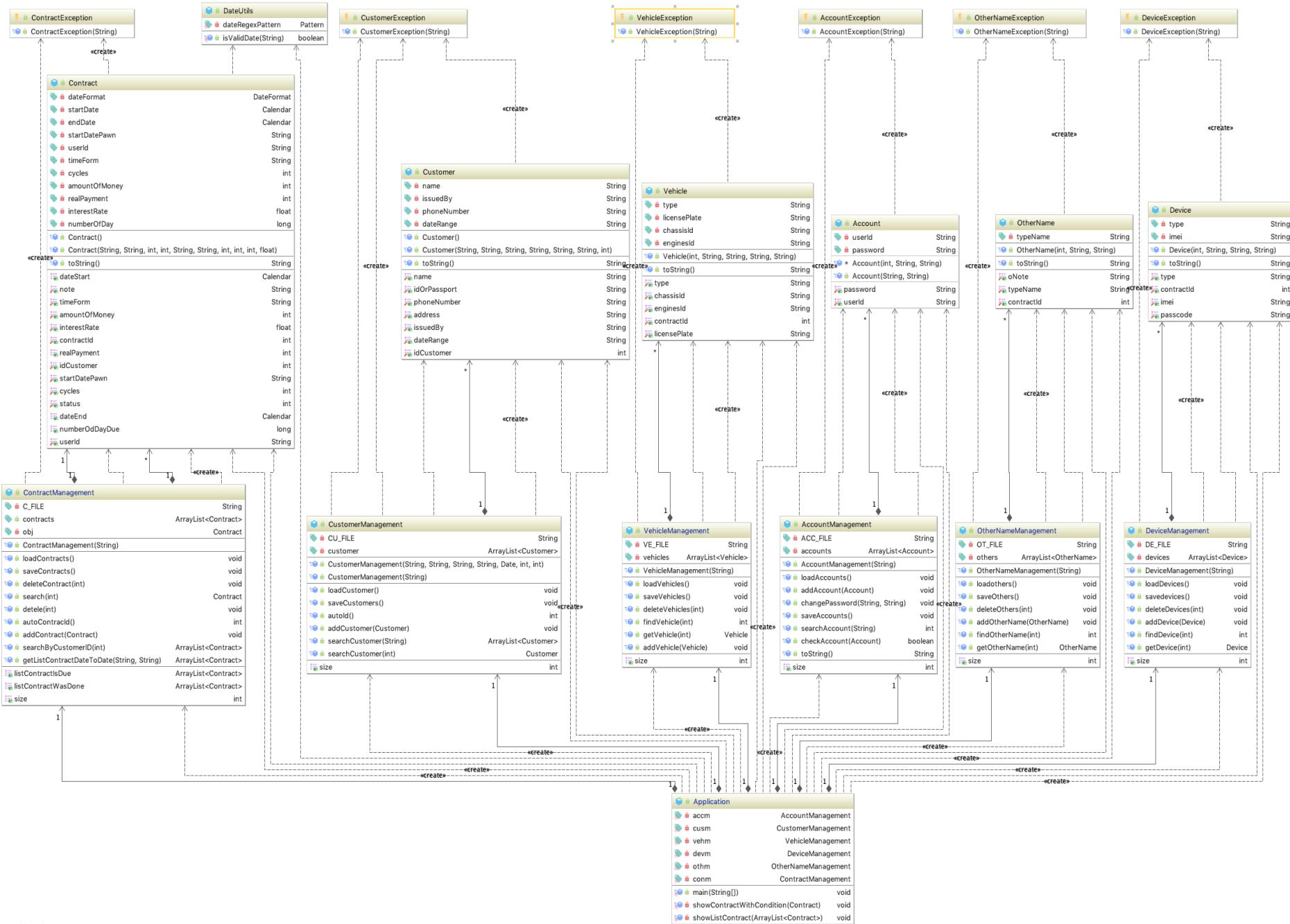
DATA MODELING



DESIGN PLAN	DOCUMENT NAME	SWD/FORM NO.5B
Effective Date 01/03/2019	DESIGN Class Diagram [Version 1] Prepared by Students	Page No.15-16 Approved by Teacher

CLASS DIAGRAM

View at next page



DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.5B
Effective Date		DESIGN File Structure [Version 1]	Page No.17-19
18/02/2019		Prepared by Students	Approved by Teacher

FILE STRUCTURE

The database includes 5 files:

- “contracts.txt”. Save contract information. Each of the 10 lines contains attributes that are:

Variable name	Describe	Datatypes	Can be NULL	Can't input from keyboard
amountOfMoney	Money that customers received	Int		
contractId	reference to Contract ID	Int		x
idCustomer	Customer ID Start with 0 Automatically increased	Int		x
note	Note	String	x	
startDatePawn	The day of start contract	String matches format (dd/mm/yyyy) and is valid date		
userId	The person who created the contract	String		x
timeForm	Terms of Loan: Choose list: - d -> Day - w -> Week - m -> Month	String		
cycles	Credit period	Int		
status	Contract status 0 -> Pawn 1 -> Complete	Int		x
InterestRate	Interest Rate	Float		

- “customers.txt”. Save customer information. The first line contains the number of customers. Each of the 7 lines contains attributes that are:

Variable name	Describe	Datatypes	Can be NULL	Can't input from keyboard
customerId	Customer ID	Int		x
name	Customer's name	String		
idOrPassport	ID or Passport of customer	String		
dateRange	Date of issuing ID card or passport	String matches format (dd/mm/yyyy)		
issuedBy	Place of issuing ID card or passport	String		
phoneNumber	Phone number of customer	Int (positive integer number)		
address	Customer's address	String	x	

- “vehicles.txt”. Save the information of vehicles that clarifies contract information. The first line contains the number of vehicles. Each of the 5 lines contains attributes that are:

Variable name	Describe	Datatypes	Can be NULL	Can't input from keyboard
contractId	To contractId can get information	Int		x
type	Name of Vehicle	String		
licensePlate	License Plate	String		
chassisId	Chassis ID	String	x	
enginesId	Engines ID	String	x	

- “devices.txt”. Save the information of devices that clarifies contract information. The first line contains the number of devices. Each of the 4 lines contains attributes that are:

Variable name	Describe	Datatypes	Can be NULL	Can't input from keyboard
contractId	To contractId can get information	Int		x
type	Name of Device	String		
imei	IMEI	String		
passcode	Passcode of Device	String	x	

- “others.txt”. Save the information of another item that clarifies contract information. The first line contains the number of another name. Each of the 3 lines contains attributes that are:

Variable name	Describe	Datatypes	Can be NULL	Can't input from keyboard
contractId	To contractId can get information	Int		x
type	Name of Device	String		
oNote	The note of other name	String	x	

DESIGN PLAN	DOCUMENT NAME	SWD/FORM NO.5B
Effective Date	USER INTERFACE [Version 1]	Page No.20
20/03/2019	Prepared by Students	Approved by Teacher

USER INTERFACE

The data file accounts.txt is found. Data of accounts is loading...Done!

The data file contracts.txt is found. Data of contracts is loading...Done!

The data file customers.txt is found. Data of customers is loading...Done!

The data file vehicles.txt is found. Data of vehicles is loading...Done!

The data file devices.txt is found. Data of devices is loading...Done!

The data file others.txt is found. Data of others is loading...Done!

Welcome to KhanhCa Pawnshop Management v0.1.8!

Copyright @2019 by HKT Group

---- LOGIN PANEL ----

Username: khanhvohong

Password: abc

Account name or password is incorrect. Please try again!

Username: khoi

Password: 1

Login successfully!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.

2. Search Contract.

3. Report.

4. Setting.

5. Quit.

Please choose option:

Error. There is no function for this option. You must be choose from 1 to 5!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.
4. Setting.
5. Quit.

Please choose option: 6

Error. There is no function for this option. You must be choose from 1 to 5!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.
4. Setting.
5. Quit.

Please choose option: a

Error. There is no function for this option. You must be choose from 1 to 5!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.
4. Setting.
5. Quit.

Please choose option: 1

----- ADD CONTRACT -----

New customer? (y/n): c

You must choose 'y' or 'n'!

New customer? (y/n): 8

You must choose 'y' or 'n'!

New customer? (y/n): y

Please enter a Customer Name:

The customer name can't be empty!

Please enter a Customer Name: Truong Gia Binh

Please enter ID or Passport:

The ID or Passport can't be empty!

Please enter ID or Passport: VNM9999

Please enter Date Range (dd/mm/yyyy):

Not valid date. Please try again!

Please enter Date Range (dd/mm/yyyy): s

Not valid date. Please try again!

Please enter Date Range (dd/mm/yyyy): 98

Not valid date. Please try again!

Please enter Date Range (dd/mm/yyyy): 02/13/2019

Not valid date. Please try again!

Please enter Date Range (dd/mm/yyyy): 29/02/2019

Not valid date. Please try again!

Please enter Date Range (dd/mm/yyyy): 29/02/2000

Please enter issued by (City/Country):

The Issued by can't be empty!

Please enter issued by (City/Country): 9080

The Issued by can't be numbers!

Please enter issued by (City/Country): Hanoi

Please enter Phone number:

The phone number can't be empty!

Please enter Phone number: abc

The phone number must be a positive integer number!

Please enter Phone number: -1

The phone number must be a positive integer number!

Please enter Phone number: 0123456789

Please enter address:

Please enter a Type name:

The Type name can't be empty!

Please enter a Type name: BMW i8

List the Type

v - Vehicle

d - Device

o - Other

Please enter a type (v/d/o):

The type can't be empty!

Please enter a type (v/d/o): a

You must type 'v' or 'd' or 'o'!

Please enter a type (v/d/o): 2

You must type 'v' or 'd' or 'o'!

Please enter a type (v/d/o): v

Press c to continue or e to close: a

You must be type 'c' or 'e'!

Please enter a type (v/d/o): e

You must type 'v' or 'd' or 'o'!

Please enter a type (v/d/o): v

Press c to continue or e to close: c

Please enter License Plate:

The License Plate can't be numbers!

Please enter License Plate: 20E-12345

Please enter a Chassis ID:

Please enter a Engines ID:

List the Time Form

d - Day

w - Week

m - Month

Please enter Time Form (d/w/m):

The Time Form can't be empty!

List the Time Form

d - Day

w - Week

m - Month

Please enter Time Form (d/w/m): a

You must type 'd' or 'w' or 'm'!

List the Time Form

d - Day

w - Week

m - Month

Please enter Time Form (d/w/m): 3

You must type 'd' or 'w' or 'm'!

List the Time Form

d - Day

w - Week

m - Month

Please enter Time Form (d/w/m): d

Press c to continue or e to close: e

Please enter Time Form (d/w/m): c

You must type 'd' or 'w' or 'm'!

Please enter Time Form (d/w/m): d

Press c to continue or e to close: c

Please enter Cycles: 12

Please enter Amount of Money: 76

Please enter Interest Rate: 1.2

Please enter Start Date Pawn (dd/mm/yyyy):

Not valid date. Please try again!

Please enter Start Date Pawn (dd/mm/yyyy): 29/02/1999

Not valid date. Please try again!

Please enter Start Date Pawn (dd/mm/yyyy): 28/02/2019

Please enter Note:

--- The contract has been successfully added to the system ---

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.

2. Search Contract.

3. Report.

4. Setting.

5. Quit.

Please choose option: 1

----- ADD CONTRACT -----

New customer? (y/n): n

Search for:

1. ID's Customer.

2. Name or Phone number.

3. Close.

Please choose option: 4

You must type '1' or '2' or '3'!

Search for:

1. ID's Customer.
2. Name or Phone number.
3. Close.

Please choose option: a

You must type '1' or '2' or '3'!

Search for:

1. ID's Customer.
2. Name or Phone number.
3. Close.

Please choose option: 1

Please enter ID Customer: 5

--- CUSTOMER'S INFORMATION ---

- ID: 5
- Name: Bradford Deaconson
- Id or passport: 303-97-9686
- Date range: 23/10/2013
- Issue by: Kelsi Biner
- Phone: 5283190092
- Address: 49499 Fairview Way

Is that correct? (y/n): n

Please try again!

Please enter ID Customer: 6

--- CUSTOMER'S INFORMATION ---

- ID: 6
- Name: Maura Sothern
- Id or passport: 408-94-6214
- Date range: 13/09/2012
- Issue by: Parry Sound
- Phone: 6078430442

- Address: 325 Summer Ridge Drive

Is that correct? (y/n): c

You must type 'y' or 'n'. Please re-enter!

Please enter ID Customer: 6

--- CUSTOMER'S INFORMATION ---

- ID: 6
- Name: Maura Sothern
- Id or passport: 408-94-6214
- Date range: 13/09/2012
- Issue by: Parry Sound
- Phone: 6078430442
- Address: 325 Summer Ridge Drive

Is that correct? (y/n): y

Please enter a Type name: iPhone XS Max

List the Type

- v - Vehicle
- d - Device
- o - Other

Please enter a type (v/d/o): d

Press c to continue or e to close: c

Please enter IMEI:

The IMEI can't be empty!

Please enter IMEI: SERVICETAG128003

Please enter Passcode:

List the Time Form

- d - Day
- w - Week
- m - Month

Please enter Time Form (d/w/m): w

Press c to continue or e to close: c

Please enter Cycles: 1

Please enter Amount of Money: 1908

Please enter Interest Rate: 6.5

Please enter Start Date Pawn (dd/mm/yyyy): 16/03/2019

Please enter Note:

--- The contract has been successfully added to the system ---

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.
4. Setting.
5. Quit.

Please choose option: 1

----- ADD CONTRACT -----

New customer? (y/n): n

Search for:

1. ID's Customer.
2. Name or Phone number.
3. Close.

Please choose option: 2

Please enter Name or Phone number: Truong Gia Binh

1.

- ID: 23
- Name: Truong Gia Binh
- Id or passport: VNM9999
- Date range: 29/02/2000
- Issue by: Hanoi
- Phone: 0123456789
- Address: null

Please enter index: 1

Please enter a Type name: Fight

List the Type

v - Vehicle

d - Device

o - Other

Please enter a type (v/d/o): o

Press c to continue or e to close: c

Please enter Othername's Note: Boing

List the Time Form

d - Day

w - Week

m - Month

Please enter Time Form (d/w/m): m

Press c to continue or e to close: c

Please enter Cycles: 1

Please enter Amount of Money: 10099

Please enter Interest Rate: 24.5

Please enter Start Date Pawn (dd/mm/yyyy): 21/02/2019

Please enter Note: not found

--- The contract has been successfully added to the system ---

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.

2. Search Contract.

3. Report.

4. Setting.

5. Quit.

Please choose option: 2

----- SEARCH CONTRACT -----

1. Search by Contract ID.

2. Search by Name or Phone number.

3. Close.

Enter option: 1

Please enter Contract ID: 7

--- INFORMATION OF CONTRACT ---

- ID: 8

- Name: Nguyen Hoang Nghia
- Id or passport: 104-89-6457
- Date range: 06/02/2013
- Issue by: Kien Giang
- Phone: 6604403976
- Address: 4 Clyde Gallagher Hill
- Start date pawn: 10/03/2019
- Cycles: 3
- Interest rate: 2.4
- Amount of money: 90000
- Amount to pay: 96480
- Contract maker: admin
- Type: Cadillac
- License Plate: 0363-0946
- Chassis Id: 297917399-1
- Engines Id: 2009

Choose function

1. Add pay to this contract
2. Delete contract
3. Close.

Please enter option: 1

Do you want to payment (y/n): c

You must choose 'y' or 'n'!

Do you want to payment (y/n): y

Contract is saving into data file contracts.txt... Done!

OK! Payment was done!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.
4. Setting.
5. Quit.

Please choose option: Error. There is no function for this option. You must be choose from 1 to 5!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.
4. Setting.
5. Quit.

Please choose option: 2

----- SEARCH CONTRACT -----

1. Search by Contract ID.
2. Search by Name or Phone number.
3. Close.

Enter option: 2

Please enter the keyword: Nguyen Xuan Phong

--- LIST CUSTOMER ---

1.
 - ID: 20
 - Name: Nguyen Xuan Phong
 - Id or passport: 678-34-5014
 - Date range: 05/06/2012
 - Issue by: Ha Noi
 - Phone: 3195429632
 - Address: 48 Independence Way

Please enter index: 1

--- LIST CONTRACT ---

1.
 - Start date pawn: 22/12/2018
 - Cycles: 6
 - Interest rate: 3.6
 - Amount of money: 100000
 - Amount to pay: 121599
 - Contract maker: admin

Please enter index: 1

--- INFORMATION OF CONTRACT ---

- ID: 20
- Name: Nguyen Xuan Phong
- Id or passport: 678-34-5014
- Date range: 05/06/2012
- Issue by: Ha Noi
- Phone: 3195429632
- Address: 48 Independence Way
- Start date pawn: 22/12/2018
- Cycles: 6
- Interest rate: 3.6
- Amount of money: 100000
- Amount to pay: 121599
- Contract maker: admin
- Type: Bentley
- License Plate: 55714-4534
- Chassis Id: 402291561-7
- Engines Id: 2011

Choose function

1. Add pay to this contract
2. Delete contract
3. Close.

Please enter option: 2

Contract is saving into data file contracts.txt... Done!

Vehicles is saving into data file vehicles.txt...Done!

Delete contract #18successfully!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.
4. Setting.
5. Quit.

Please choose option: 3

----- REPORT -----

1. Display Contracts are Due
2. Display Contracts by Date
3. Display Contracts were Done
4. Display Sales Report
5. Display Items Report
6. Display All Contracts

7 - Close

Please choose option: 1

----- CONTRACT IS DUE -----

CONTRACT ID	CUSTOMER NAME	START DATE PAWN	AMOUNT OF MONEY
AMOUNT OF PAYMENT	PHONE NUMBER		
0	Cully Mariaud	12/03/2019	1023 1145 6367711729
15 8647871220	Matty Wais	16/02/2019	456300 668479
20	das	28/02/1999	1 110 3
1	Truong Gia Binh	28/02/2019	76 97 0123456789
22	jd	16/11/1999	1080 199767 280
23	jd	12/12/2018	39 97 280
24	jd	12/12/2018	38 94 280
25	jd	12/12/2018	82 241 280
26	hdo	12/12/2018	280 692 280
27	od	12/12/2018	80 485 2

----- REPORT -----

1. Display Contracts are Due
2. Display Contracts by Date
3. Display Contracts were Done
4. Display Sales Report
5. Display Items Report
6. Display All Contracts

7 - Close

Please choose option: 2

Date from (dd/mm/yyyy): 01/01/2019

Date to (dd/mm/yyyy): 22/03/2019

----- CONTRACTS FROM 01/01/2019 TO 22/03/2019 -----

CONTRACT ID	CUSTOMER NAME	START DATE PAWN	AMOUNT OF MONEY
AMOUNT OF PAYMENT	PHONE NUMBER		
0	Cully Mariaud	12/03/2019	1023 1145 6367711729
3	urtv Boatman	13/02/2019	3000 3144
5147880449			
4	Renie Deeny	25/02/2019	500 518 7263885922
5	Bradford Deaconson	01/03/2019	63000 81900
5283190092			
6	Chic Beecraft	27/02/2019	30500 32696
9591705980			
7	Nguyen Hoang Nghia	10/03/2019	90000 96480
6604403976			
8	Ho Thi Thanh Lam	10/03/2019	599 706
3574104507			
9	Ho Thi Huynh Mai	25/01/2019	63000 69804
5938825385			
10	Nguyen Cao Phong	07/03/2019	4300 4609
9841641112			
11	Sanson Gulliman	01/02/2019	2300 2796
3205949660			
12	Camila Collip	03/03/2019	9600 10291
1492573281			
13	Delmar McReath	16/03/2019	5200 7009
9075463809			
14	Cornelle Valasek	07/03/2019	5600 6137
8648711431			
15	Matty Wais	16/02/2019	456300 668479
8647871220			
16	Kristinehamn	12/01/2019	95000 105260
1047108071			
1	Truong Gia Binh	28/02/2019	76 97 0123456789
2	Maura Sothern	16/03/2019	1908 2032
6078430442			
21	Truong Gia Binh	21/02/2019	10099 12573
0123456789			

----- REPORT -----

1. Display Contracts are Due
2. Display Contracts by Date
3. Display Contracts were Done
4. Display Sales Report
5. Display Items Report
6. Display All Contracts
- 7 - Close

Please choose option: 3

----- CONTRACTS WAS DONE -----

CONTRACT ID	CUSTOMER NAME	START DATE PAWN	AMOUNT OF MONEY
AMOUNT OF PAYMENT	PHONE NUMBER		
7 6604403976	Nguyen Hoang Nghia	10/03/2019	90000 96480
19 7826875755	Nguyen Van Bay	30/4/2018	52000 91000

----- REPORT -----

1. Display Contracts are Due
2. Display Contracts by Date
3. Display Contracts were Done
4. Display Sales Report
5. Display Items Report
6. Display All Contracts
- 7 - Close

Please choose option: 4

----- SALE REPORT -----

- MONEY OUT: \$783605
- MONEY IN: \$187480

----- REPORT -----

1. Display Contracts are Due
2. Display Contracts by Date
3. Display Contracts were Done
4. Display Sales Report
5. Display Items Report

6. Display All Contracts

7 - Close

Please choose option: 5

----- ITEMS REPORT -----

--- VEHICLE ---

CONTRACT ID	TYPE NAME	LICENSE PLATE	CHASSIS ID	ENGINES ID
0	Mercedes-Benz	33261-386	817397559-0	2011
5	Chevrolet	4305-923	718699521-7	2002
6	Ford	44523-606	726457181-5	1997
9	Mercedes-Benz	10096-0272	850082624-X	2009
10	BMW	51862-162	155217961-3	1992
14	Nissan	65862-604	713647130-3	1998
16	Ford	0378-2922	876198949-5	2008
20	Bentley	55714-4534	402291561-7	2011
26	80d	doj	ejo	do
27	r	djpr	jo	o

--- DEVICE ---

CONTRACT ID	TYPE NAME	IMEI	PASSCODE
3	Jetwire	3549217244570943	7460
6	Mydo	3529417729959629	6143
8	Wordware	5100138797636533	7534
11	Brightbean	3552302255374270	5400
13	Avamm	5007669585270683	7878
15	Kwimbee	201915118458088	2688
17	Skivee	5602250787363847	9067
2	iPhone XS Max	SERVICETAG128003	1112

--- OTHER NAME ---

CONTRACT ID	TYPE NAME	NOTE
4	BlogXS	Computers
12	Realcube	ealth
21	Fight	Boing

----- REPORT -----

1. Display Contracts are Due
2. Display Contracts by Date
3. Display Contracts were Done
4. Display Sales Report
5. Display Items Report
6. Display All Contracts

7 - Close

Please choose option: 6

----- VIEW ALL CONTRACTS -----

CONTRACT ID	CUSTOMER NAME	START DATE PAWN	AMOUNT OF MONEY
AMOUNT OF PAYMENT	PHONE NUMBER	STATUS	
0	Cully Mariaud	12/03/2019	1145
Not payment			6367711729
3	uryt Boatman	13/02/2019	3144
5147880449	Not payment		
4	Renie Deeny	25/02/2019	518
Not payment			7263885922
5	Bradford Deaconson	01/03/2019	81900
5283190092	Not payment		
6	Chic Beecraft	27/02/2019	32696
9591705980	Not payment		
7	Nguyen Hoang Nghia	10/03/2019	96480
6604403976	Done		
8	Ho Thi Thanh Lam	10/03/2019	706
3574104507	Not payment		
9	Ho Thi Huynh Mai	25/01/2019	69804
5938825385	Not payment		
10	Nguyen Cao Phong	07/03/2019	4609
9841641112	Not payment		
11	Sanson Gulliman	01/02/2019	2796
3205949660	Not payment		
12	Camila Collip	03/03/2019	10291
1492573281	Not payment		
13	Delmar McReath	16/03/2019	7009
9075463809	Not payment		
14	Cornelle Valasek	07/03/2019	6137
8648711431	Not payment		
15	Matty Wais	16/02/2019	668479
8647871220	Not payment		

16	Kristinehamn 1047108071	Not payment	12/01/2019	95000	105260		
17	Sanson Gulliman 3205949660	Not payment	12/12/2018	30000	31440		
19	Nguyen Van Bay 7826875755	Done	30/4/2018	52000	91000		
20	das		28/02/1999	1	110	3	Not payment
1	Truong Gia Binh Not payment		28/02/2019	76	97	0123456789	
2	Maura Sothern 6078430442	Not payment	16/03/2019	1908	2032		
21	Truong Gia Binh 0123456789	Not payment	21/02/2019	10099	12573		
22	jd		16/11/1999	1080	199767	280	Not payment
23	jd		12/12/2018	39	97	280	Not payment
24	jd		12/12/2018	38	94	280	Not payment
25	jd		12/12/2018	82	241	280	Not payment
26	hdo		12/12/2018	280	692	280	Not payment
27	od		12/12/2018	80	485	2	Not payment

----- REPORT -----

1. Display Contracts are Due
2. Display Contracts by Date
3. Display Contracts were Done
4. Display Sales Report
5. Display Items Report
6. Display All Contracts
- 7 - Close

Please choose option: 7

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.
2. Search Contract.
3. Report.

4. Setting.

5. Quit.

Please choose option: 4

Only the admin account can be open Setting

Do you want to continue (y/n): y

Enter the password for the admin account: 1

Logged in successfully!

Logged in successfully!

----- SETTING -----

1. Change Password.

2. Add new Account.

3. Close.

Please choose option: 4

You must type '1' or '2' or '3'!

1. Change Password.

2. Add new Account.

3. Close.

Please choose option: 2

Username: khanhvohong

Password: 1

Account is saving into data file vehicles.txt...Done!

Added a new account successfully!

----- KHANHCA PAWNSHOP MANAGEMENT -----

1. Add Contract.

2. Search Contract.

3. Report.

4. Setting.

5. Quit.

Please choose option: 5

Thank for using our software!

See you again!

Account is saving into data file vehicles.txt...Done!

Customer is saving into data file customers.txt... Done!

Vehicles is saving into data file vehicles.txt...Done!

Devices is saving into data file devices.txt...Done!

Others is saving into data file others.txt...

Done!

DESIGN PLAN		DOCUMENT NAME	SWD/FORM NO.15
Effective Date	18/02/2019	USER REQUIREMENT CRS Acceptance Criteria [Version 1] Prepared by Students	Page No.40-41 Approved by Teacher

VII. CHECKLIST

No	Document Name	Planned Start Date	Estimated Number Of Days Completed	Start Time	Completion Time	Total time to complete (Hours)	Team Mates Name	Note
1	Problem Definition	13:00 24/01/2019	3	13:00 24/01/2019	23:00 27/02/2019	9	KhoiLQ, ThinhNT, HungPNM	Completed
2	User requirement	13:00 15/02/2019	7	13:00 15/02/2019	23:00 22/02/2019	9	KhoiLQ, ThinhNT, HungPNM	Completed
3	Checking document 1	13:00 15/02/2019	1	13:00 15/02/2019	23:00 15/02/2019	3	KhoiLQ, ThinhNT, HungPNM	Completed
4	Project detail	13:00 18/02/2019	2	13:00 18/02/2019	18:00 20/02/2019	8	KhoiLQ	Completed
5	Design Data Models	13:00 15/02/2019	3	13:00 15/02/2019	11:00 18/02/2019	9	KhoiLQ, ThinhNT, HungPNM	Completed
6	Design Class Diagram	13:00 01/03/2019	5	13:00 01/03/2019	11:00 06/03/2019	15	KhoiLQ	Completed
7	Code Exceptions Class, Vehicle, Device, OtherName Class	13:00 08/03/2019	1	13:00 08/03/2019	2:25 08/03/2019	5	KhoiLQ	Completed
8	Code Account, Customer, Contract	13:00 08/03/2019	3	13:00 08/03/2019	23:00 11/03/2019	18	HungPNM	Not yet
9	Code Account, Customer, Contract	7:00 12/03/2019	2	13:00 12/03/2019	23:00 14/03/2019	4	KhoiLQ, ThinhNT	Completed
10	Checking document 2	13:00 15/03/2019	1	13:00 15/03/2019	23:00 15/03/2019	2	KhoiLQ, ThinhNT, HungPNM	Completed

11	Code Managements Class	9:00 15/03/2019	3	9:00 15/03/2019	23:00 18/02/2019	18	KhoiLQ, ThinhNT	Completed
12	Code Application Class	13:00 19/03/2019	1	18:30 19/03/2019	11:00 20/03/2019	17	KhoiLQ	Completed
13	Connect Classes	13:00 20/03/2019	1	13:00 20/03/2019	20:00 20/03/2019	3	KhoiLQ	Completed
14	Testing	13:00 20/03/2019	2	18:30 20/03/2019	12:00 22/03/2019	10	KhoiLQ, ThinhNT, HungPNM	Completed
15	Checking document 3	13:00 20/03/2019	1	13:00 20/03/2019	23:00 20/03/2019	4	ThinhNT, HungPNM	Completed
16	Powerpoint	18:30 19/03/2019	2	18:30 19/03/2019	2:00 22/03/2019	4	KhoiLQ, ThinhNT, HungPNM	Completed
17	Complete Application	13:00 20/03/2019	2	13:00 20/03/2019	12:00 22/03/2019	14	KhoiLQ, ThinhNT, HungPNM	Completed
18	Presentation Preparation	13:00 22/03/2019	1	13:00 22/03/2019	14:15 22/03/2019	1	KhoiLQ, ThinhNT, HungPNM	Completed
19	Presentation & Demo	13:00 25/03/2019	1	13:00 25/03/2019	14:15 25/03/2019	1	KhoiLQ, ThinhNT, HungPNM	
20	Deadline	25/03/2019					KhoiLQ, ThinhNT, HungPNM	