Week 1 Seminar & Pre-class activities

Q1. What is an Information System?

Question A *Submitted Mar 4th 2022 at 3:32:38 pm*

An information system is an integrated set of components (people, procedures, hardware, software, databases/data warehouses, telecommunications) to collect, store and process data to deliver information to system users.

For the Allocate+ information system, discuss the following:

- Who are the people (users) of the system? What do they want from the system? What data do they provide to the system?
- How is the data collected for the system?
- How is the data stored?
- How is the data processed?
- How are the outputs delivered to the relevant users?

An integrated set of components for collecting, storing, and processing data and for delivering information , every organization relies on information systems to carry out and manage their operations, interact with their customers and suppliers, and compete in the marketplace. Main components information system are - people, procedures, hardware and software, databases, data warehouses, telecommunications .

Students and teachers use this system. Students use the system to register for the subject they want, providing information and data to the system, and teachers use the system to check the number of students in the course. This data is then sent to the financial system to let schools know how much students will be charged for their courses.

Q2. Assessing an Information System

Question A *Submitted Mar 4th 2022 at 4:41:48 pm*

Assess the tutorial allocation system - Allocate+ based on the characteristics used to typically assess an information system.

According to the standard, there are 8 ways to access the tutorial allocation system:

1. Accuracy and reliability: The tutorial allocation system comes from the Allocate+ system, which is independently developed and authorized by the school, with high reliability and high accuracy

2. Accessibility: In Australia, this system has the fastest response speed, but overseas, such as China, its access speed will be relatively slow, and sometimes it is necessary to use a school VPN to help users access it, so accessibility is effective.

3. Ease of use: The tutorial distribution system has clear layout and instructions to help users understand quickly and is very practical.

4. Flexibility: Teachers can view the information of each student in their tutoring class in the system, and only the teacher can view the specific information of the students, while other students cannot see the information of other students. This flexibility is very important for students. privacy is very useful.

5. Security: As a university system, it contains the information of all teachers and students in the whole university, so security should be maintained by multiple it teams.

6. Usefulness: Users need the information of the system to know what time they have tutoring lessons. Without this information, the student will not know what courses he has signed up for, and the teacher does not know how to arrange the students' courses reasonably, so the system's Very useful.

7. Timeline: Since the assignment results will be displayed on the system as soon as the webpage is refreshed, teachers and students can change or adjust their time in time. So its timeline is very timely.

8. Completeness: The information of all courses will be listed, such as time, subject, link, location, number of people, almost all the conditions that need to be considered, so this is a very complete system.

Q3. Systems Development Lifecycle Phases (4 parts)

Question A *Submitted Mar 4th 2022 at 3:57:07 pm*

List the phases of the Systems Development Lifecycle (SDLC) .

Phases of SDLC:

1. Initiation

2. Analysis

3. Design

4. Implementation

5. Support

Question B *Submitted Mar 4th 2022 at 4:09:52 pm*

You are developing a system in a very short timeframe and have decided to go straight into detailed analysis of the client's requirements. What are the consequences of not completing the Initiation phase?

Because the start-up phase of the SDLC is very important to ensure that the system is properly planned and developed. If the start-up phase is skipped, the priority of user project requests will be very confusing, and it is likely that many unimportant projects will be prioritized, resulting in failure to complete important projects within the specified time. Secondly, the feasibility of some projects cannot be determined. If the project is halfway through and it is found that the technology and funds cannot complete the project, it will lose a lot of resources. So make a project plan at the very beginning.

Question C *Submitted Mar 4th 2022 at 4:45:26 pm*

What is the difference between Analysis & Design?

The purpose of the analysis phase is to identify detailed user requirements and create a preliminary system model to confirm the requirements and design, requiring perform a build-and-buy analysis.

In the design phase, the technical architecture needs to be defined, the production technical specifications are considered, and the database is created.

System analysis deals with the client issues and modification that has to be done in the project whereas system design deals with the requirement of the client and need of the customer.

Question D *Submitted Mar 4th 2022 at 4:51:42 pm*

Why do you have to start maintaining a system, as soon as it is deployed?

Because the newly released product is not the final system, technical support is required to conduct post-implementation checks, find errors and improve, and monitor system performance. The system needs to be adjusted based on user feedback, so maintenance of the system must begin immediately after deployment.

Week 2 Seminar & Pre-class activities

Q1. Agile Manifesto Values

Question A *Submitted Mar 12th 2022 at 12:25:19 pm*

Briefly describe each of the 4 manifesto values:

- Individuals and Interactions over process and tools
- Working software over comprehensive documentation
- Customer collaborations over contract negotiations
- Responding to change over following a plan

1. The value of individuals and interactions over processes and tools is basically a statement. This should be determined in conjunction with the state of our work environment, and we use processes and tools where appropriate. But usually focusing on the individual and their interactions is the way to work and solve problems.

2. First, the documentation isn't completely useless. Documentation may not be very useful in certain situations. So when faced with a choice between two, Working software over comprehensive documentation.

3. This value stresses the importance of encouraging your customers and development team to collaborate to chart the best way forward together, rather than to view each other as adversaries.

4. Respond to change instead of following a plan In traditional development, change seems to be about avoiding increased costs, however, in agile, change always improves the project, making it better and more valuable. At the same time changes provide direction for improvement.

Q2. Agile Principles

Question A *Submitted Mar 12th 2022 at 1:54:44 pm*

You will be required to consider each of your FIT2001 assignments as an Agile project, and apply agile principles in your day to day work on the assignments. The following are examples of how a student would apply 2 of these principles in this context:

- **Satisfy the customer -** For the assignments, our team will need to *satisfy the FIT2001 teaching team.* We will need to ensure that we understand the teaching team's requirements using the resources they provide such as the assignment specification and assignment information video, and if we are unsure of what is required we will meet with our tutor during consultation to sort out any issues.
- **Deliver working software frequently -** We will *complete different parts of our assignment according to a plan* (because it is an assignment, even though we complete different parts we will not submit/deliver it until the submission date) rather than rushing to complete it all at the end. This will give us the opportunity to discuss any issues that come up with the tutor, and refine what is required, which is not possible if we do it all at the last minute.

Select any 5 of the 10 remaining Agile principles (not the above 2 :) and describe how you would apply these principles when completing your assignments with your team.

1. Welcoming changing requirements：

When we are carrying out the task, we cannot solve the task perfectly at one time, and no one can predict what will happen in the future. So the plan created before a product is created cannot fully cope with changes at any time so agile principles support observing changing markets, customer needs and competitive threats and changing direction if necessary.

2. Collaborate Daily：

Business people and developers must work together daily throughout the project. Communication is a critical component to the success of any project or team, so communication is the most essential part of the day. A successful product requires regular communication between business people and developers, which helps improve alignment across the organization.

3. Motivated Individuals:

Find individuals who are open to caring about their work (i.e. potentially motivated). Engage

them to become motivated about building something valuable. Let them make delivery commitments they believe they can achieve. Support them and get out of their way.

4. Face-to-face Conversation：

Face-to-face conversations are the most effective way to exchange information with each other within a development team. Therefore, when conditions permit, face-to-face meetings are held every day to sort out and demonstrate projects and tasks.

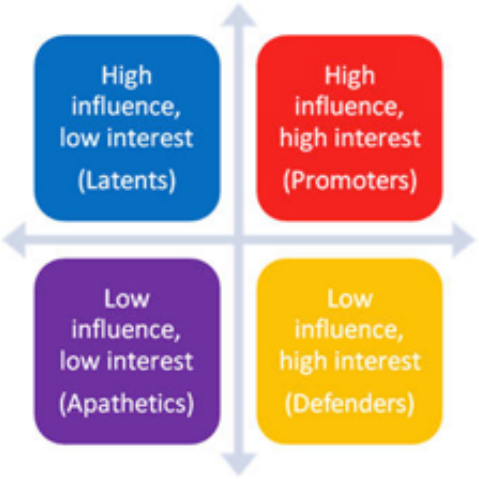
5.

Q4. Stakeholder Management (4 parts)

The Timetabling Department has requested revisions to the Allocate+ system, and Monash eSolutions has approved this request. A new Operations Manager has been allocated to manage the delivery of this project with his Agile Team, and the Timetabling Department Manager will decide whether the revised system meets their needs and is successful. The Operations Manager is very keen on the project being a success, as it will affect his continuing employment. He will report to the Chief Operating Officer who is ultimately responsible for many, many projects of which this is just one. Both the student and staff unions are keen to find out about the changes and the impact it will have on students and staff.

Using the description above, determine who the stakeholders of the system are, and then answer the 4 questions:

NOTE: You may not have stakeholders in each quadrant of the grid below.



Question A *Submitted Mar 12th 2022 at 1:18:26 pm*

Who would you place in the 'High influence, low interest' quadrant? Why?

Timetabling Department Manager, because it was up to him to decide whether the system met the requirements and was successful, so it had a high influence.

Question B *Submitted Mar 12th 2022 at 1:18:27 pm*

Who would you place in the 'High influence, high interest' quadrant? Why?

The Operations Manager, because he is very keen on the project being a success, as it will affect his continuing employment.

Question C *Submitted Mar 12th 2022 at 1:18:28 pm*

Who would you place in the 'Low influence, low interest' quadrant? Why?

The Chief Operating Officer, because they get a lot of projects, it's not a critical project and it doesn't attract all of their attention.

Question D *Submitted Mar 12th 2022 at 1:18:28 pm*

Who would you place in the 'Low influence, high interest' quadrant? Why?

The Student Union and staff, because both the student and staff unions are keen to find out about the changes and the impact it will have on students and staff.

Week 3 Seminar & Pre-class activities

Q1. Investigating requirements (2 parts)

Question A *Submitted Mar 19th 2022 at 11:46:37 am*

As a user of the Allocate+ system, identify one business opportunity which would improve the system.

(not more than a couple of sentences to describe the opportunity)

Make the allocate+ system into a software, which is an internal software that can only be downloaded from the school network, and can only be logged in with the student account. After opening the login, allocate+ will run by default in the background of the system, and students and teachers will be prompted whenever there is a course schedule in the timetable.

Question B *Submitted Mar 19th 2022 at 11:49:31 am*

Identify 2 functional requirements, and 2 non-functional requirements of the Allocate+ system as you know it.

(list the requirements in point form - not more that a sentence per requirement)

functional requirements:

1. log-in system

2. Assign courses

non-functional requirements:

1. The system can support a large number of users at the same time

2. Simple user page

Q2. Interviews

Question A *Submitted Mar 19th 2022 at 1:19:07 pm*

You are going to conduct an interview with Andrew from Bayside Bikes - the Product Owner on your Agile Team.

Briefly describe *(in point form)* the key things you need to to do to prepare for this interview to ensure its success.

1. Make sure face-to-face conversations are one-on-one.

2. Mutually determine the time and location of the interview to ensure that the interview goes smoothly.

3. Determine the topic of the interview question and set an informational goal.

4. Varied requirements are welcome, and multiple proposals are accepted.

5. Get to know the team ahead of time and ask important key questions.

6. Reasonable arrangement of time, simple and clear question and answer discussion.

7. Record conversation files and share them.

Q4. Other Data Gathering Techniques (3 parts)

You are a developer on a project team improving some aspects of the Allocate+ system. For each of the following 3 questions, identify the best data gathering technique(s) to get the information specified, and provide 2 reasons *(in point form)* for your choice.

Question A *Submitted Mar 19th 2022 at 12:10:56 pm*

The development team want to get a sense of how bad current students think the current version of the waiting list functionality is. For example do they absolutely hate it, or are they just mildly irritated by it.

Questionnaire：

Because questionnaires can collect feedback from a large number of students in a short period of time for analogy, statistics and analysis.

The bar chart formed after the statistics is completed can simply and clearly tell the team the proportion of people who dislike or dislike it very much.

Question B *Submitted Mar 19th 2022 at 12:14:31 pm*

The team have been told that concerns have been expressed about the usability of the system's interfaces, and would like to understand what some of these issues are.

Interview：

Because someone asks a question, interviewing the people who asked the question can be more effective in identifying problems.

During the interview, they can present the questions more intuitively, and can quickly determine the direction of improvement

Question C *Submitted Mar 19th 2022 at 12:11:02 pm*

The team have been told to improve the reporting functionality of the system.

Research vendor/competitor

Many problems have been solved by other companies - have a look around for good ideas.

And cheaper and less risky.

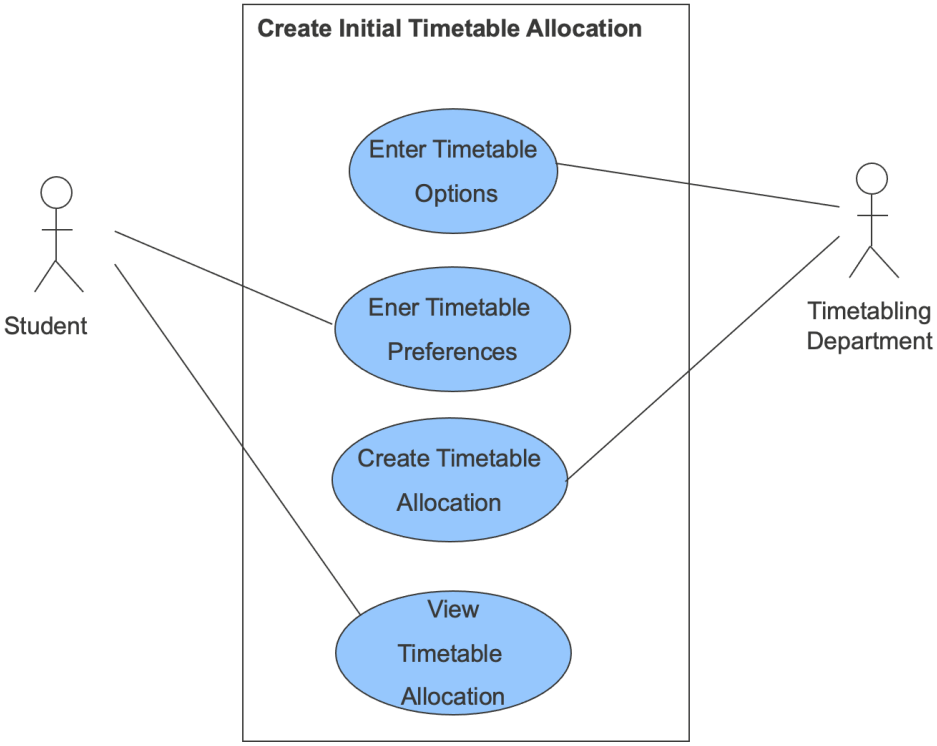
Week 4 Seminar & Pre-class activities

Q1. Modelling

Question A *Submitted Mar 26th 2022 at 1:27:53 am*

Provide 3 reasons as to why Developers use models such as the Use Case Diagram below, rather than narrative descriptions, in the requirements gathering process.

(list the 3 reasons in point form - not more that a sentence per requirement)



Value: 20%

1. Reducing complexity of systems to be built by abstraction, briefly summarizing the complex system in a few abstract phrases allows the team to better understand the requirements.

2. Documenting all the details of requirements。

3. You can better communicate with other development teams through these summarized requirements models.

Q2. User Stories (3 parts)

Question A *Submitted Mar 26th 2022 at 1:42:12 am*

A new graduate has joined your development team, and are participating in their first story mapping workshop. Briefly describe *(in point form)* the advice you would give them about writing good user stories.

Value: 20%

1. A short and simple list of product features.

2. Plans need to be simplified, turning big plans into small ones.

3. Avoid prematurely determining the design details of your product.

4. The story must be simple and easy to understand, don't write too long and complicated stories.

Question B *Submitted Mar 26th 2022 at 1:55:20 am*

Write a complete user story, in the right format, describing one feature that a customer of Uber Eats would want from the Uber Eats system.

Value: 10%

As an Uber Eats customer, I want to order food from restaurants around me online so that I can eat food without cooking.

Question C *Submitted Mar 26th 2022 at 2:04:51 am*

Briefly discuss 3 possible issues *(in point form)* with this User Story.

Hint: Consider the format and the size of the user story

As a *prospective student*

I want to *enrol in a Monash course*

Value: 20%

1. so that I can learn a lot of professional knowledge

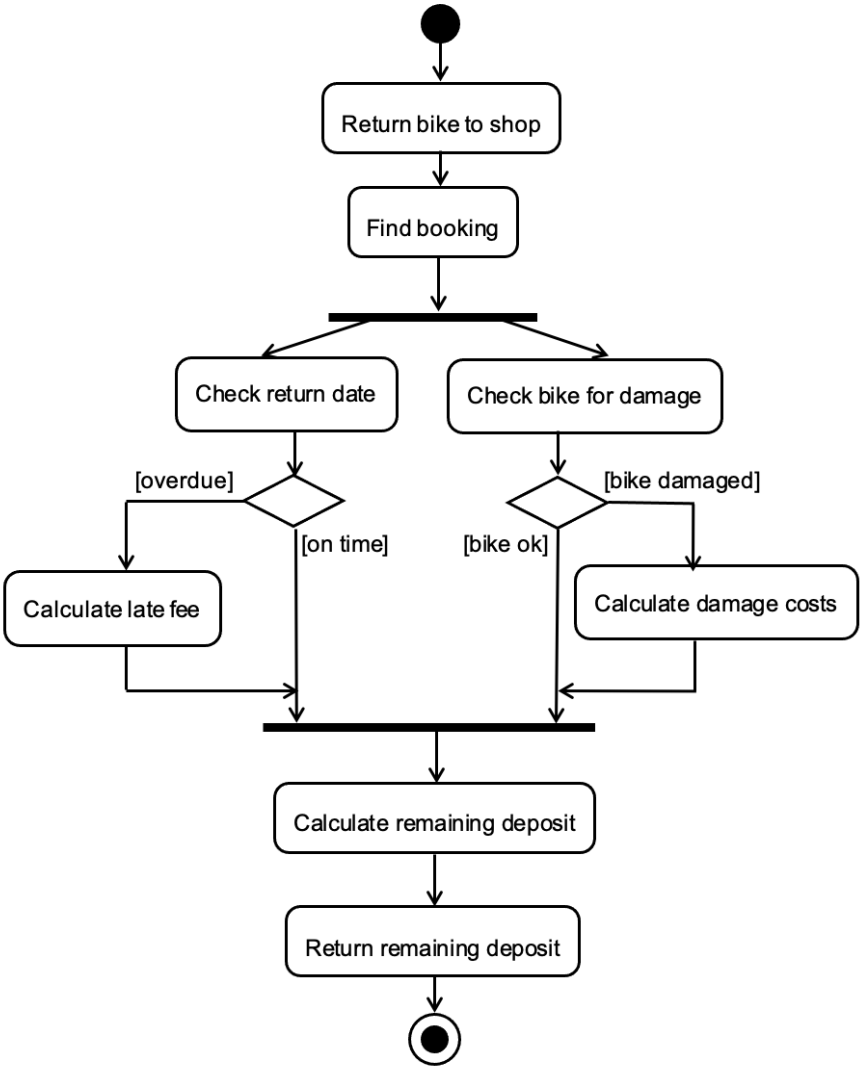
2. so that I can get a bachelor's degree

3. so that if i graduate i can get a better job

Q3. Activity Diagrams

Question A *Submitted Mar 26th 2022 at 2:25:30 am*

Describe the process (*in point form)* of 'returning a rented bike' documented in the following Activity diagram.



Value: 30%

1. Return bike to shop

2. Find booking

3. Actions carried out in parallel: Check return date ; Check bike for damage

4. Decision nodes: Check whether it is returned on time; Whether the returned bike is in good condition.

5. Overdue calculates the amount over the market, damage calculates the cost of loss. Returned on time with

no damage to the bike to proceed with settlement.

6. Calculate remaining deposit

7. Return remaining deposit

Week 5 Seminar & Pre-class activities

Q1. User Goal Technique

Question A *Submitted Apr 2nd 2022 at 11:04:06 am*

Using the User Goal technique identify 3 Use Cases for an Allocate+ Student user.

Value: 10%

User	User Goal and resultinh use case
Student	Check unit arrangement, select suitable time for class, and determine test time.
Allocate+ Manager/lecturer	Check personnel changes, edit course information, schedule course times and exams.
System staff	Add/update course management，maintain systems, design/update web pages

Q2. Event Decomposition

Question A *Submitted Apr 2nd 2022 at 11:34:24 am*

For the following system description:

- Identify the events that occur to which the system must respond
- For each of these events
    - identify what type of event it is
    - name a use case that describes what the system does when the event occurs

System description

A customer reviews a range of restaurants to decide where to place an order, and then places their order. Some restaurants show up as not accepting orders, because when a restaurant reaches their pre set max. no of orders to meet reasonable delivery times, the system changes their status to not accepting orders. At midnight each night each restaurant gets a tally of all their Uber Eats orders for the previous 24 hours.

Value: 20%

The events that system must respond:

1. External Events - Customer places order

2. State Events - When the restaurant reaches the maximum number of reservations, the system will show that the order is not accepted

3. Temporal Events - At midnight each day, orders for the past 24 hours will be sent to the restaurant.

Use case：

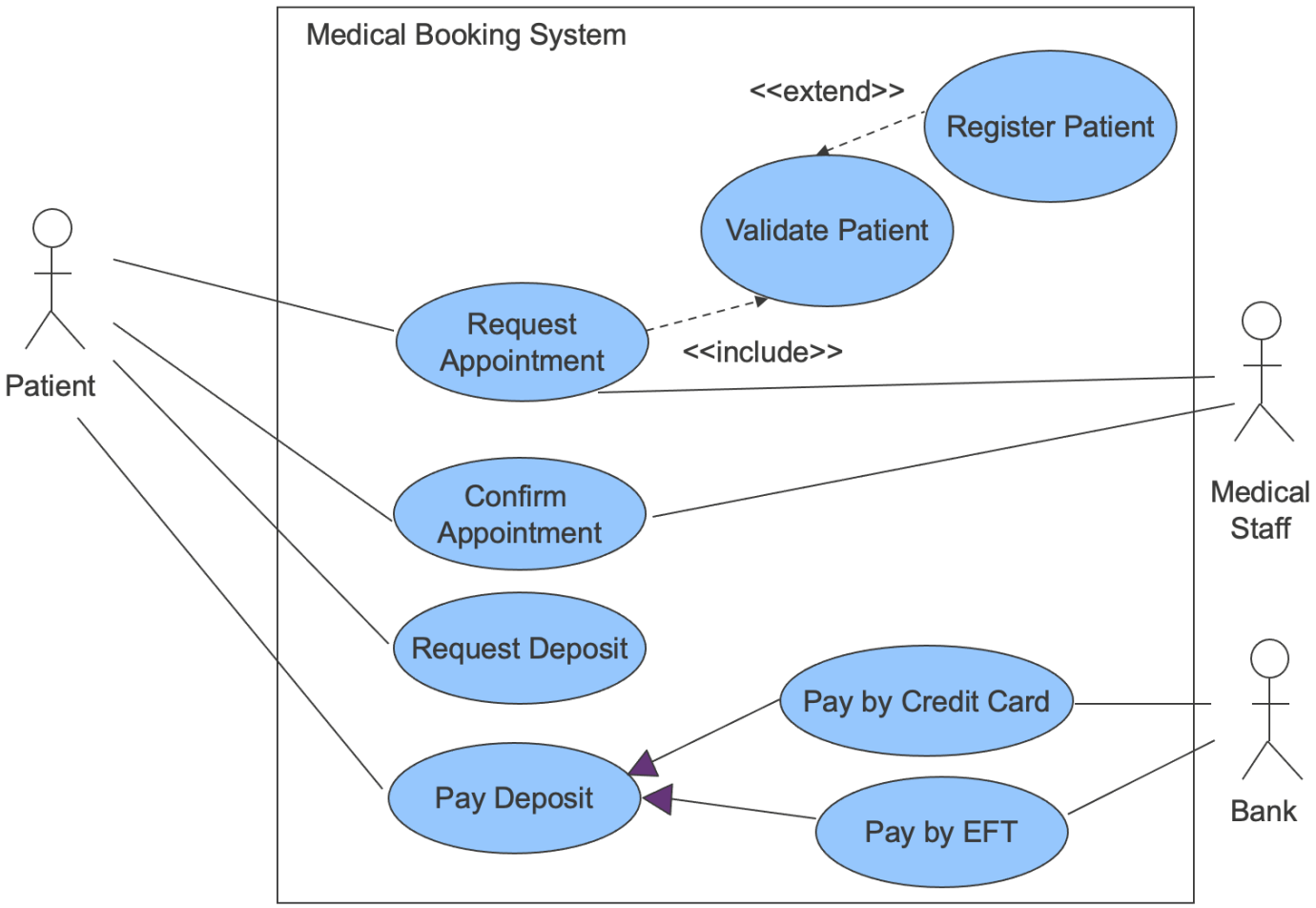
Customer thinks about the dinner，Customers open UberEats looking for a restaurant，Customer opens a Burger King menu to check out the dishes, Customer place order on UberEats for Burger King

Q3. Use Case Diagrams

Question A *Submitted Apr 2nd 2022 at 12:14:30 pm*

Describe the following Use Case Diagram in point form:

NOTE: *Your description should demonstrate your understanding of include, extend and generalisation*



Value: 50%

Medical Booking System:

1. Actors: primary actor: Patient;

   secondary actor: Medical Staff, Bank

2. Goal: Patients need to register with the medical reservation system and pay a deposit to book

a doctor's appointment.

3. The patient will request an appointment, and the validate patient contained in the request appointment will be called. If the verification is successful, the request appointment will be executed. If the verification is unsuccessful, his child register patient will be executed, and the patient needs to register to request an appointment.

4. If the patient successfully requests appointment, the medical staff will receive the request and ask the patient to confirm. After the patient confirms the appointment of medical staff, he will receive a request for a deposit.

5. The bank provides two ways to pay the deposit, pay by credit card or pay by EFT. The patient needs to pay the deposit in these two ways.

Q4. Verifying Data Entities

Question A *Submitted Apr 2nd 2022 at 12:21:55 pm*

In the Allocate+ system, provide use case examples that would allow you to verify the Subject Timetable data entity using the CRUD model.

NOTE: *For each element of C R U D provide one use case example*

Value 20%

Create: Create course unit timetable data

Read/report: View Timetable; produce Timetable history

Update: Update course timetable

Delete: Update student course information

Week 6 Seminar & Pre-class activities

Q1. Classes and Associations

System description

Each Uber Delivery Driver gets a report each night tallying all their deliveries for the previous 24 hours. They also get a summary of their Driver reviews e.g. 5 star - 3 reviews, 1 star - 4 reviews, etc.

Question A *Submitted Apr 10th 2022 at 1:16:00 pm*

Using the Uber Eats system description:

A. Identify the things (classes) and the class category of each thing (class) you have identified.

Class example from Allocate+ system: Student - Role

B. Describe the associations between the things (classes)

Association examples from Allocate+ system - Reminder: Associations occur in 2 directions:

- *A Student is enrolled in a Course*
- *A Course may be enrolled in by many Students*

Value: 30%

A. driver - role ; report - Transactions; driver reviews - events

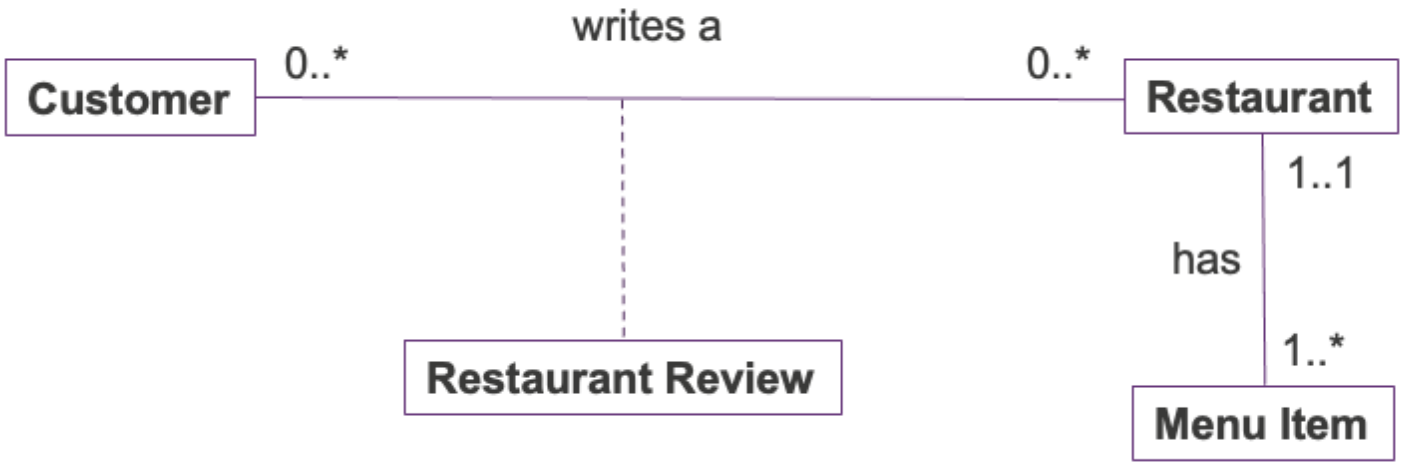
B. A Uber Delivery Driver get a report every night.

A Uber Dlivery Driver get a summary of their Driver reviews.

The Driver reviews are shown in the report.

Q2. Multiplicity, Association Classes, Attributes

The following depicts a partial domain model class diagram of the 'Review restaurant' functionality. Using the diagram below answer the questions.



Question A *Submitted Apr 10th 2022 at 1:44:23 pm*

Describe the multiplicity of each of the associations in the above diagram

Value: 20%

Customers may not have written any restaurant reviews, or they may have written many restaurant reviews.

A restaurant may not have been reviewed by customers, or it may have been reviewed by many customers.

A restaurant menu has at least one menu item and may have many menu items.

A menu item has one and only one restaurant to use.

Question B *Submitted Apr 10th 2022 at 1:52:12 pm*

List what you think may be the attributes for the 'Restaurant Review' class.

Value: 10%

Customer ID

Restaurant Name

Environment of a restaurant

Food tastes

Question C *Submitted Apr 10th 2022 at 2:09:22 pm*

Describe the association class in the diagram.

Value 10%

Association class is 'Restaurant Review' class, it is based on the association between the customer and the restaurant.

Customers comment on the restaurant after they experience it.

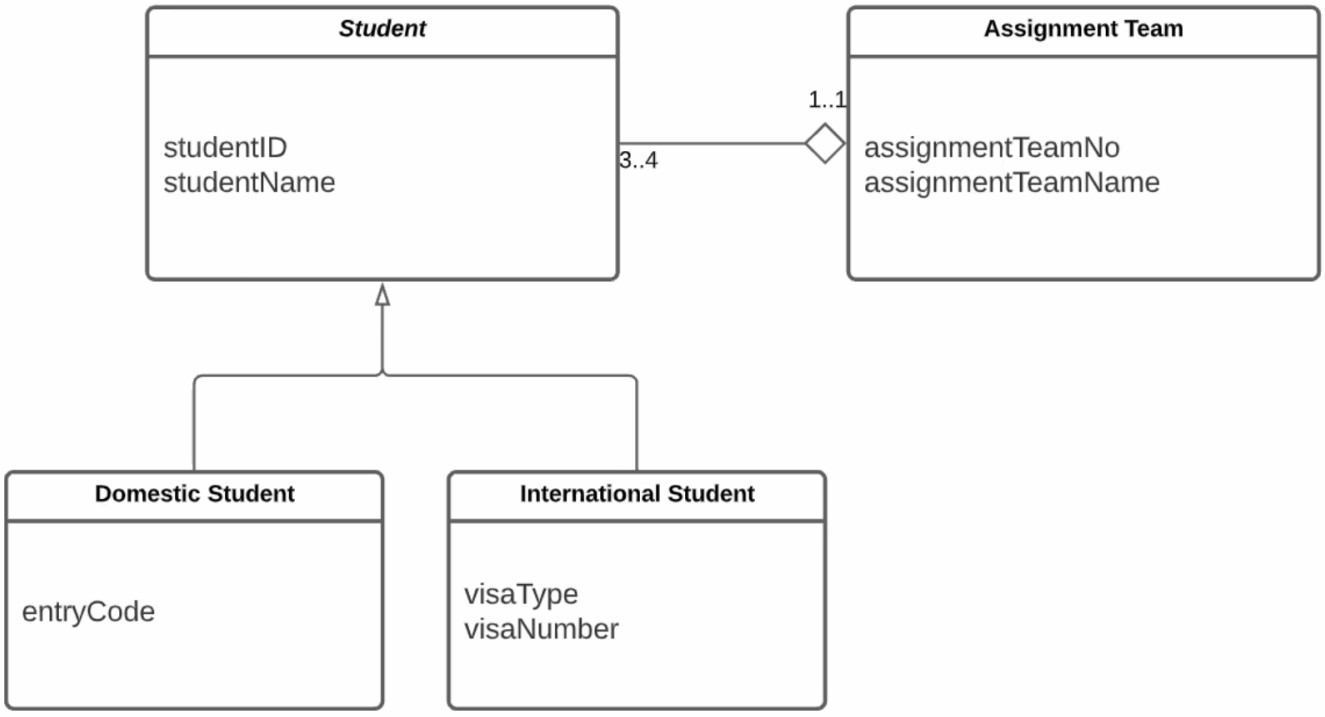
Q3. Complex relationships

Please note the following issue in the video:

- Slide 33 - Abstract class names should be shown in italics

The following depicts a partial domain model class diagram.

Using the diagram below, answer each of the following questions:



Question A *Submitted Apr 10th 2022 at 2:24:59 pm*

IMPORTANT NOTE - Please do not attempt this question A as there is an issue with the diagram in relation to this question. There will be no marks allocated to this question.

Describe the 'Student - Assignment Team' association

Value: 10%

issue

Question B *Submitted Apr 10th 2022 at 2:24:03 pm*

List the attributes of the 'International Student' class (from this diagram only). Why did you include these attributes?

Value 20%

visaType and visaNumber

Because each student has a student ID and name, it is impossible to tell whether the student is a domestic student or an international student, so ‘student’ is an abstract class. Domestic students and international students are instantiated classes so they are concrete classes. Visas can distinguish between two different categories of students, domestic students do not need a visa, while international students need to determine the visa classification and visa number. So the 'International Student' class include these attributes.

Week 7 Seminar & Pre-class activities

Q1. Why Prototype?

Question A *Submitted Apr 23rd 2022 at 1:09:36 pm*

After completing a story mapping workshop with your client, the team is still confused about the requirements of a couple of the user stories.

- What should you do?
- Why? Provide 2 reasons - briefly describing each reason (one sentence per reason) for your choice.

NOTE: Typically when answering this type of question in the exam students just list the reasons even though they are asked to provide a brief description. You are expected to show that you understand the reason you have listed by briefly describing it in a sentence.

Value: 20%

I need to write a prototype of the system. It's like a picture that helps us understand what we know.

The first reason is improved communication, showing them what the system does and explaining what it can do for them.

Next, when they understand the new system I will reduce maintenance, save time and money, and improve user satisfaction.

Q2. Prototyping process

Question A *Submitted Apr 23rd 2022 at 2:53:23 pm*

Your development team has decided to develop high fidelity prototypes for a couple of the user stories to ensure that you fully capture the user's requirements.

- Briefly describe 2 reasons why this might be useful
- Briefly describe 1 reason why this might be an issue

Value: 30%

reasons:

It looks and feels like a real system and real content can get feedback quickly

cooperation

issue:

It's very complex and takes developers a long time to learn

Q3. Usability

Question A *Submitted Apr 23rd 2022 at 2:59:32 pm*

Evaluate the usability of the Airbnb site using the 5 usability evaluation criteria. Focus on the functionality of traveller looking for a place to stay in the city they are visiting.

https://www.airbnb.com.au/

NOTE: Up to 2 sentences for each criterion.

Value: 50%

1.Learbility: The site is very simple, you can know the customer registration and choice, good

2.Efficienvy: Each module is very brief, determine the specific information, to help customers quickly

3.Memorability: Very simple operation, even if the user has not used for a long time can immediately recall

4.Errors:There is no clear guarantee that users' payment information will be made private.

5Satisfaction:

Week 8 Seminar & Pre-class activities

Q1.Personas

Question A *Submitted Apr 30th 2022 at 12:14:41 pm*

The Uber Eats Management Team are concerned that their demographic is mainly customers under 50 years of age. They would like to increase their market share in the 50+ age group. You have been asked to prepare a persona for customers in this age group.

What information do you need to include in the Persona? Give examples of the different types of information.

NOTE: You may want to talk to some people in this age group, or you can use your imagination to come up with examples

Value: 30%

Persona Name and ID ：Recording User Information

Demographics - Gender, age, place of residence, Profession ：Record age, gender and residential address of app users over 50

Personality - Tastes and preferences of restaurants：Note whether their favorite food is light or heavy

Behaviour patterns：Whether they can use the app smoothly

Product context information - Do they have previous knowledge about the product?

Q2. Effective User Design

Question A *Submitted Apr 30th 2022 at 12:35:28 pm*

Provide 7 good or bad examples of effective user interface design after assessing the following 2 sites. At least 2 of the 7 examples must be a comparison of the same element/item/process on the different sites.

- Creating an online account for Woolworths: https://www.woolworths.com.au/shop/signup/one-login
- Creating an online account for Coles - you will need to go to the Login/Signup tab located on the right hand black bar of the screen: https://shop.coles.com.au/a/national/home

NOTES:

- *Use Ben Shneiderman's 8 Golden rules and Jakob Nielsen's 10 heuristics as a guide to help with your assessment.*
- *We do not expect you to actually create an online account ... so just enter dummy data so that you can conduct the assessment*

Value: 70%

Strive for consistency：Woolworths 'account creation page is consistent, and all interfaces and information layout are parallel and consistent.

Cater for diverse users：You can create an account in Woolworths to choose personal shopping or shopping for one company, providing multiple channels for different shopping groups.

Offer informative feedback：When creating an account in Woolworths and creating a password, meeting the requirements of creating a password will give feedback that the password is reasonable.

Design dialogues that yield closure：Create an account in Woolworths, proceed from top to bottom, start, middle and end submit. Let the user know when it's over.

Prevent errors：Woolworths prompts various messages, such as Error messages and information, when establishing passwords

Reduce short-term memory load：Woolworths and Coles both has highlights where you are and shows sequence of action

Support internal locus of control：Woolworths and Coles both let users decide what to do next, cancel or submit

Week 9 Seminar & Pre-class activities

Q1. Coupling & Cohesion

Question A *Submitted May 7th 2022 at 11:43:05 am*

Discuss 2 reasons as to why low Coupling and high Cohesion result in systems that are easier to reuse and maintain.

Value: 20%

Because the low-coupling classes can work independently, are quite loose and easy for the system to understand, with only a few ripple effects, without changing all the other classes at maintenance time.

Hight Cohesion reduced the dependency of objects, causing little ripple effect and increasing the ability to reuse parts of the system for easier maintenance.

Q2. Design Class Diagrams

Question A *Submitted May 7th 2022 at 12:16:22 pm*

Describe 3 ways in which a Design Class Diagram differs from a Domain Class Model Diagram?

Value: 30%

The Domain Class Model Diagram only has the Class name and attributes. The Design Class Diagram details the type of the Class and the data type of the attributes.

The Design Class Diagram defines a special symbol for a Class based on four types of stereotypes. The Domain Class Model Diagram has none of this.

The Design Class Diagram is composed of Class name, attributes and method signatures. Domain Class Model Diagram only Class name and attributes.

Q3. Sequence Diagrams

Question A *Submitted May 7th 2022 at 2:33:01 pm*

For the student functionality "Update student information", using the Domain Model Class Diagram and the System Sequence diagram:

- Draw a First-cut Sequence Diagram
- Draw a Final-cut Sequence Diagram

NOTES: See Process Guidelines for how to draw these diagrams

IMPORTANT - Please cut and paste an image of your 2 diagrams in the answer

Value: 50%

Process Guidelines

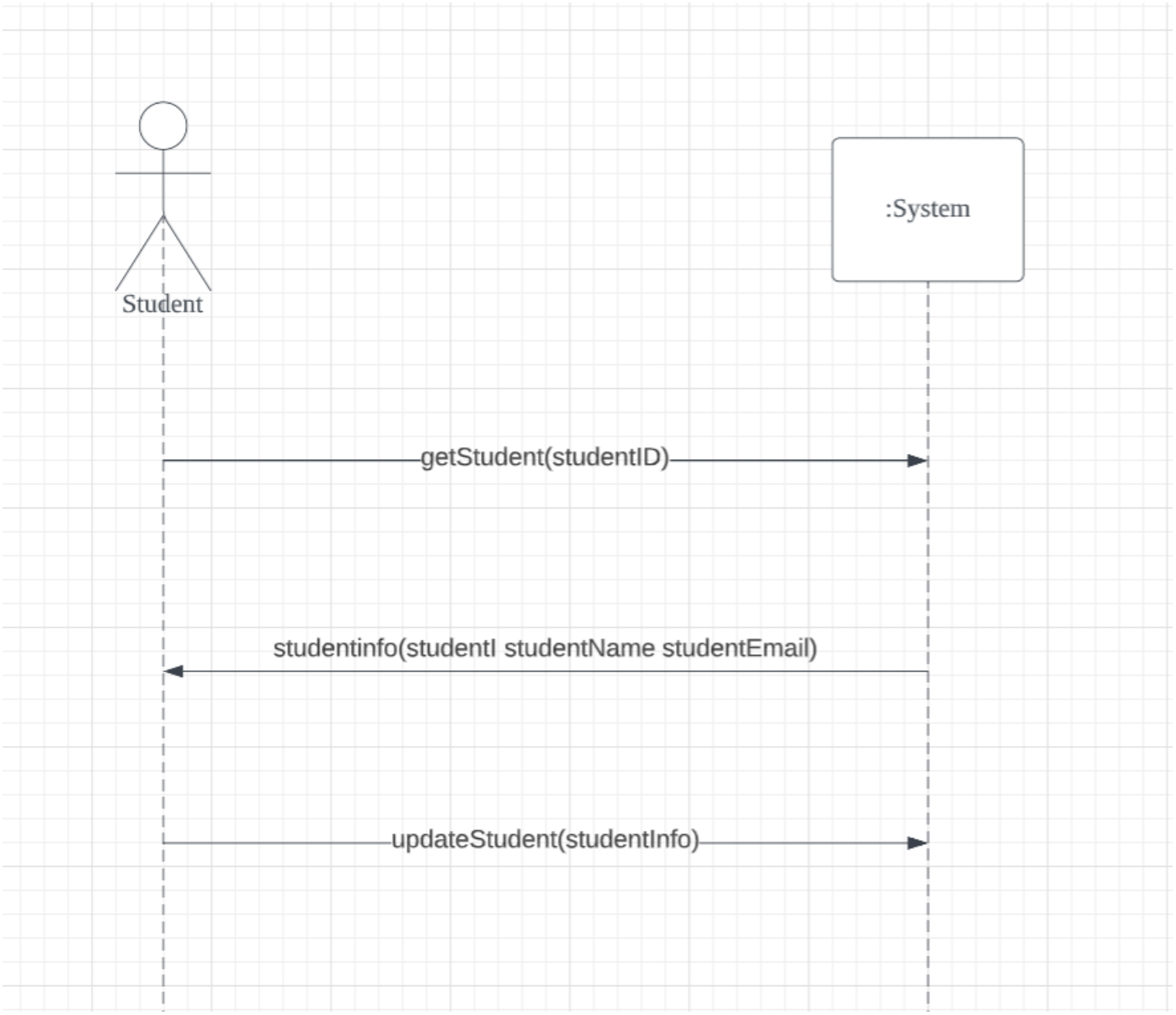
Draw the First-Cut Sequence Diagram

- Start with elements from System Sequence Diagram (SSD) and first-cut Design Class Diagram
    - A Sequence Diagram uses all elements of an SSD .. System object replaced by all internal objects and messages

- Replace the :System object with an appropriately named use case controller
- For each input message
    - Determine all internal messages that result from that input
    - Determine its objective, what information is needed
    - Identify the complete set of classes from the domain model affected by the message
        - What class needs it (destination)
        - What class provides it (source)
        - Whether any objects are created as a result of the input
    - Flesh out the components for each message
        - Iteration, true/false conditions, return values, passed parameters
    - Add the controller - use case controller acts as intermediary between outside world and internal system

Draw the Final-Cut Sequence Diagram

- Add a view layer interface class before the controller either as a single GUI class or as Windows classes
- Add a data access class for each problem domain class
    - Data access layer should only support database CRUD – (Create, Read, Update, Delete) operations so classes maintain a high level of cohesion and are loosely coupled with the business layer


Student
:System
getStudent(studentID)
studentinfo(studentI studentName studentEmail)
updateStudent(studentInfo)

Week 11 Seminar & Pre-class activities

Q1. Buy vs. Build Decision

Question A *Submitted May 21st 2022 at 2:45:39 pm*

Case Study: A medical clinic would like to implement an automated standard appointment system. Due to an increase in their patient numbers they are keen to implement the system as quickly as possible, and the owners are keen to know the final cost of the system upfront.

Would you recommend they build a custom system, or buy an off-the-shelf system?

Provide 3 reasons for your decision *(1 sentence per reason).*

Value: 30%

Buy.

1. The hospital hopes to implement the system as soon as possible, but has not made any preparation, so the hospital will not have a lot of resources for in-house development at this time, so directly buying can meet the requirements faster.

2.Hospitals hope to implement the system as soon as possible, with purchasing options more cost-effective than in-house development.

3. When hospitals purchase directly, because systems and documentation are usually maintained by vendors, they do not have to pay for maintenance.

Q2. Data Conversion & Training

Question A *Submitted May 21st 2022 at 2:59:11 pm*

Briefly discuss the impact of late implementation planning on the 'Data Conversion' activity, and the project.

Value: 10%

Changes in data storage format and content

Often needs specially written conversion programs

Manual file conversion is a time-consuming task

Confirmation of data accuracy

Question B *Submitted May 21st 2022 at 2:58:18 pm*

Explain what the following quote means in relation to 'Training'

“If you think education is expensive and time-consuming - try ignorance” Bok

Value: 10%

If he does not attend the training, he will not be familiar with the system, resulting in low work efficiency.

Q3. Deployment/Installation Alternatives

Question A

Case Study: Monash are going to update Web Enrolment System in February with major changes. The University are experiencing financial issues due to reduced Government funding. Staff have been heavily involved with Usability testing and are looking forward to the rollout of the updated system. The system has to be rolled out across all local and international campuses.

What installation/deployment strategy do you suggest for the updates of the Web Enrolment System?

Briefly discuss any 3 criteria you considered when selecting this deployment strategy for the Web Enrolment System.

(Your answer discussing the criteria must describe how you used the criteria to choose a deployment strategy to the case study described above)

Value: 40%

No response

Q4. Maintenance

Question A *Submitted May 21st 2022 at 2:56:48 pm*

What type of maintenance is most likely to occur soon after the system is implemented?

Briefly discuss why this is the case.

Value: 10%

corrective

Failure to isolate and correct during development, so most corrective problems arise soon after installation or after major system changes