

# GROUP ASSESSMENT ITEM COVER SHEET

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## Course Code

S	E	G	G	2	1	3	0
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(Example)

A	B	C	D	1	2	3	4
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## Course Title

Systems analysis and design
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(Example)

Intro to University
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Campus of Study: Callaghan (eg Callaghan, Ourimbah, Port Macquarie)

Assessment Item Title: Assignment 1 Due Date/Time: 12/04/19

Tutorial Group (If applicable):  Word Count (If applicable):

Lecturer/Tutor Name:

Extension Granted: ☐ Yes ☐ No Granted Until:

Please attach a copy of your extension approval

**NB: STUDENTS MAY EXPECT THAT THIS ASSIGNMENT WILL BE RETURNED WITHIN 3 WEEKS OF THE DUE DATE OF SUBMISSION**

### Please tick box if applicable

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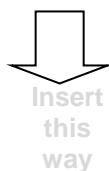
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# SENG2130 - ASSIGNMENT 1

C3279166, C3282229, C3286819, C3275916

Systems Analysis and Design

**Actors:** Manager, Office Staff, Maintenance Staff

**Use Cases:**

1. Manager -> Calls -> Organizes Lease Terms and Costs
  - a. Organizes Lease Terms and Costs <<extends>> Organizes Leases -> Extends Leases -> Schedules Maintenance
2. Office Staff -> Calls -> Gives Equipment Information
3. Office Staff -> Edit Logbook
4. Maintenance Staff -> Call/Visit -> Office Staff
5. Maintenance Staff -> Maintain Equipment
6. Maintenance Staff -> Receives Item
7. Office Staff -> Receives Orders -> Edits Logbook
8. Maintenance Staff -> Loan Equipment
9. ///
10. ///



**Use Case Description:**

**Calls:** When a staff member receives or gives phone calls

**Discuss Lease:** The Manager discusses the terms and costs of equipment leasing to customers

**Organizes Leases:** The Manager organizes leases with the customer

**Extends Leases:** The Manager organizes the extension of equipment leases with the customer

**Schedules Maintenance:** The Manager organizes the servicing of leased equipment with customers

**Gives Equipment Information:** Customers receive information about equipment that can be loaned out from SAMEH

**Edit Logbook:** Office Staff adds information regarding loaned equipment in a physical logbook in the office

**Call/Visit:** Maintenance Staff call/visit the main office to enquire about what jobs are waiting for them

**Maintain Equipment:** Maintenance Staff fix/service equipment that are broken or require a scheduled maintenance check

**Receives Item:** Staff receive equipment from customers

**Receives Orders:** Office Staff receive several orders from many customers

**Loan Equipment:** Maintenance Staff will loan out equipment to regular customers without informing the Office Staff

<b>Use Case Name</b>	Receive Call	
<b>Brief Description</b>	Office Staff receives an incoming phone call from client	
<b>Actors</b>	Office Staff	
<b>Related Use Cases</b>	<<include>> Provide Information	
<b>Entry Condition</b>	Phone call received	
<b>Exit Condition</b>	Phone call ends	
<b>Flow of Events</b>	<b>Actors</b>	<b>System</b>
	1. Office Staff picks up phone 2. Office Staff answers enquiry	1.1 receives enquiry  2.1 receives feedback 2.2 call ends
<b>Exception condition</b>	1.1 No enquiry is given <ul style="list-style-type: none"> <li>a. Customer doesn't provide an enquiry to an Office Staff member</li> <li>b. The Office Staff member ends call</li> </ul> 2.1 Customer has multiple enquiries <ul style="list-style-type: none"> <li>a. Office Staff member continues to provide information to the customer about their enquiry until all enquiries are answered</li> </ul>	

<b>Use Case Name</b>	Provide Information	
<b>Brief Description</b>	Office staff provides information for an enquiry	
<b>Actors</b>	Office Staff	
<b>Related Use Cases</b>		
<b>Entry Condition</b>	Information is needed for an enquiry	
<b>Exit Condition</b>	Enquiry is handled	
<b>Flow of Events</b>	Actors	System
	1. Office Staff provides information	1,1 enquiry is answered
<b>Exception condition</b>	1.1 Office Staff does not know required information a. Seeks information from other Staff b. Seeks information other sources c. Apologizes if not enough information is found	

<b>Use Case Name</b>	Edit Logbook	
<b>Brief Description</b>	Office Staff updates office logbook	
<b>Actors</b>	Office Staff	
<b>Related Use Cases</b>		
<b>Entry Condition</b>	Office Staff has casual hire details	
<b>Exit Condition</b>	Logbook is up-to-date	
<b>Flow of Events</b>	Actors	System
	1. Office Staff enters details into the office logbook.	1.1 Office logbook updated
<b>Exception condition</b>	1.1 Casual hire details are not complete <ul style="list-style-type: none"> <li>a. Office Staff resolves the missing details.</li> <li>b. Office Staff cannot resolve missing details and does not register details into the logbook.</li> </ul>	

<b>Use Case Name</b>	Receive Orders	
<b>Brief Description</b>	Office Staff receive several orders from many customers	
<b>Actors</b>	Office Staff	
<b>Related Use Cases</b>		
<b>Entry Condition</b>	Office Staff is contacted by Client	
<b>Exit Condition</b>	Orders are processed	
<b>Flow of Events</b>	Actors	System
	1. Office Staff enters the order into the system	1.1 Receives order information
<b>Exception condition</b>	<p>1.1 No information is given</p> <ul style="list-style-type: none"> <li>a. The customer has no loan details to give to the Office Staff member communicating with them</li> <li>b. Office Staff member ends communication with the customer if they cannot provide any of the details required</li> </ul> <p>1.2 Wrong information is given</p> <ul style="list-style-type: none"> <li>a. The customer gives incorrect details to the Office Staff member</li> <li>b. Office Staff member will call or email the customer to get in contact with them</li> <li>c. The Office Staff member receives correct customer details</li> </ul> <p>1.3 Equipment is already on loan</p> <ul style="list-style-type: none"> <li>a. Office Staff informs customer that the equipment they've requested is already on loan</li> <li>b. Office Staff asks if customer requires more assistance</li> </ul>	



<b>Use Case Name</b>	Call client	
<b>Brief Description</b>	Manager contacts clients in regards to a loan	
<b>Actors</b>	Manager	
<b>Related Use Cases</b>	<<Includes>> Discuss Loan	
<b>Entry Condition</b>	Manager calls client.	
<b>Exit Condition</b>	Call is terminated	
<b>Flow of Events</b>	Actors	System
	1. Manager contacts client 2. Manager discusses loan details	1.1 phone call is picked up 2.1 client lease-related matter is discussed. 2.2 call ends
<b>Exception condition</b>	1.1 Incorrect contact details <ul style="list-style-type: none"> <li>a. Manager rings the wrong number or the contact number is wrong in SAMEH's phonebook</li> <li>b. Manager asks Office Staff to check phone records to see what the correct number is</li> </ul>	

<b>Use Case Name</b>	Receive Returns	
<b>Brief Description</b>	Maintenance Staff receive equipment from customers	
<b>Actors</b>	Maintenance Staff	
<b>Related Use Cases</b>	<<Extend>> Charge Fuel	
<b>Entry Condition</b>	Equipment is received by Staff	
<b>Exit Condition</b>	Deposit is returned to client	
<b>Flow of Events</b>	Actors	System
	1. Staff receive equipment 2. Staff check fuel level  3. Staff return deposit	2.1 fuel charge is calculated 2.2 deposit is withdrawn
<b>Exception condition</b>	2.1 Staff don't check fuel level <ul style="list-style-type: none"> <li>a. Sometimes Staff members don't check the fuel level upon equipment return</li> <li>b. Equipment is loaned back out without having full fuel</li> </ul>	

<b>Use Case Name</b>	Maintain equipment	
<b>Brief Description</b>	Maintenance Staff perform equipment maintenance	
<b>Actors</b>	Maintenance Staff	
<b>Related Use Cases</b>		
<b>Entry Condition</b>	Maintenance Staff assigned maintenance task	
<b>Exit Condition</b>	System is notified about maintenance	
<b>Flow of Events</b>	<b>Actors</b>	<b>System</b>
	1.1 Staff receive request for equipment maintenance 2. Staff receive equipment from warehouse 3. Staff perform maintenance 4. Staff return equipment to warehouse	1.1 System has equipment listed for maintenance        4.1 Maintenance is marked as complete
<b>Exception condition</b>	2.1 Equipment is on loan a. Equipment is still being used by the company that leased it b. Staff will request the equipment to be returned for maintenance	

<b>Use Case Name</b>	Loan Equipment	
<b>Brief Description</b>	Maintenance Staff will loan out equipment to regular customers without informing the Office Staff	
<b>Actors</b>	Maintenance Staff	
<b>Related Use Cases</b>		
<b>Entry Condition</b>	Client requests loan	
<b>Exit Condition</b>	Loan request is handled	
<b>Flow of Events</b>	Actors	System
	1. Staff receive request for loan 2. Maintenance staff finalise loan of equipment	2.1 warehouse logbook is updated with loan details
<b>Exception condition</b>	2.1 Equipment is on loan already <ul style="list-style-type: none"> <li>a. Staff informs customer that the equipment they've requested is already on loan</li> <li>b. Staff asks if the customer would like to hire any other equipment</li> </ul> 2.2 Equipment is having maintenance work done <ul style="list-style-type: none"> <li>a. Staff will inform customer that the equipment is unavailable</li> <li>b. Staff asks if the customer would like to hire any other equipment</li> </ul> 2.3 Loan is casual hire, therefore warehouse logbook is not updated and office should be informed about casual hire to update their office logbook.	

<b>Use Case Name</b>	Edit Logbook	
<b>Brief Description</b>	Maintenance Staff updates warehouse logbook	
<b>Actors</b>	Maintenance Staff	
<b>Related Use Cases</b>		
<b>Entry Condition</b>	Maintenance Staff has loan details (not casual hire)	
<b>Exit Condition</b>	Logbook is up-to-date	
<b>Flow of Events</b>	Actors	System
	1. Office Staff enters details into the office logbook.	1.1 Office logbook updated
<b>Exception condition</b>	1.1 loan details are not complete c. Office Staff resolves the missing details. d. Office Staff cannot resolve missing details and does not register details into the logbook.	

<b>Use Case Name</b>	Discuss Lease	
<b>Brief Description</b>	The Manager discusses lease-related matter with client	
<b>Actors</b>	Manager	
<b>Related Use Cases</b>		
<b>Entry Condition</b>	Manager in a phone call with client	
<b>Exit Condition</b>	Lease-related matter has been discussed	
<b>Flow of Events</b>	Actors	System
	1. Manager talks to customer	2.1 Manager and customer discuss lease-related matter. 2.2 An arrangement is made between both parties. 2.3 Call ends.
<b>Exception condition</b>	2.1 Customer and Manager don't come to an agreement <ul style="list-style-type: none"> <li>a. Both parties cannot come to an agreement</li> <li>b. An arrangement isn't made</li> <li>c. Communication between the Manager and Customer ends</li> </ul>	

<b>Use Case Name</b>	Organise lease	
<b>Brief Description</b>	The Manager organizes leases with the customer	
<b>Actors</b>	Manager	
<b>Related Use Cases</b>	Discuss Lease	
<b>Entry Condition</b>	Manager in a phone call with client	
<b>Exit Condition</b>	Lease arrangement made or not	
<b>Flow of Events</b>	Actors	System
	1. Manager discusses lease terms  2. Manager writes a contract arrangement	1.1 Manager and customer come to an agreement 2.1 Manager and customer create a legal binding agreement over the leasing over equipment
<b>Exception condition</b>	2.1 Customer and Manager don't come to an agreement <ul style="list-style-type: none"> <li>a. Both parties cannot make an agreement</li> <li>b. A lease contract isn't made</li> <li>c. Communication between the Manager and Customer ends</li> </ul>	

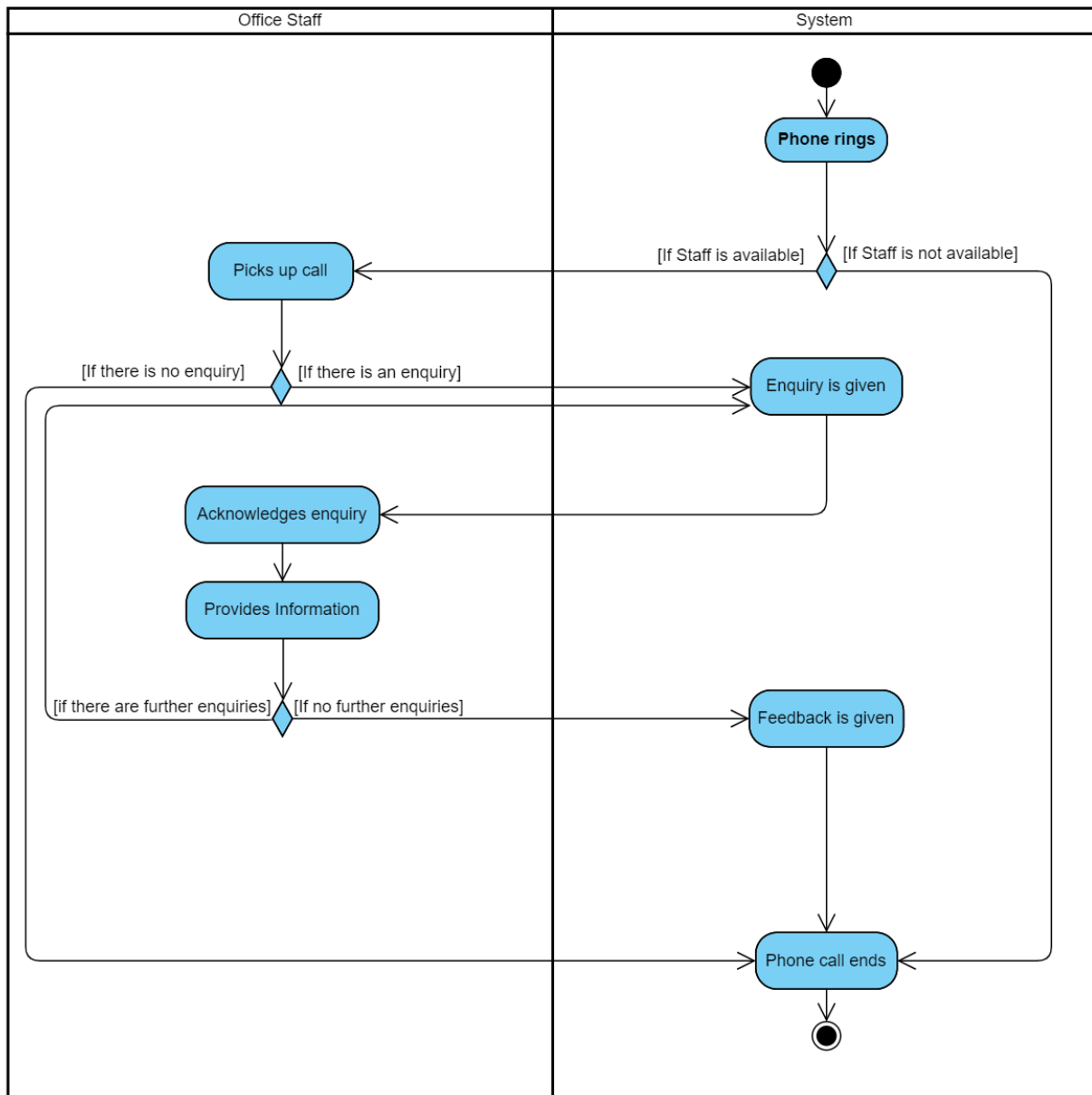
<b>Use Case Name</b>	Extends Lease	
<b>Brief Description</b>	The Manager organizes the extension of equipment leases with the customer	
<b>Actors</b>	Manager	
<b>Related Use Cases</b>	Discuss Lease	
<b>Entry Condition</b>	Manager in a phone call with client	
<b>Exit Condition</b>	Loan period is extended or not	
<b>Flow of Events</b>	Actors	System
	1. Manager discusses lease extension	1.1 Manager determines whether an extension can be granted 1.2 Extension is granted/declined
<b>Exception condition</b>	1.1 If the extension cannot be granted <ul style="list-style-type: none"> <li>a. The equipment will be returned on the original date set by the two parties</li> <li>b. Communication between Manager and customer ends</li> </ul>	



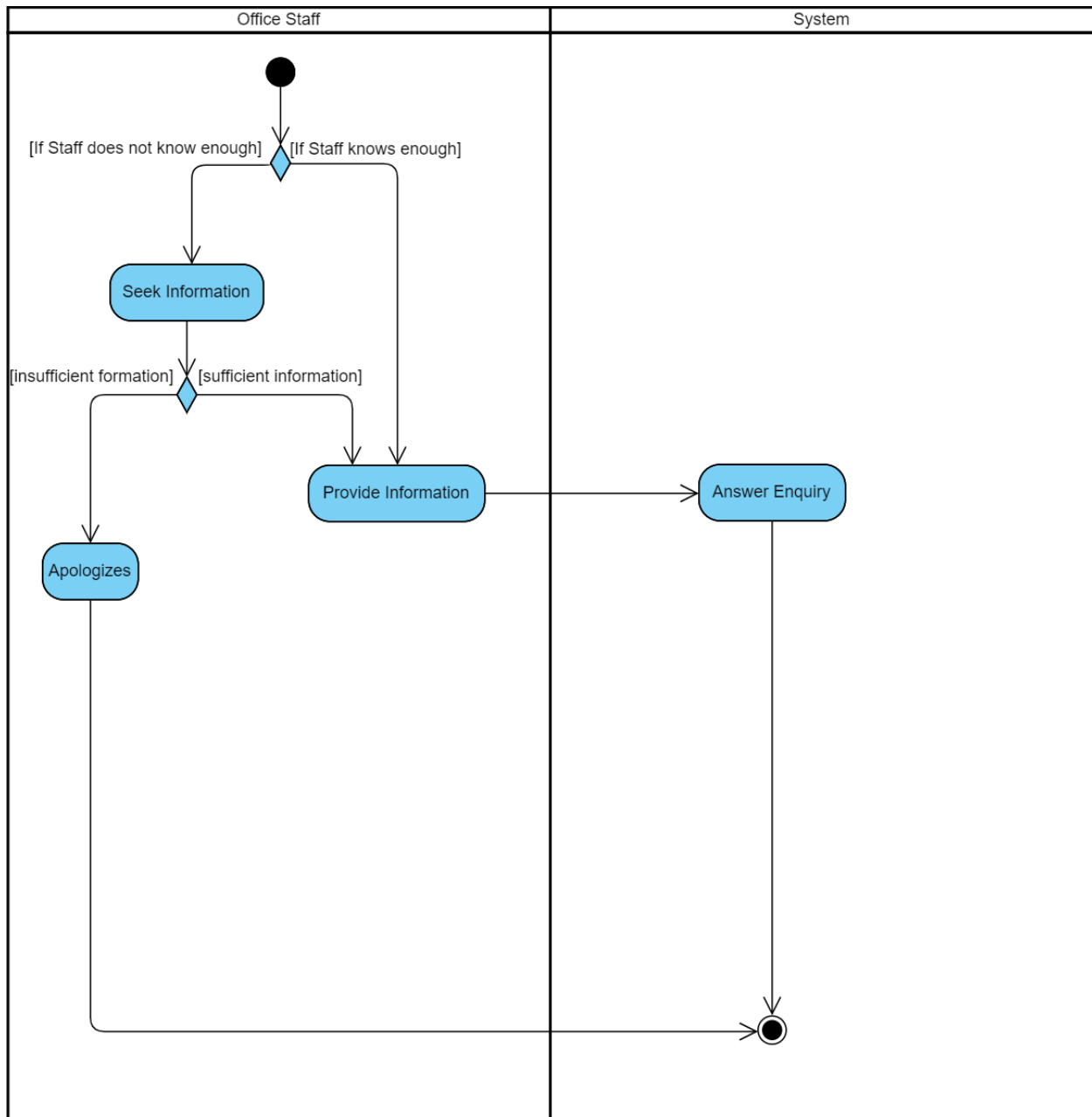
<b>Use Case Name</b>	Schedule maintenance	
<b>Brief Description</b>	The Manager organizes the servicing of leased equipment with customers	
<b>Actors</b>	Manager	
<b>Related Use Cases</b>	Discuss Lease	
<b>Entry Condition</b>	Equipment is on loan term	
<b>Exit Condition</b>	Maintenance time has been scheduled or not	
<b>Flow of Events</b>	Actors	System
	1. Manager discusses schedule of maintenance.  2. Client brings equipment to warehouse	1.1 Manager informs customer that equipment they are loaning is in need of a service 1.2 Client and Manager organise a date to get the equipment maintained 2.1 Equipment is serviced and sent back to the client
<b>Exception condition</b>	1.1 If the client and Manager cannot come up with a date to get equipment serviced <ul style="list-style-type: none"> <li>a. The Manager will schedule a date which is suitable to both parties</li> <li>b. An alternate date is a set</li> </ul>	

<b>Use Case Name</b>	Seek Duties	
<b>Brief Description</b>	Maintenance Staff contact the Office Staff to know what jobs are waiting and which equipment are required to be ready.	
<b>Actors</b>	Maintenance Staff, Office staff	
<b>Related Use Cases</b>	<<include>> Contact Office	
<b>Entry Condition</b>	Staff call/contact office	
<b>Exit Condition</b>	Staff are given required information	
<b>Flow of Events</b>	<b>Actors</b>	<b>System</b>
	1. Maintenance Staff contacts Office Staff 2. Both parties communicate	1.1 Contact is done by calling or visiting Office 2.1 Maintenance Staff ask the Office Staff is there are any jobs waiting and when they need to be serviced by 2.2 Office Staff provide tasks for that require completion 2.3 Maintenance Staff return to the warehouse
<b>Exception condition</b>	2.1 If phone call is not answered <ul style="list-style-type: none"> <li>a. Maintenance staff visits Office and asks for jobs in person</li> </ul> 2.2 If there are no jobs to do <ul style="list-style-type: none"> <li>a. Office Staff inform the Maintenance Staff that there is no jobs that require completion</li> <li>b. Maintenance Staff return to the warehouse/end the call</li> </ul>	

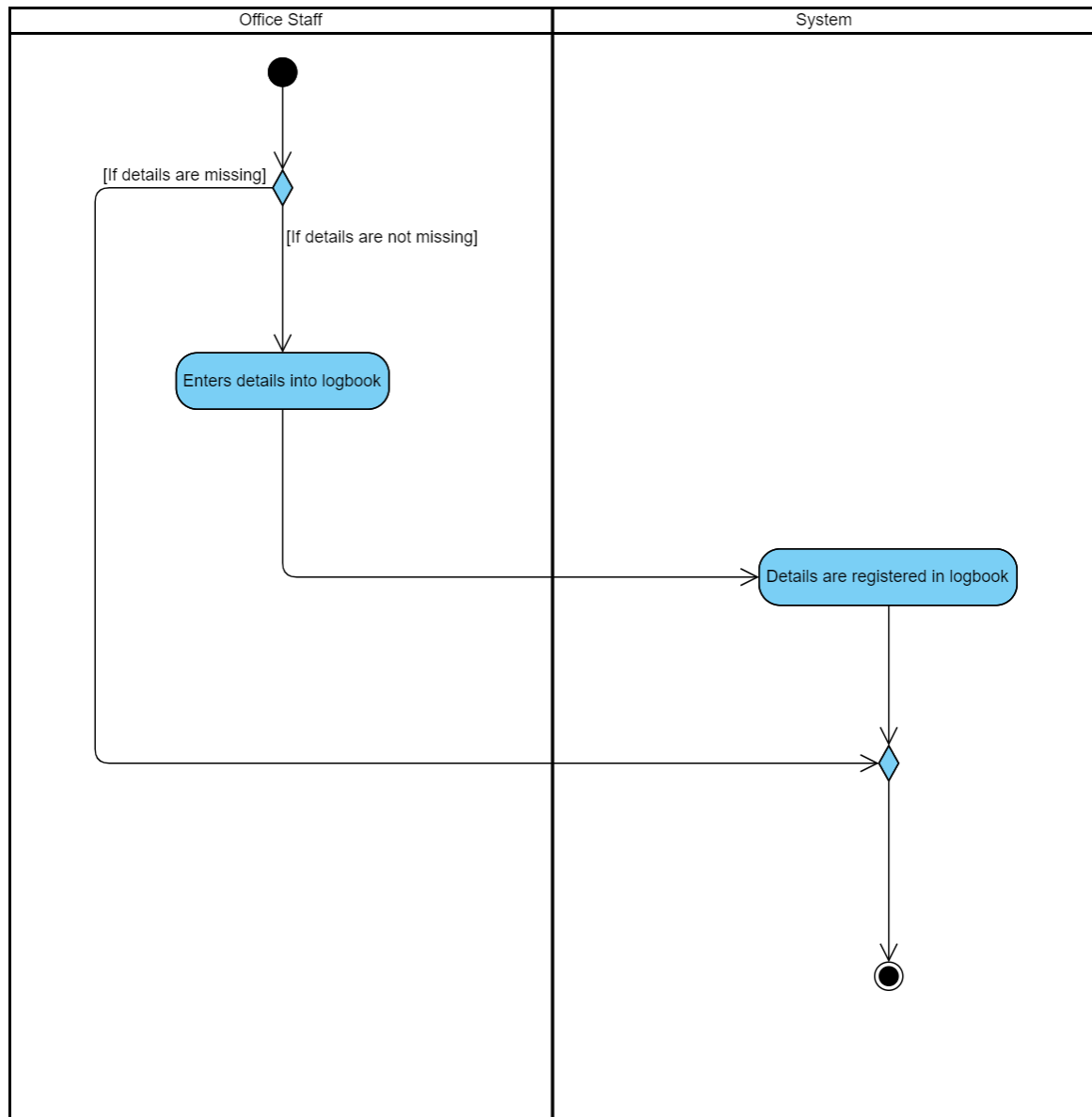
## Receive Call and Provide Information



## Provide Information

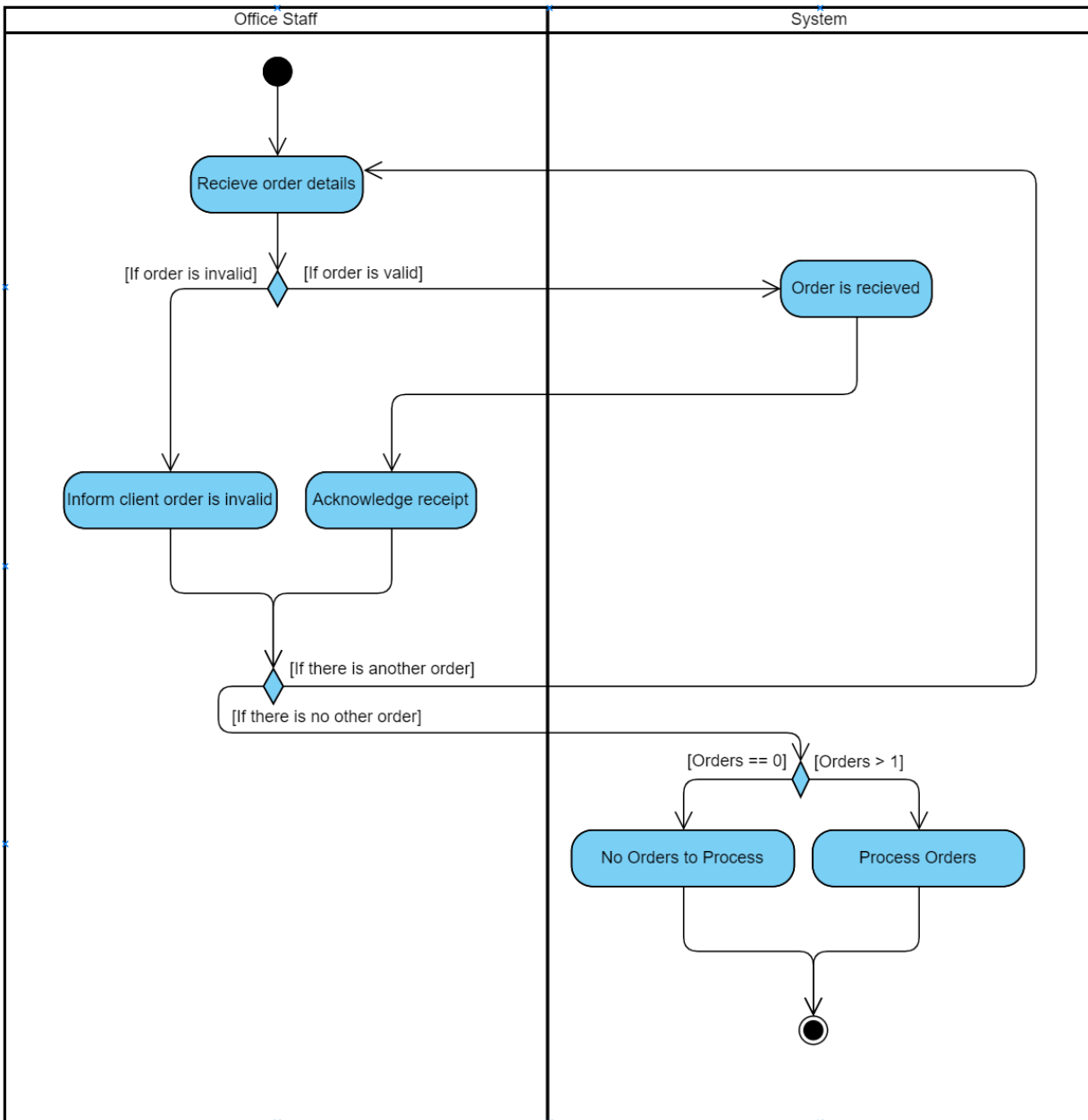


## Edit Logbook

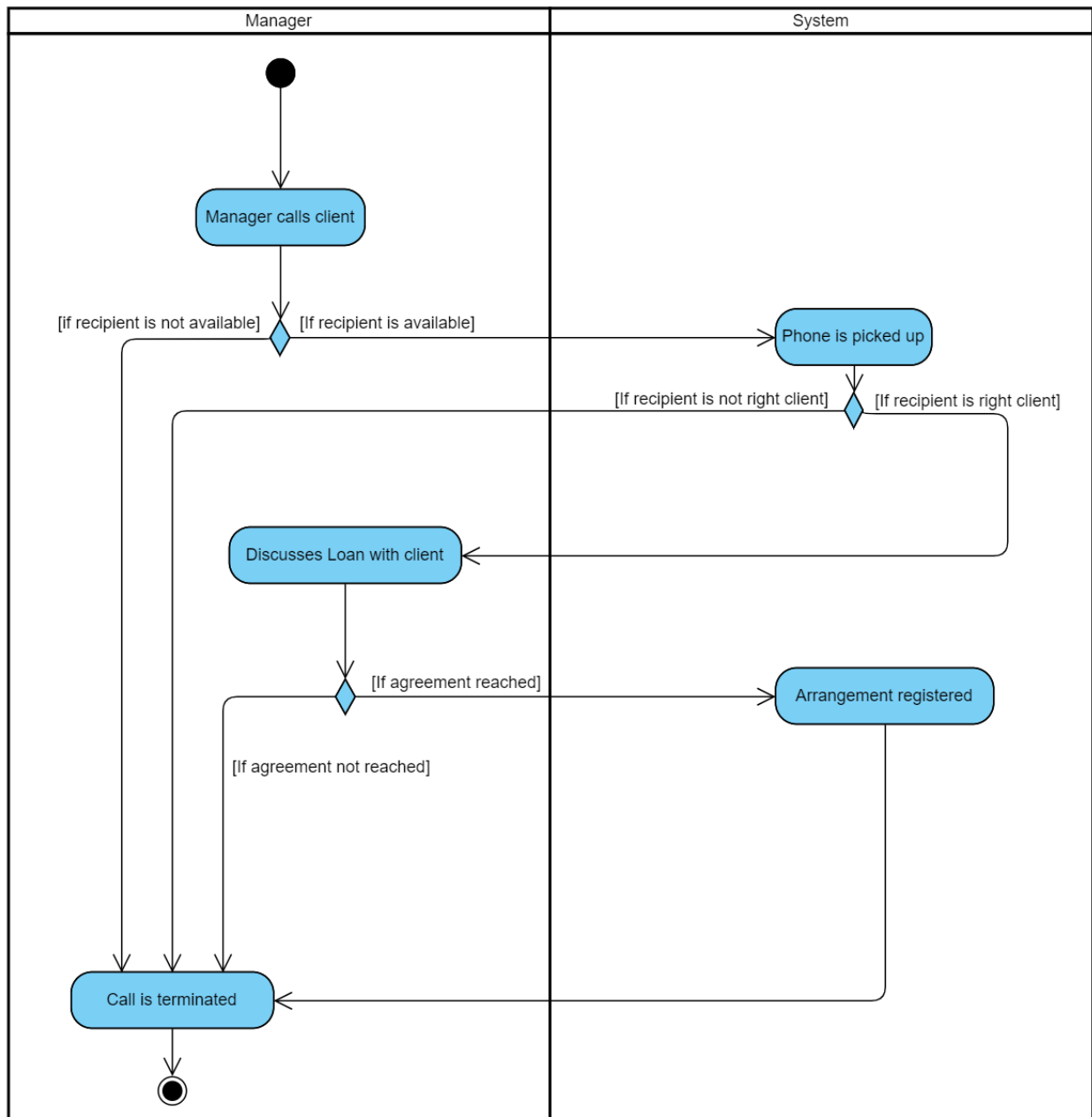


//same Activity Diagram for Maintenance Staff -> Edit Logbook

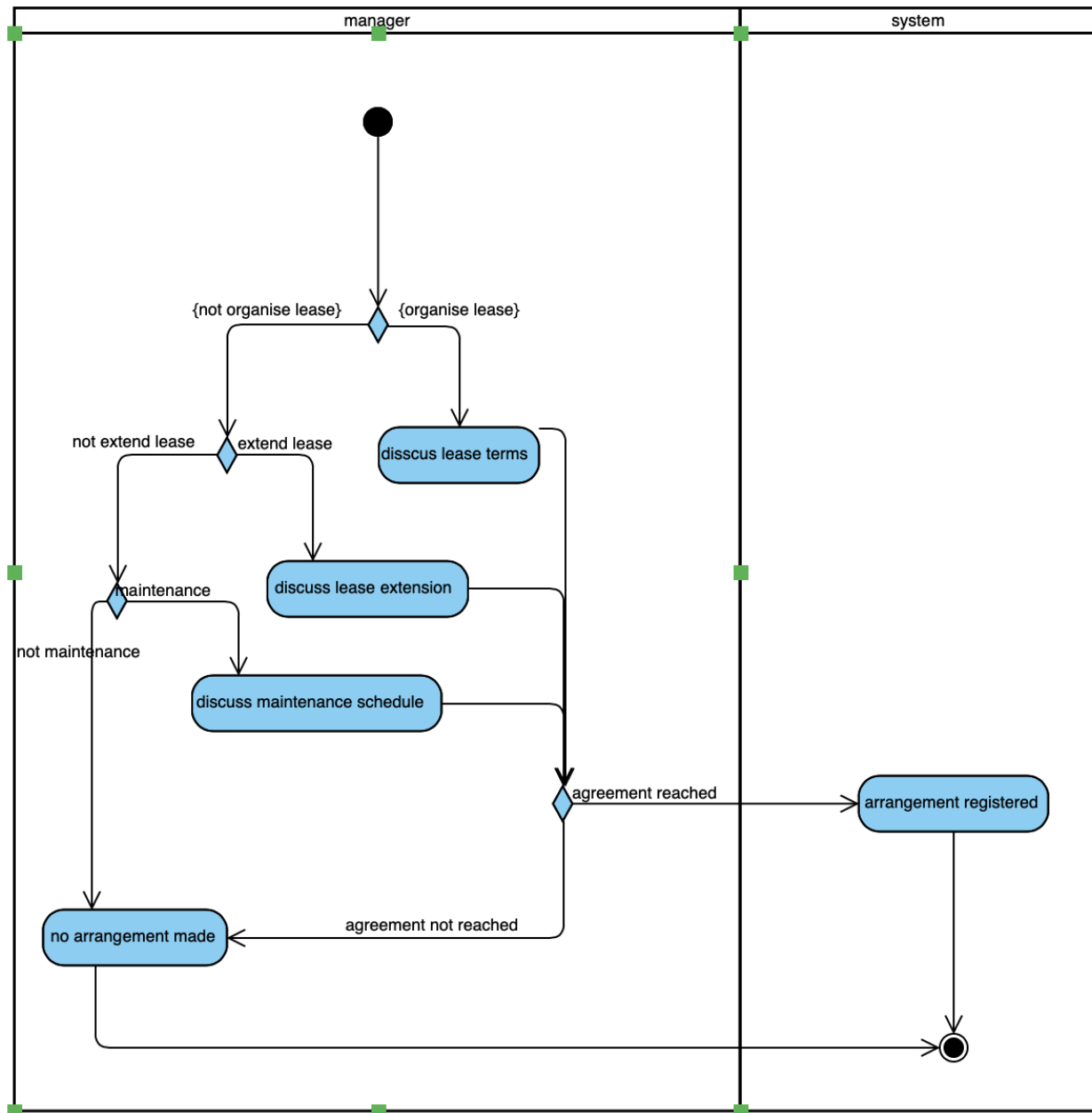
## Receive Orders



## Call Client & Discuss Lease

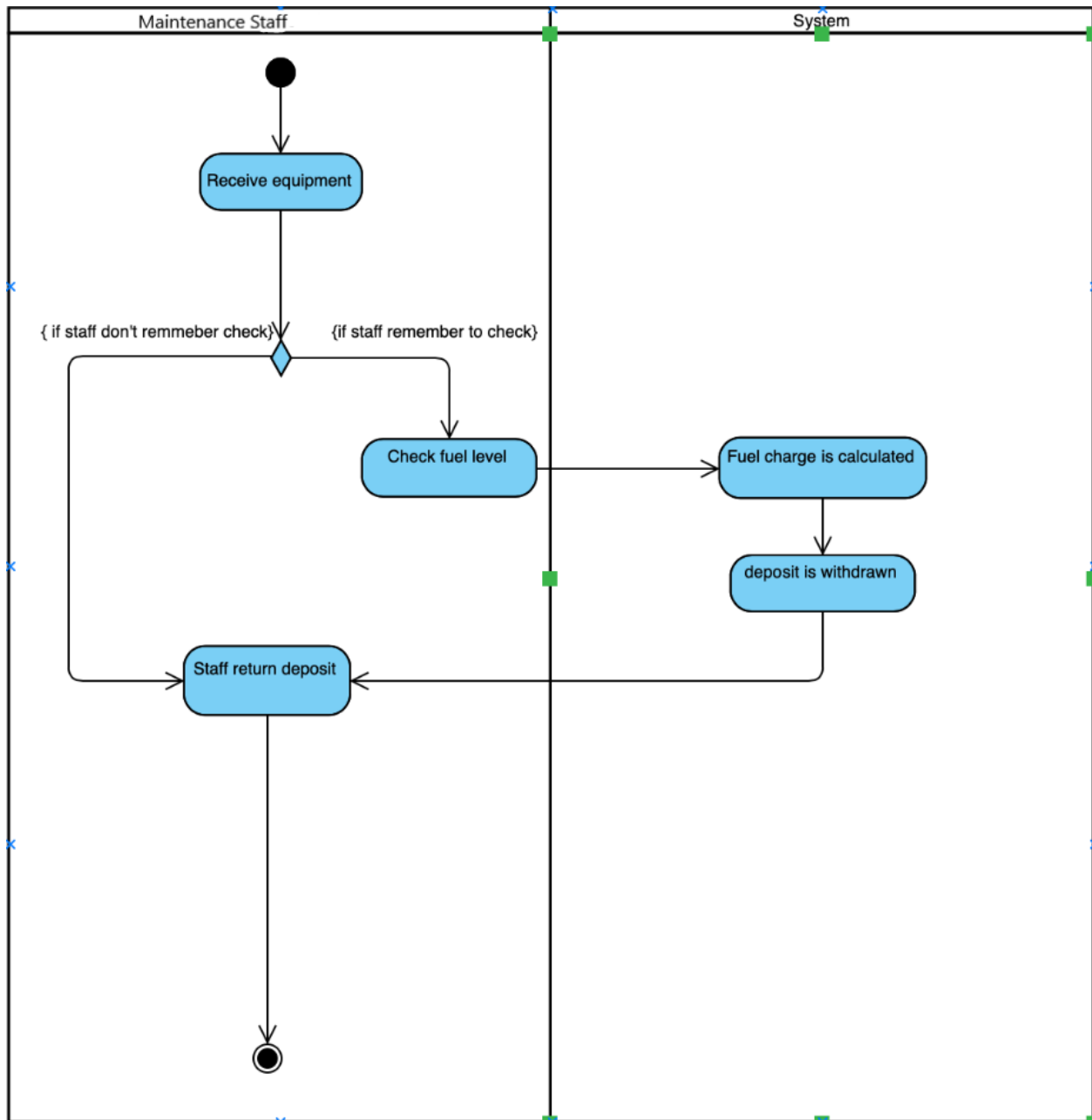


## Discuss Lease (Organize Lease, Extend Lease, Schedule maintenance)

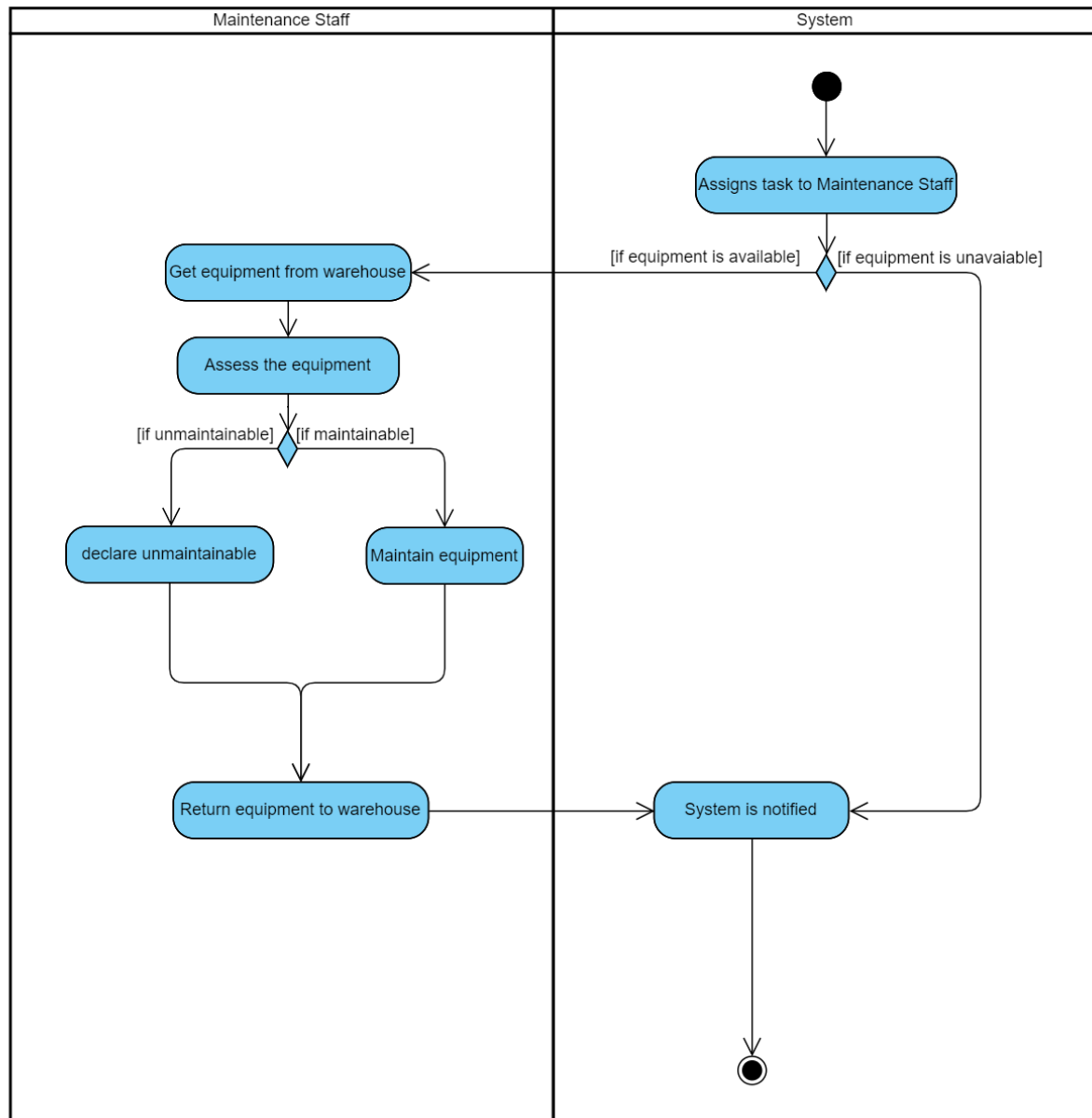




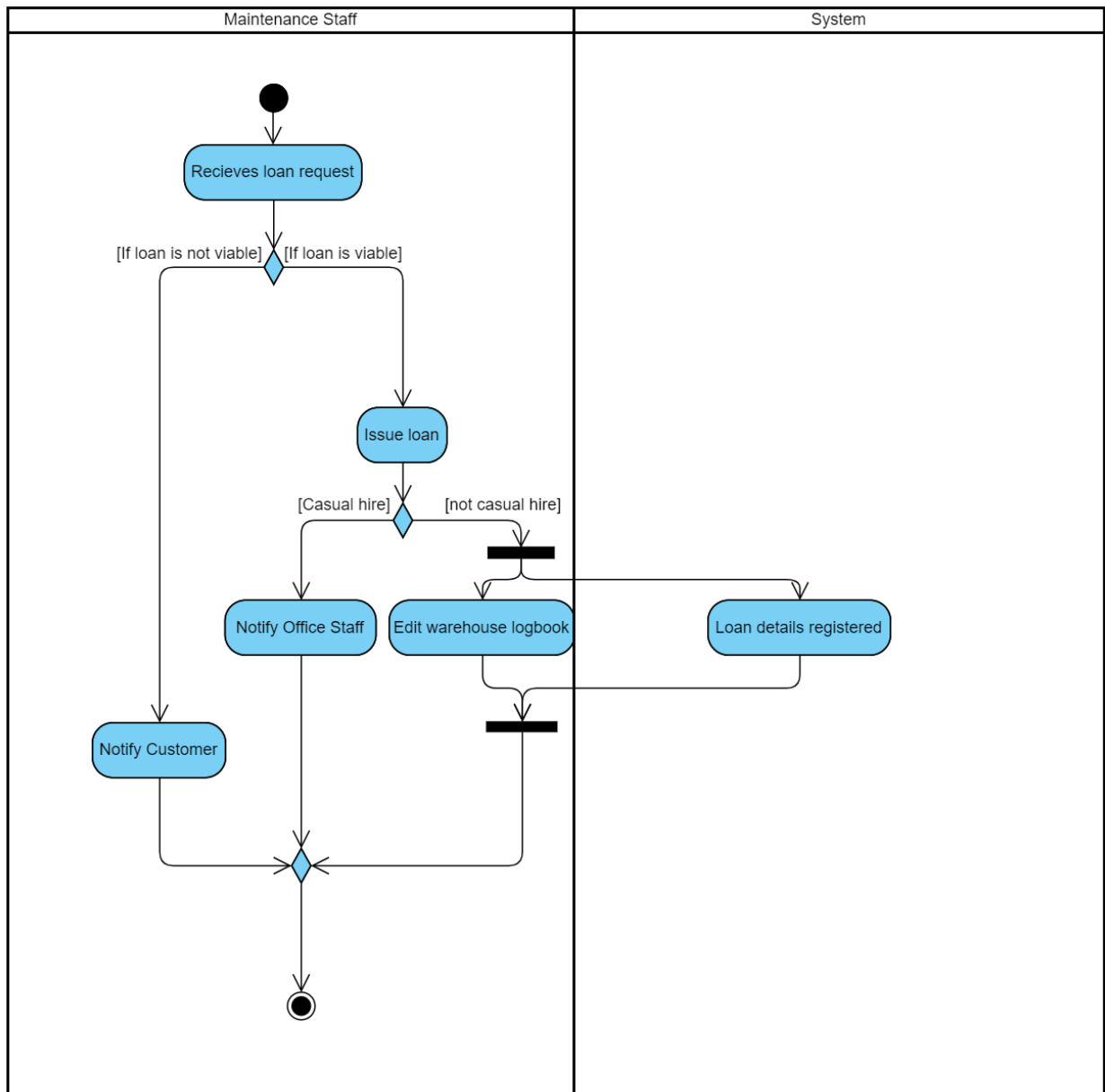
## Receive Returns



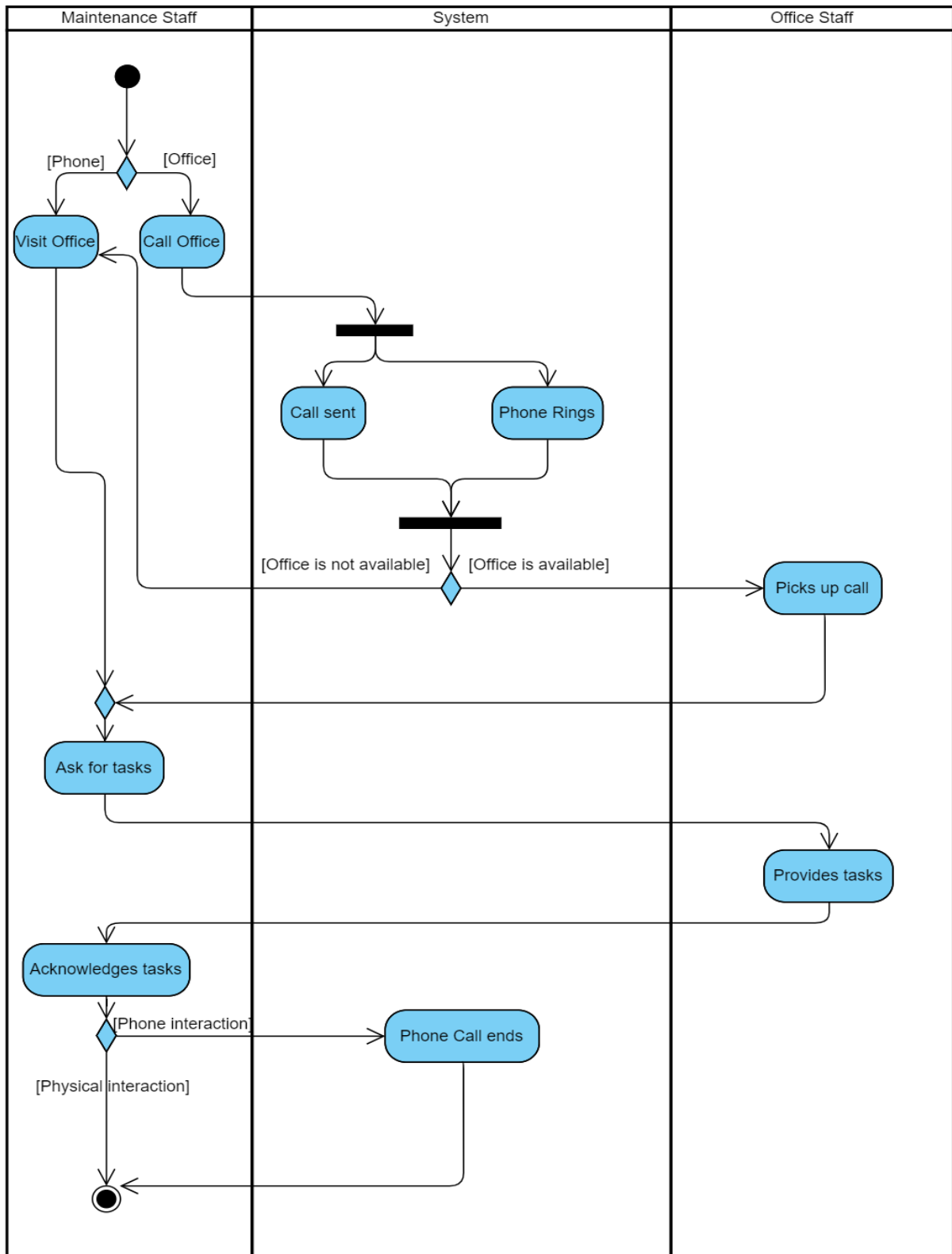
## Maintain Equipment

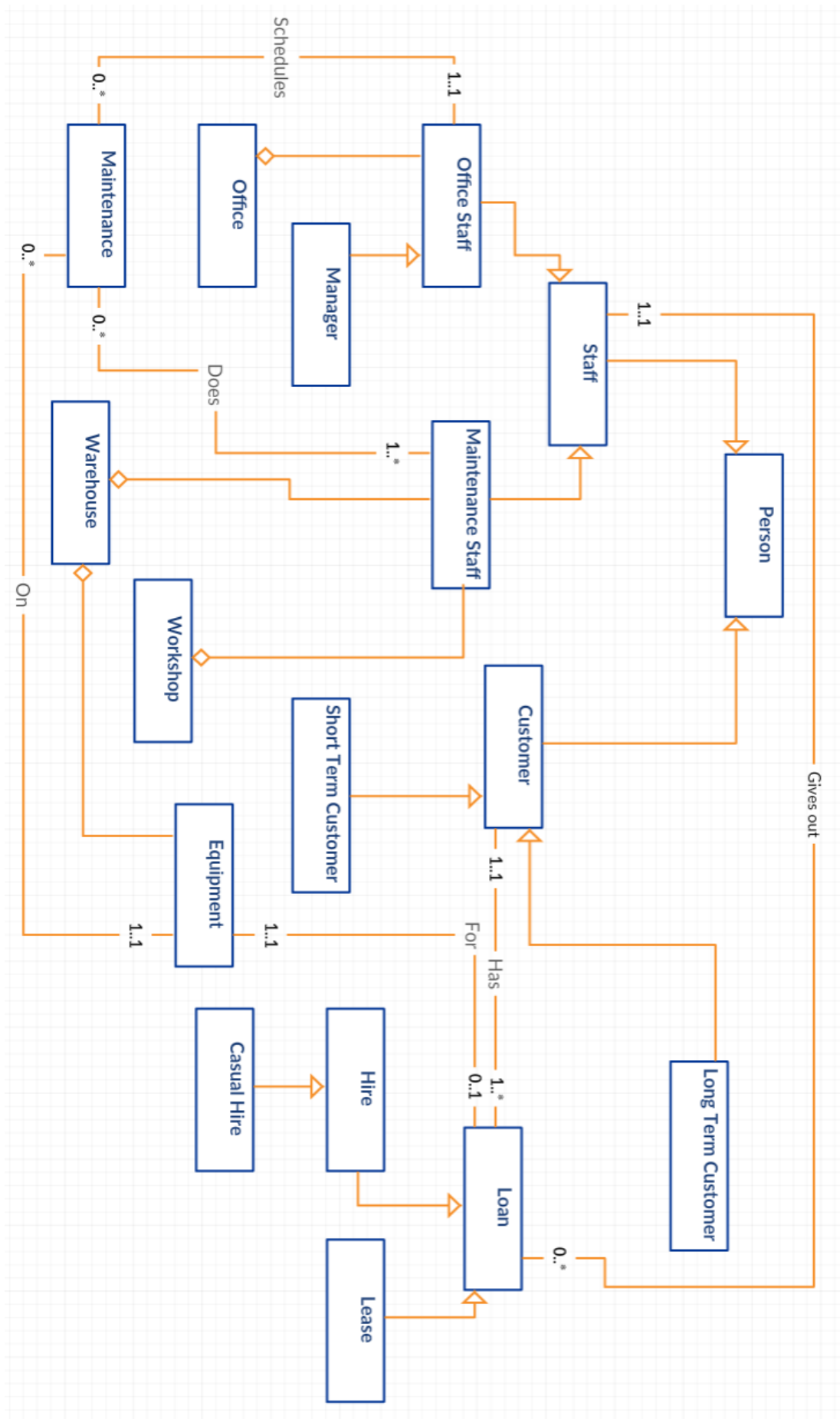


## Loan Equipment



## Seek Duties





# SENG2130 Systems Analysis and Design

## Minutes of meeting

Group: AAFG

Place: EF Building

Date/Time: Wednesday 11am-2pm

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### In attendance

Ayden Khairis

Ahmed Abdelsalam

Faraz Zarnihki

Gavin Austin

### Apologies

None

### Agenda

- Matters arising from previous meeting
  - First meeting
- Agenda items (as needed)
  - Where to begin our assignment
  - Discuss and document use cases and requirements
- Date, time and place for next meeting
  - 4<sup>th</sup> April, 9am, EF Building
- Matters for consideration at next meeting
  - Continuation of use case discussion and second draft

### Action sheet

Task	Responsible	Due	Notes
Question 1	Everyone	4 <sup>th</sup> April	

# SENG2130 Systems Analysis and Design

## Minutes of meeting

Group: AAFG

Place: EF Building

Date/Time: Thursday 9am-1pm

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### In attendance

Ayden Khairis

Ahmed Abseladam

Faraz Zarnihki

Gavin Austin

### Apologies

None

### Agenda

- Matters arising from previous meeting
  - Continuation of use case discussion and second draft
- Agenda items (as needed)
  - Discuss and document use cases and requirements
  - Create use cases for Question 1
  - Start Question 2
- Date, time and place for next meeting
  - 5<sup>th</sup> April, 8am, Online Meeting
- Matters for consideration at next meeting
  - Question 2 completion
  - Start Question 3

### Action sheet

Task	Responsible	Due	Notes
Completing Question 1	Everyone	By the end of the meeting	Question 1 was completed
Start Question 2	Ayden and Gavin	By the end of next meeting	





# SENG2130 Systems Analysis and Design

## Minutes of meeting

Group: AAFG

Place: Online

Date/Time: Friday 8am-12pm

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### In attendance

Ayden Khairis

Ahmed Abseladam

Faraz Zarnihki

Gavin Austin

### Apologies

None

### Agenda

- Matters arising from previous meeting
  - Question 2 completion
  - Start Question 3
- Agenda items (as needed)
  - Examine Question 2 answers together
  - Start Question 3
- Date, time and place for next meeting
  - 8<sup>th</sup> April, 11am, EF Building
- Matters for consideration at next meeting
  - Question 3 completion

### Action sheet

Task	Responsible	Due	Notes
Finish Question 2	Ayden and Gavin	End of this meeting	
Start and Finish Question 3	Faraz and Ahmed	End of next meeting	

# SENG2130 Systems Analysis and Design

## Minutes of meeting

Group: AAFG

Place: EF Building

Date/Time: 1-2pm

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### In attendance

Ayden Khairis

Ahmed Abseladam

Faraz Zarnihki

Gavin Austin

### Apologies

None

### Agenda

- Matters arising from previous meeting
  - Question 3 completion
- Agenda items (as needed)
  - Examine Question 3 answers together
- Date, time and place for next meeting
  - 10<sup>th</sup> April, 11am, EF Building
- Matters for consideration at next meeting
  - Complete Question 4 and hand in assignment

### Action sheet

Task	Responsible	Due	Notes
Finish and edit Question 3	Faraz and Ahmed	End of this meeting	

# SENG2130 Systems Analysis and Design

## Minutes of meeting

Group: AAFG

Place: EF Building

Date/Time: 11-2pm

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### In attendance

Ayden Khairis

Ahmed Abseladam

Faraz Zarnihki

Gavin Austin

### Apologies

None

### Agenda

- Matters arising from previous meeting
  - None
- Agenda items (as needed)
  - Complete Question 4 and hand in assignment
- Date, time and place for next meeting
  - ---
- Matters for consideration at next meeting
  - ---

### Action sheet

Task	Responsible	Due	Notes
Finish Question 4	Everyone	End of this meeting	
Format Submission	Gavin	10 <sup>th</sup> April	
Submit Assignment	Faraz	11 <sup>th</sup> April	