PART A

MIS – Manager for International Students

1. Could you introduce your company's agent process?

We have a Facebook group that is our main advertisement. Through this tool we capture our customers. My team is composed of 4 people, all able to give all information to the clients. The financial process goes through me, and then I'm accountable to my partner. The company earns commissions from schools and partner colleges of the company. All of my control of customer information, documents and payments are controlled by spreadsheets and placed in an individual folder, but we have a control sheet for all customers.

2. How many functions from the process do you hope to realize in this software?

At least 5. Registration of customers, control of the progress of the entire process of the client, cash flow, financial control of the company and help tool in the capture of customers.

3. Will the software be run by your company itself or other operator company?

In my company. However, also I want to access it outside of my company.

4. If it runs, how many advisors will you provide with the online work during workdays?

At least 2.

5. How many costumers do you have? How many of them will use this software? How many of them will use it at the same time?

I have 40 customers per month. No one will access my system. Everyone uses Facebook and Whatsapp.

6. What is your budget to develop this software?

I have no idea yet, but it can not be too loud.

7. Would you like to develop a mobile version of it?

It depends on when it would cost me and the benefit that this tool would bring me.

8. Do you want to have any financial functions like payment in the software?

I guess it's not necessary, because my customer living outside of Canada.

9. What was your mind about the user interface?

I guess that in my case it's not necessary.

10. How long time you can give us to develop this software?

I think that 3 months it's ok.

CUSTOMER: Sila Intercâmbio

Problem description:

This Company helps Brazilian students to come to Canada to study English or college. Sila give all supports to your customers like information of country, customs, dwelling, fees and information of schools and colleges. The Company uses Facebook and word of mouth marketing. It has an average of 40 new customers per month. It controls all process, cash flow and student information, using spreadsheets. The company has a small staff, four persons, 2 employees and 2 owners.

The data of the company are accessed manually and sharing in folders of Dropbox, so it's inconvenient that one owner has to spend too much time watching these files every time. Due to personal treatment, the company has to spend much time on single customer and this hinders company's growth. The main problem is low productivity and laborious financial control.

The contact personality with customers is captivating and attracts new customers every time. The reputation of the company is recognized by anyone who has used its services.

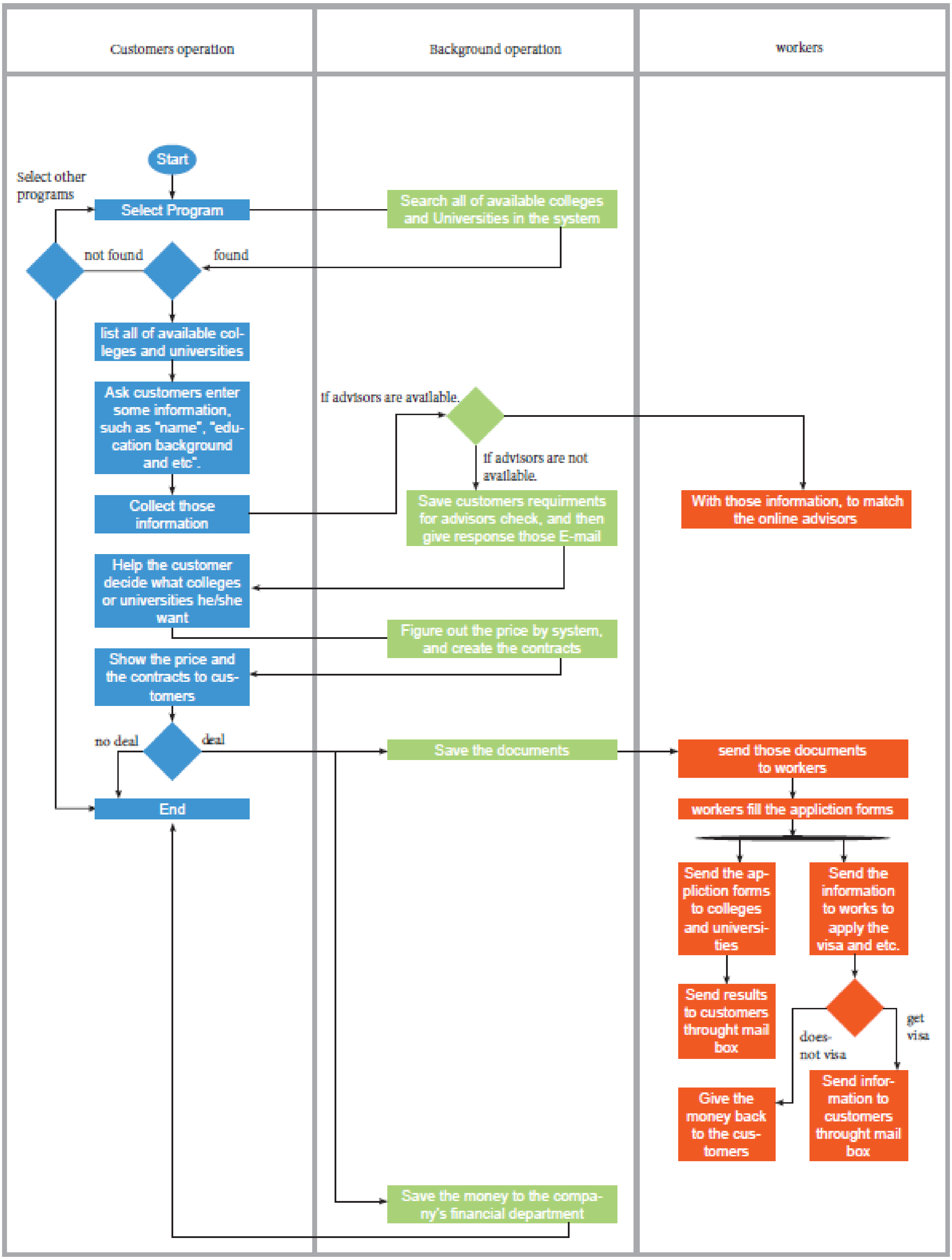
System capabilities:

- The system will be able to collect student information, store and help track each student's process.
- The system will enhance and streamline the financial control of the company.
- The system will allow the SILA team to have more time to focus on attracting new customers.
- The system will bring the company a new concept in enterprise data security.
- The system can be accessed by registered customers to search for common issues.
- The system should have the ability to be accessed from outside the SILA.

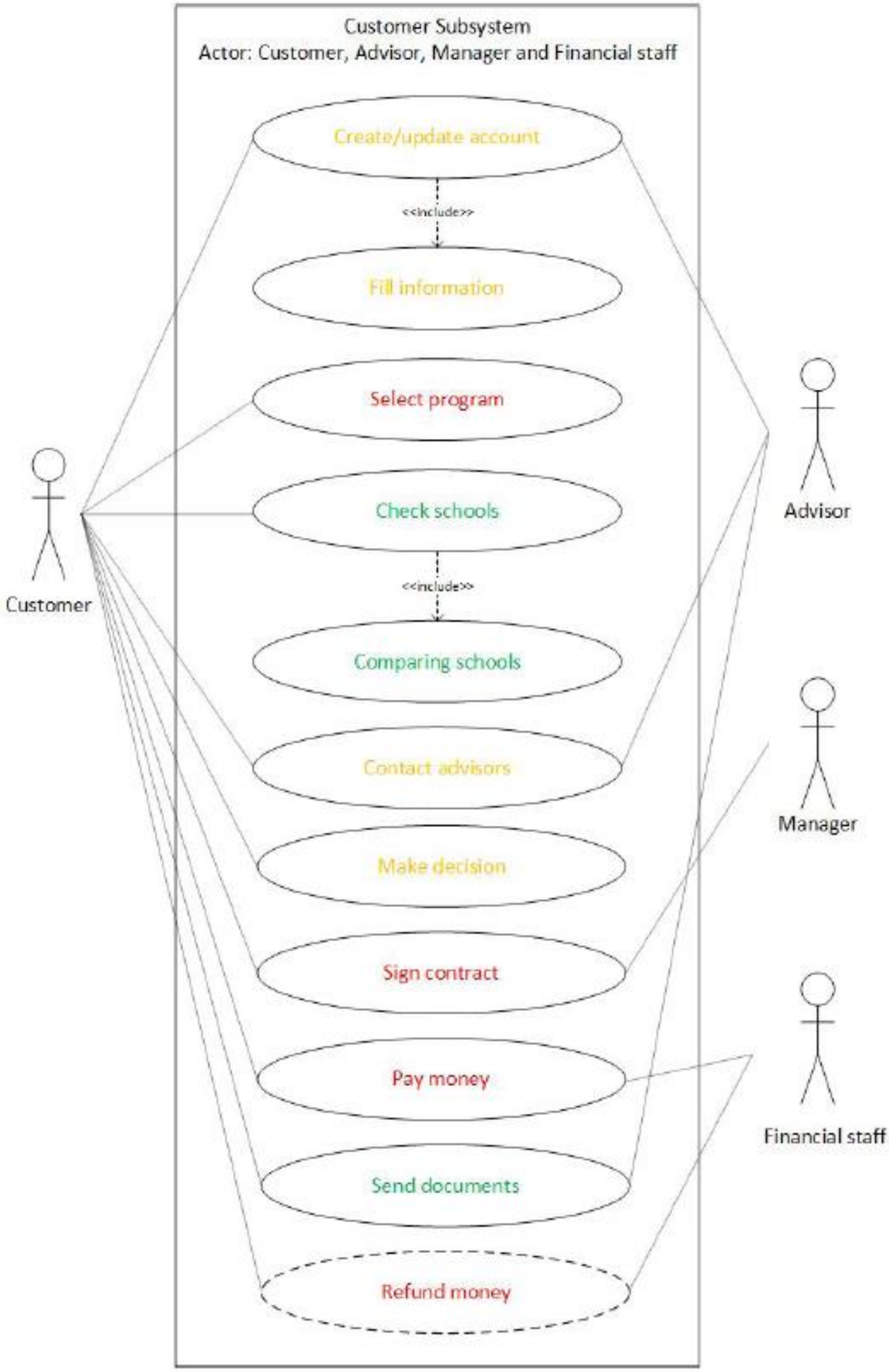
Business benefits:

- reducing costs with improved financial management.
- Increased customer empowerment due to time savings.
- Increased customer data security.
- Increased potential in company billing.

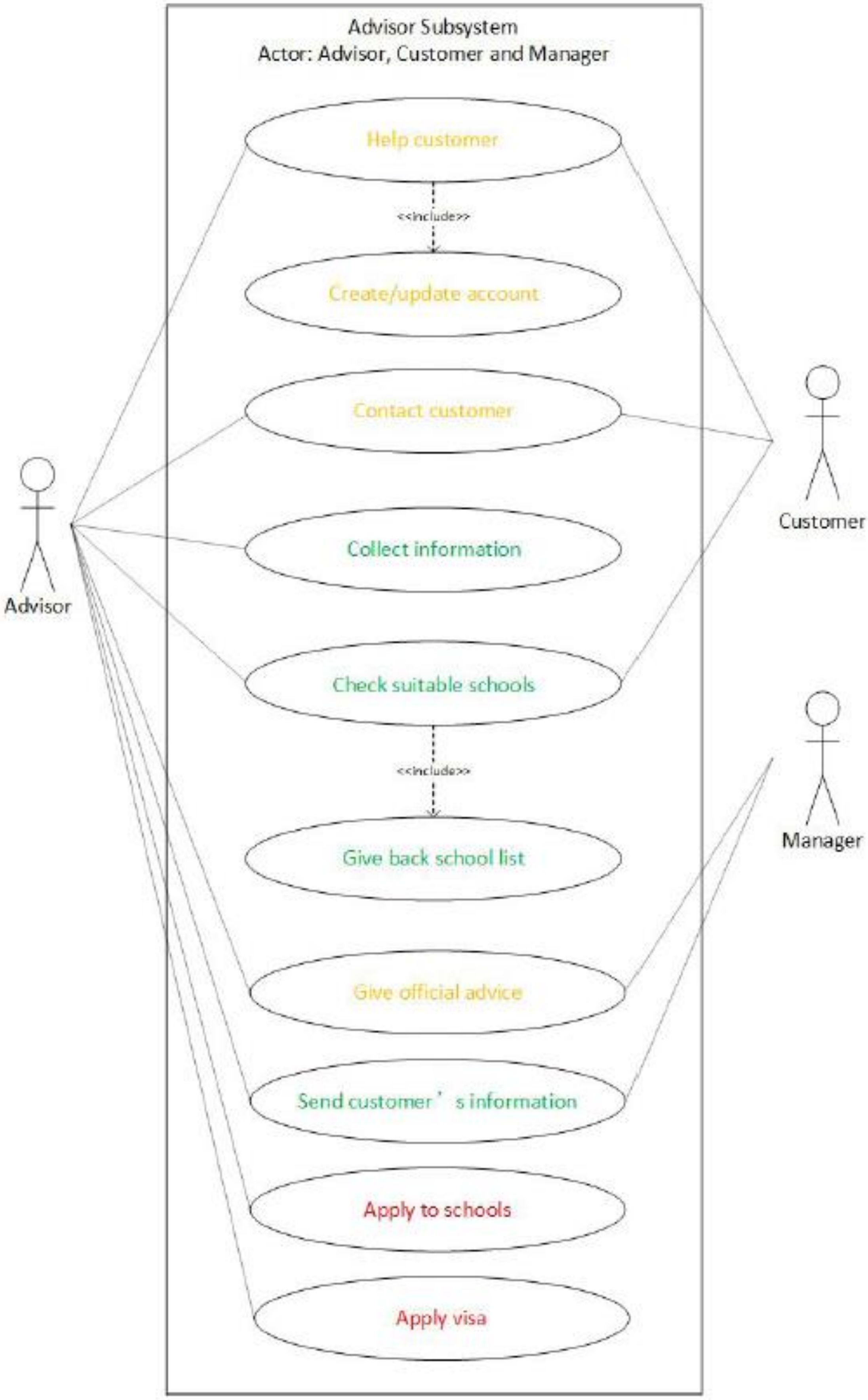
PART A


Customers operation
Background operation
workers
Start
Select other programs
Select Program
Search all of available colleges and Universities in the system
not found
found
list all of available colleges and universities
Ask customers enter some information, such as "name", "education background and etc".
If advisors are available.
If advisors are not available.
Collect those information
Save customers requirments for advisors check, and then give response those E-mail
With those information, to match the online advisors
Help the customer decide what colleges or universities he/she want
Figure out the price by system, and create the contracts
Show the price and the contracts to customers
no deal
deal
Save the documents
send those documents to workers
End
workers fill the appliction forms
Send the appliction forms to colleges and universities
Send the information to works to apply the visa and etc.
Send results to customers throught mail box
does-not visa
get visa
Give the money back to the customers
Send information to customers throught mail box
Save the money to the company's financial department

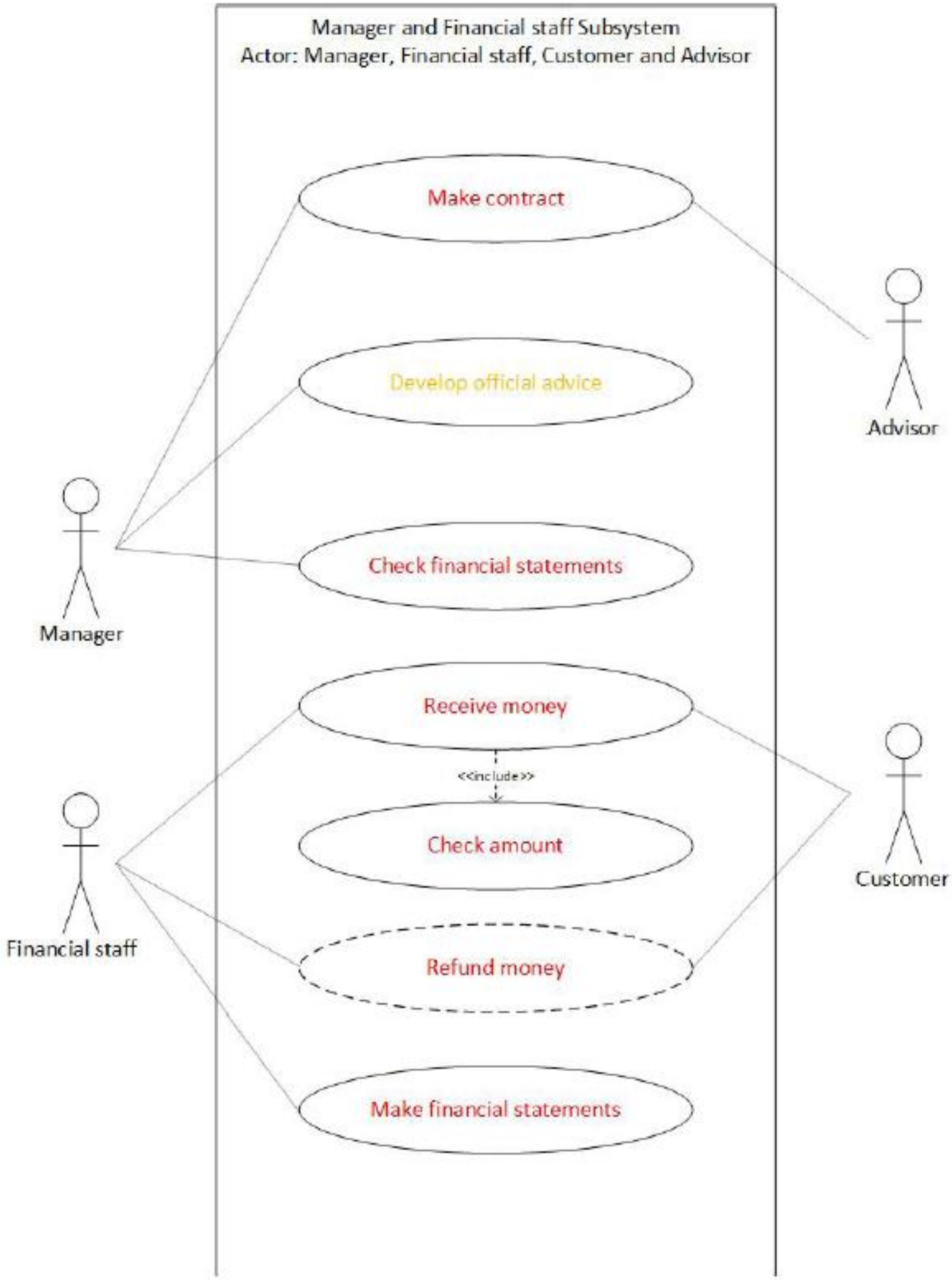
PART B


Customer Subsystem
Actor: Customer, Advisor, Manager and Financial staff
Create/update account
<<include>>
Fill information
Select program
Check schools
<<include>>
Comparing schools
Contact advisors
Make decision
Sign contract
Pay money
Send documents
Refund money
Customer
Advisor
Manager
Financial staff

PART B


Advisor Subsystem
Actor: Advisor, Customer and Manager
Help customer
<<include>>
Create/update account
Contact customer
Collect information
Check suitable schools
<<include>>
Give back school list
Give official advice
Send customer's information
Apply to schools
Apply visa
Advisor
Customer
Manager

PART B



Manager and Financial staff Subsystem
Actor: Manager, Financial staff, Customer and Advisor
Make contract
Develop official advice
Check financial statements
Receive money
<<include>>
Check amount
Refund money
Make financial statements
Manager
Financial staff
Advisor
Customer

PART B

Brief use case descriptions

Customer Subsystem:

Create/update account: Create/update customer account in our company.

Fill information: Fill in customer's personal information in account.

Select program: Choose which kind of service customer want, like going to college/university/master or learning ELL.

Check schools: Check every schools' details in our website.

Comparing schools: Comparing with several chosen schools.

Contact advisors: Contact advisor by online chat function in our website, or through phone/email.

Make decision: Make decision on which programs to choose and which school to going to.

Sign contract: Fill in and sign contract provided by company's manager.

Pay money: Pay money to company's account.

Send documents: Send personal documents used for application to the advisor.

Refund money: If application fails, customer has right to get their money back and we will refund the money (not include the application fee).

Advisor Subsystem:

Help customer: Advisor helps to create/update customer account.

Create/update account: Advisor helps to fill in customers' personal information in account.

Contact customer: Contact customer by online chat function in our website, or through phone/email.

Collect information: Collect all useful personal information and personal requests or wills from customer.

Check suitable schools: Check every available school that meet customer's requirements.

Give back school list: Make a list of those schools and give it back to customer.

Give official advice: Give the agency official advice to customer. (see details in "Develop official advice")

Send customer's information: Send the customer's information, status and decisions to manager to make contracts.

Apply to schools: Send applications and customer's documents to schools.

Apply visa: Send customer's documents and apply for a visa and etc.

Manager and Financial staff Subsystem:

Make contract: Collect customer information given by advisors to make contracts.

Develop official advice: Collect every schools' admission status in recent years, the sponsorship status by schools and customer statistics in recent years to develop the agency official advice.

Check financial statements: Check the financial statements from financial staff.

Receive money: Receive money from customers.

Check amount: Check amount with the contract.

Refund money: Give money back to customer if visa doesn't pass or customer doesn't be admitted by any school (not include the application fee).

Make financial statements: Make financial statements at regular intervals.

Prioritized list of use cases

High level

Customer Subsystem:

Select program; Sign contract; Pay money; Refund money(optional)

Advisor Subsystem:

Apply to schools; Apply visa

Manager and Financial staff Subsystem:

Make contract; Check financial statements; Receive money (include Check amount); Refund money(optional); Make financial statements

Middle level

Customer Subsystem:

Create/update account (include Fill information); Contact advisors; Make decision

Advisor Subsystem:

Help customer (include Create/update account); Contact customer; Give official advice

Manager and Financial staff Subsystem:

Develop official advice

Low level

Customer Subsystem:

Check schools (include Comparing schools); Send documents

Advisor Subsystem:

Collect information; Check suitable schools (include Give back school list); Send customer's information

Manager and Financial staff Subsystem:

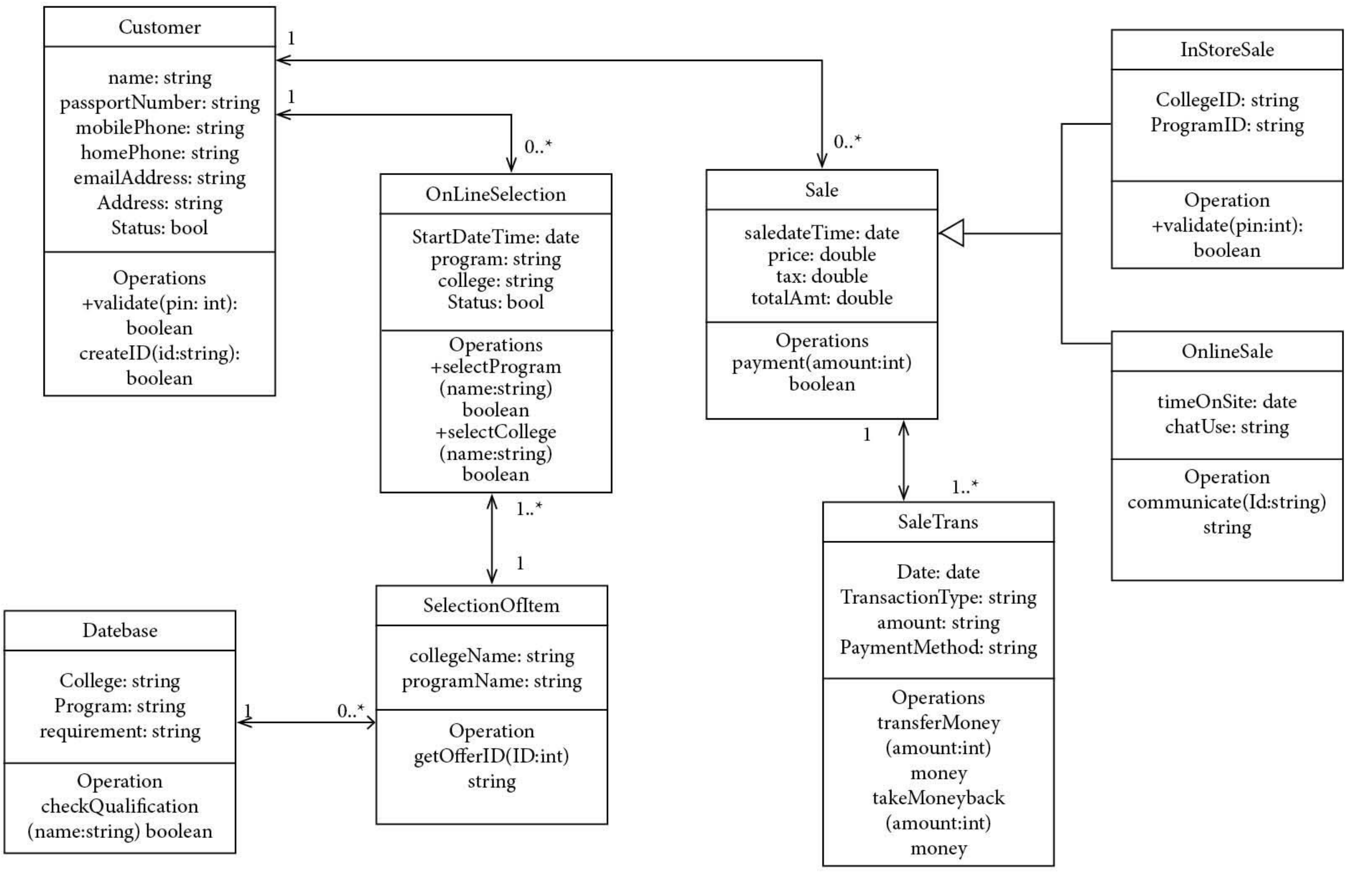
None

PART B

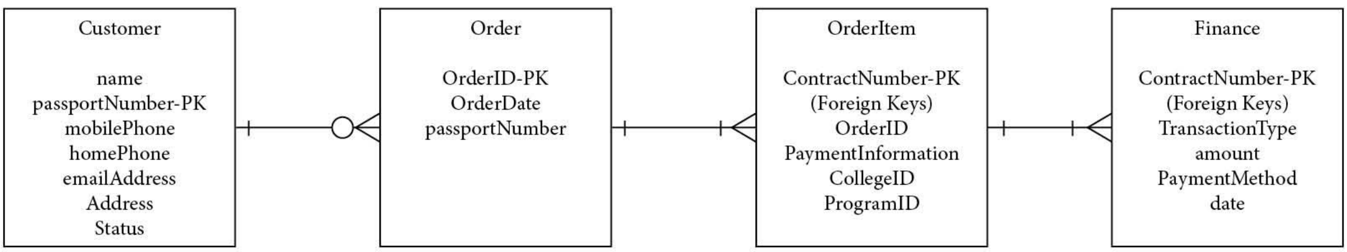
Minutes of meetings log between team members					
Meeting#	**Date**	**Duration**	**Name of attendees**	**Type**	**Key action agreed upon**
1	08/6/2018	1 hour (in class)	Han Li Fernando Martins Truong Giang Nguyen Gaofeng	In class, and online	Discuss about the Use Case Diagram from the Part A ‘s information before about our business
2	15/6/2018 -22/6/2018	1 hour (in class)	Han Li Fernando Martins Truong Giang Nguyen Gaofeng Hojun Na	In class, and online	We talked about the priority of use cases and we have the use case and brief description done.
3	29/6/2018	1 hour	Han Li Fernando Martins Truong Giang Nguyen Gaofeng Hojun Na	Through Inter-net	After the priorities done, we talked about Dia-gram and entities, we got the first draft of ERD and Class Diagram done and show to profes-sor for feedback.
4	13/7/2018	40 hours	Han Li Fernando Martins Truong Giang Nguyen Gaofeng Hojun Na	In class and through WhatsApp	We fixed some part of diagram and got every-thing done for submission.

PART B

association-UML



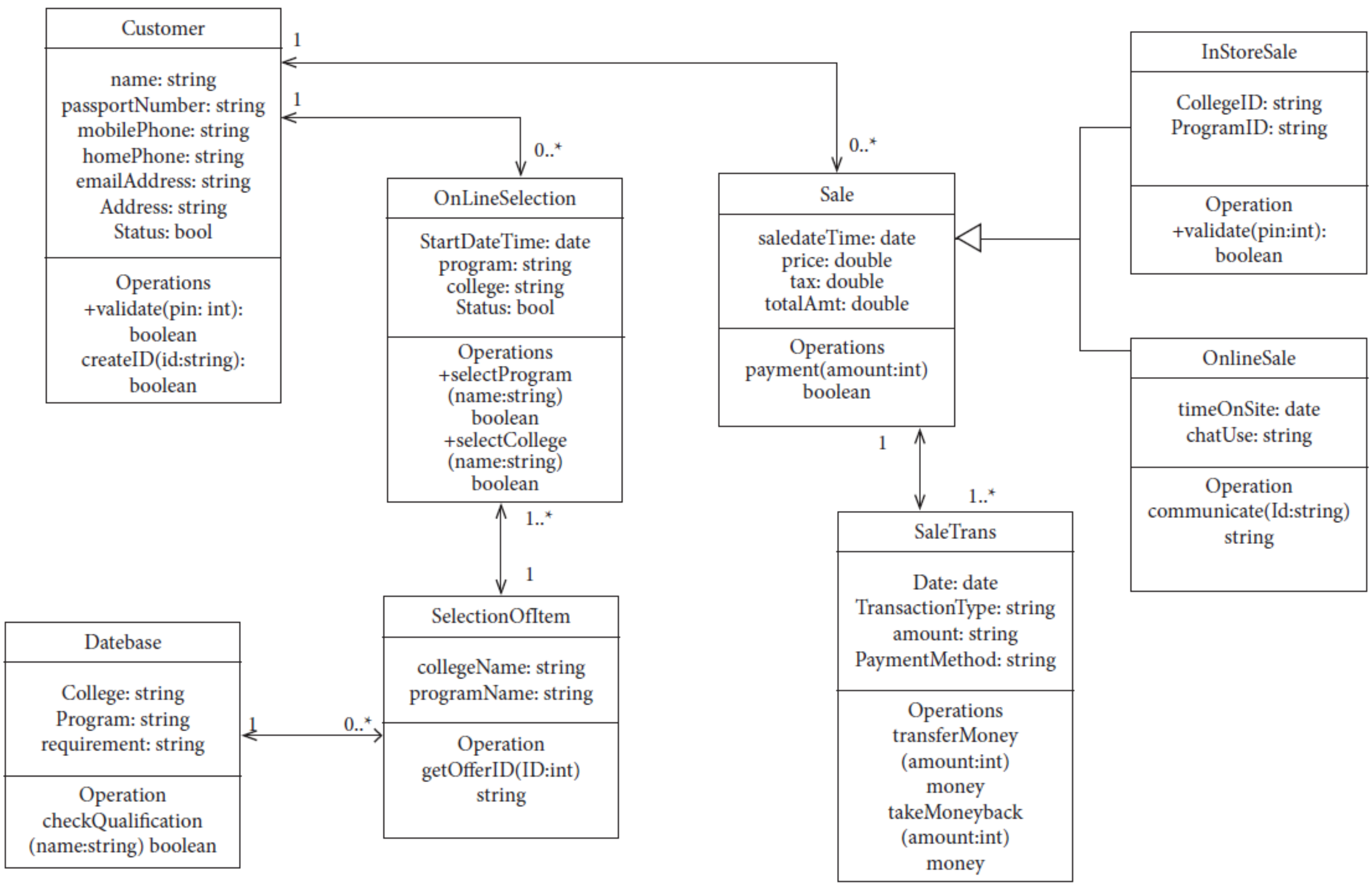
relationship - ERD



PART C

1.Add at least 2 methods to each class in the Domain class model you developed in part B.

association-UML



2.Use Case full description form / Users' Stories

Here we are talking about a fully developed users' story and a fully developed use case description.

Background:

Viji is a student in Brazil just graduated from a high school. She wants to come to Canada for further study. She would like to learn about software.

One day she found our company through Internet. She made her first call to us and decided to choose our company to help her.

Processes:

Firstly, she goes to our website to create an account. This process includes filling her personal information.

Then she must select a program. This is our first high level priority use case. We provide many programs for customer to choose like going to college (includes diploma, degree, certificate…), university (bachelor degree, master degree, doctor degree), ELL (different levels) …… Each program contains almost every accessible schools in different cities.

Viji wants to study software and get a 3 years diploma in one college in Toronto. So, she can choose Toronto – college – diploma – software.

Our system will list all software majors in every accessible college in Toronto as soon as possible for Viji to check and compare (Every detail about schools and majors will be contained).

After that she contacts with one of our advisors - Narendra by randomly through online chat function in our website. (phone/email are also available)

Meanwhile our advisor Narendra has set up one-to-one correspondence with customer Viji. Now he is able to view Viji's account, he will collect useful information and talk to her to know personal requests and wills.

Then Narendra will check every available school that meets Viji's requirements, make a list of those schools and give the agency official advice to customer.

Viji makes a decision on going to Centennial College to learn Software Engineering Technology.

Advisor Narendra sends Viji's information and decision to company manager – Jake. Jake makes a contract and sign it firstly, then gives it to Narendra. Narendra also must sign it.

Now customer Viji has two choices – one is going to our office in Brazil to sign contract and make payment face to face. Two is doing these things through Internet. She selects the second way: sign in the PDF contract online and make payment by PayPal.

The financial staff – Mayy in our company receives the money and checks amount with contract.

Until now the contract starts, and company has received money from customer. Narendra will send Viji a list of documents she should provide for application of school and visa, give her some time to prepare for them. After a few days, Viji will post them to company.

Narendra helps to write application letter, binds documents and posts them to school.

As soon as gets offer, Narendra will post documents including the offer to Embassy of Canada for visa.

Regular work:

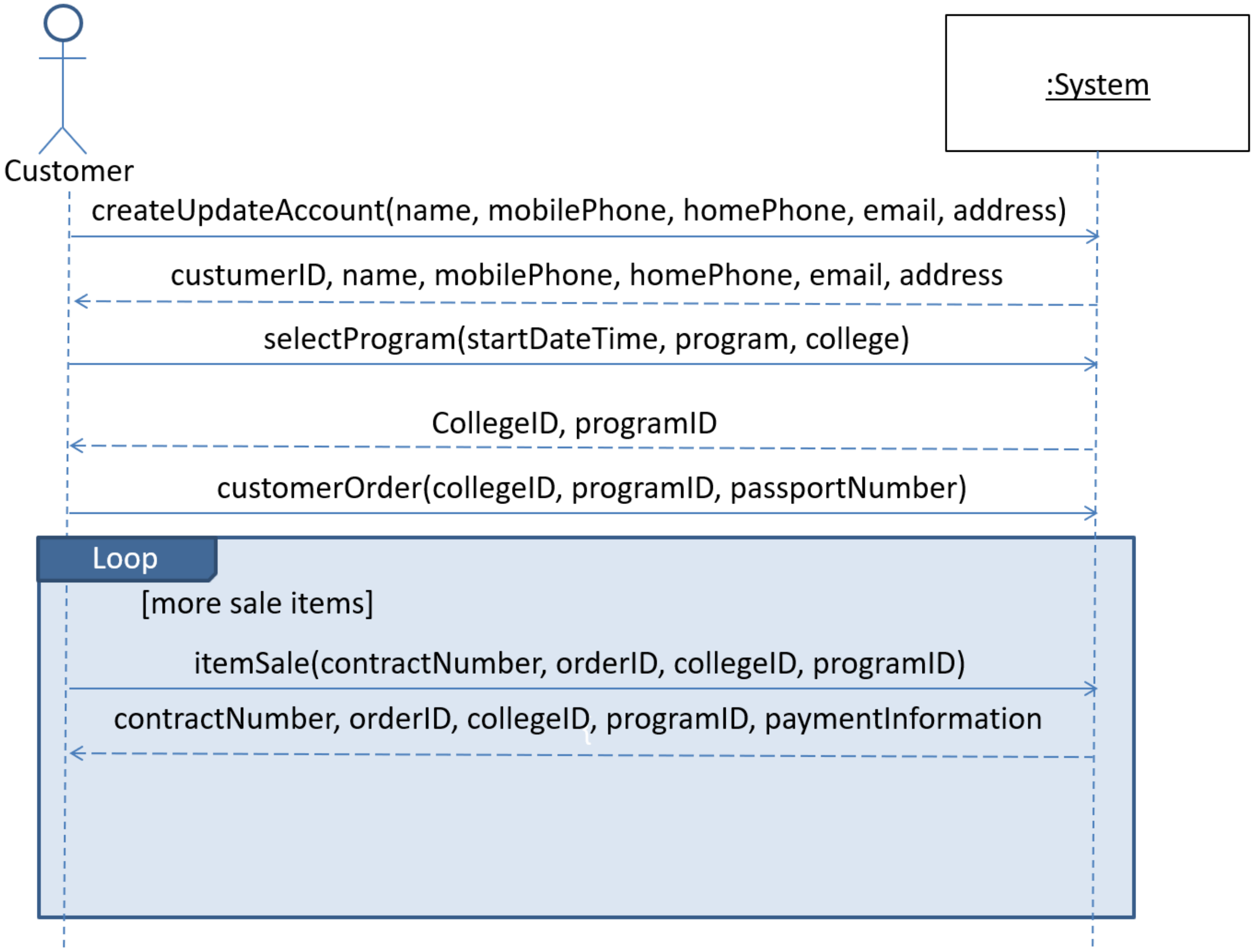
As the manager, Jake ought to have right to control the whole company. It includes all advisor's work. To avoid some inexperienced advisors giving out unsuitable advice. Jake should develop an agency official advice. It is based on every schools' admission status in recent years, the sponsorship status by schools, customer statistics in recent years and so on.

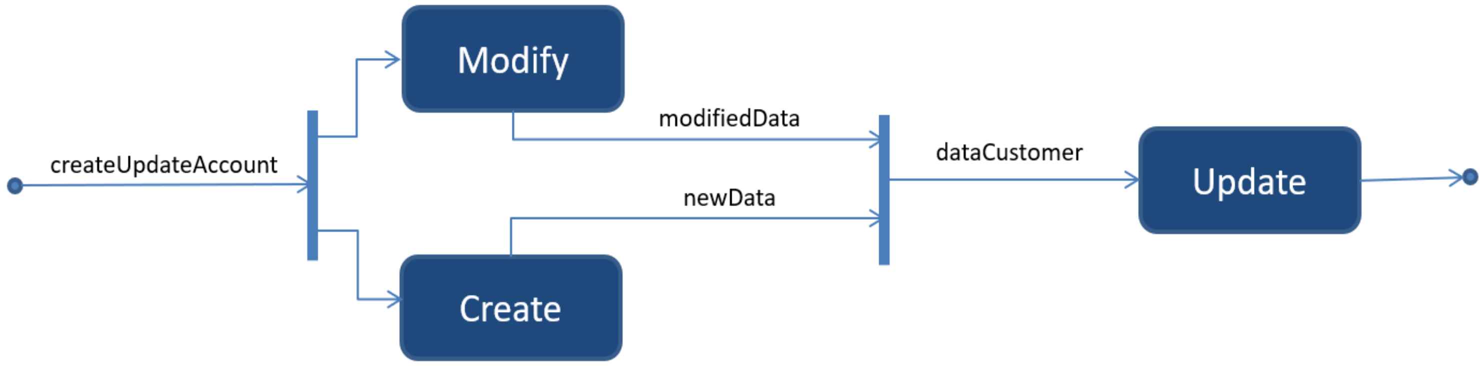
Jake also has to check the financial statements regularly. They are made by Mayy – the financial staff at regular intervals.

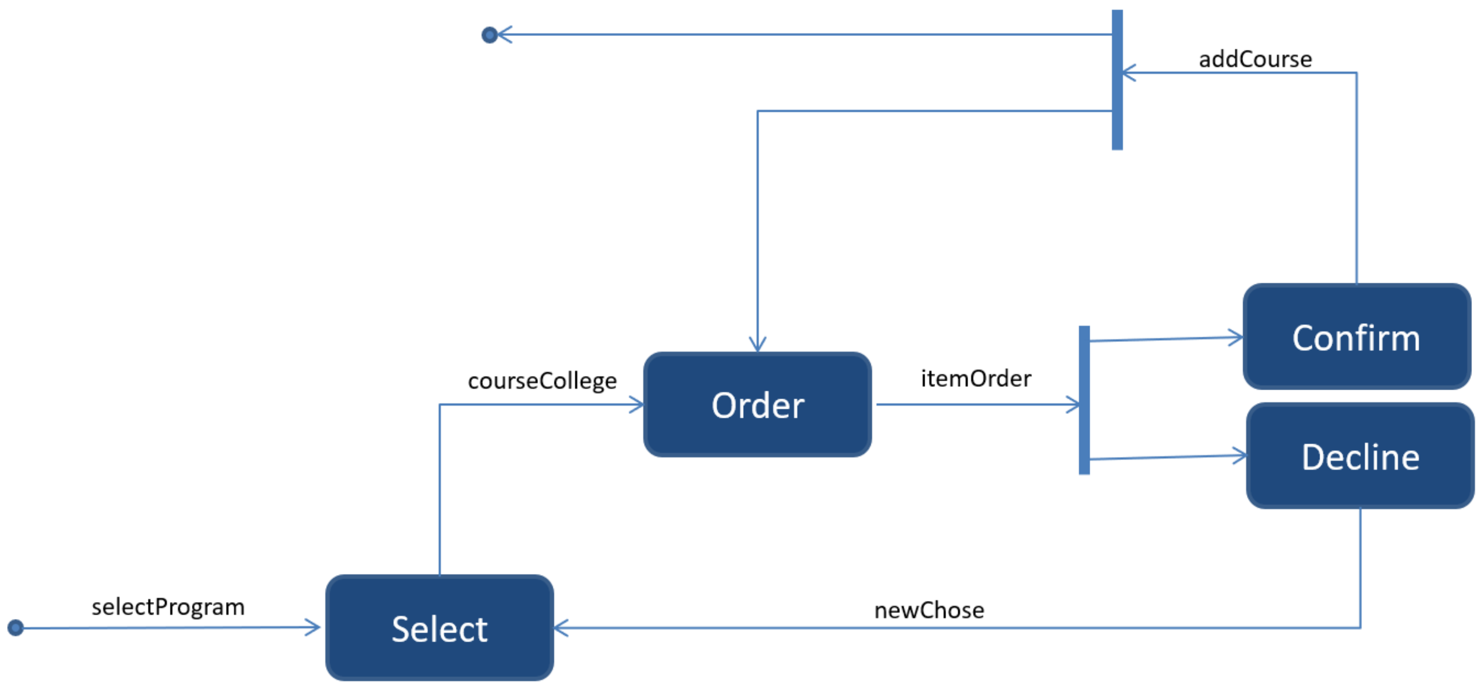
Non-essential work:

If visa doesn't pass or customer Viji doesn't be admitted by any school, she has right to get her money back. The financial staff Mayy will refund the money. (not include the application fee)

3.System Sequence Diagrams and State Machine Diagrams




Modify
modifiedData
createUpdateAccount
dataCustomer
Update
newData
Create


addCourse
Confirm
courseCollege
Order
itemOrder
Decline
selectProgram
Select
newChose

4. Gantt chart

	Ta M	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Hour Spend
		Determine business model	1 day	Fri 18/5/11	Fri 18/5/11		4 of us	2 hrs
		Create vision document domain	3 days	Mon 18/5/14	Wed 18/5/16	1	Fernando,Gaofeng Pan	6 hrs
		Prepare interview questions	3 days	Fri 18/5/18	Tue 18/5/22		Gaofeng Pan	6 hrs
		Develop workflow(diagram)	5 days	Mon 18/5/21	Fri 18/5/25		HanLi	5 hrs
		Deliever BRD (Part A)	1 day	Fri 18/6/1	Fri 18/6/1	4,1,2,3	Truong	1 hrs
		Determine use cases	4 days	Mon 18/6/4	Thu 18/6/7	5	4 of us	6 hrs
		Develop Use Case Diagram	3 days	Fri 18/6/8	Tue 18/6/12	6	Gaofeng Pan	8 hrs
		Prioritized list of use case	1 day	Wed 18/6/13	Wed 18/6/13	7	Gaofeng Pan,Truong	2 hrs
		Use case brief description	2 days	Thu 18/6/14	Fri 18/6/15	7,8	Gaofeng Pan,Fernando	2 hrs
		Develop domain diagram (ERD)	5 days	Fri 18/6/29	Thu 18/7/5		HanLi	6 hrs
		Decide method & PK for domain class	2 days	Fri 18/7/6	Mon 18/7/9		HanLi,Fernando,Truong	3 hrs
		Deliever UML Dia & ERD (PartB)	1 day	Tue 18/7/10	Tue 18/7/10	6,7,8,9,10,11	4 of us	2 hrs
		Determine Use cases stories	3 days	Wed 18/7/11	Fri 18/7/13	12	Gaofeng Pan	5 hrs
		Create System Sequence Diagram	3 days	Tue 18/7/17	Thu 18/7/19		Fernando	5 hrs
		Develop State Machine Diagram	3 days	Fri 18/7/20	Tue 18/7/24		Fernando,HanLi	5 hrs
		Draw Gantt Chart	3 days	Thu 18/7/26	Mon 18/7/30		Truong	4 hrs
		Deliever Part C	1 day	Tue 18/7/31	Tue 18/7/31	13,14,15,16	4 of us	2 hrs