Tutorial 1

**Question 1**

Group 1 { New Yee Hao, Cecilia Kong Xin Ru, Wong Weng Cheng Mavis, Kuah Jia Yu, Yew Ze Xuan }

An information system is said to have five main *components*, namely: hardware, software, data, people and processes.

Identify all the five main components for each of the following information systems. (Note that each of the components is expected to contain a number of items).

• Auto Teller System

• Point of Sales (POS) System

Note: You may use the following table to organise your answers.

|  |  |  |
| --- | --- | --- |
|  | Auto Teller System | Point of Sales System |
| Hardware | Auto Teller Machine  Printer  Server  Chip Card Reader | Computer  Point of Sales Terminal  Printer  Server  Telecommunication Devices |
| Software | System Software (Network Operating System)  Application Software (ATM System) | Cashier System Point of Sales System (Application Software) |
| Data | User’s Pins  User’s Account Details  Customer Banking Transactions | Product Sales Details Membercard Details  Sales Transaction |
| Processes | Verify user’s pins  Update the balance  Check balance | Verify each item Calculate the total  Track product details |
| People | ATM Card’s User  Bank Customer | Customer  Cashier  Manager/Supervisor |

**Question 2**Group2{Low Jun Yan, Tan Kang Hong, Har Chun Wai, Lau Jun Dian, Ho Jing Xian}  
 SBS Ltd is a medium-sized bus operator. It provides bus services to different parts of Malaysia, passing through many major towns. In order to serve its customers better, SBS provides them with an online bus ticket booking facility.  
**Briefly describe FOUR (4) functions of the bus ticket booking system used by SBS Ltd.**

**Answers:**

**Input**: System accepts booking / reservation details. For example, number of tickets, user information, selected seat details and dropping point.  
**Process**: System will calculate the payment of bus tickets. / System will verify the user details.  
**Output**: System will generate the bus ticket / receipt.  
**Storage**: After the customer gets the ticket, the system will save the information for future use. For example, the system will store ticket reservation details / store the latest passenger list.

(stores the user’s information for clarification of the bus ticket details)

# **Question 3**

Group 3**{Chi Pui Mun, Tan Li Yuet, Yoon Yu Hong, Ong Shen Hoi. Janet Soh Jia Er}**

**Factory** firm is one of the many types of organization in the business world. Systems used in a factory firm are for purposes of supporting their business processes or functions.

**Required:**

(a) Identify 5 systems (or modules) commonly used in a typical manufacturing firm.

Systems commonly used in a typical manufacturing firm are

* accounting system,
* finance system,

marketing system, human resource system and inventory system, production system

(b) For any ONE of the systems identified in (a) above, list any 4 related subsystems (or submodules) involved.

Inventory system

(i) stock receiving system

(ii) stock issue/stock out

(iii) stock checking

(iv) stock packaging

(v) stock reporting system

(vi) stock analysis system

(c) Briefly describe **2** major functions (features) for any ONE of the subsystems in (b) above.

Stock receiving system

Receive the stock receipt details to ensure the amount are correct

Comparing the stock receipt detail with stock order detail

**-- Additional Questions --**

**Question 4**

**G4 {Chuah Shee Yeap,Sean Loi Yit Seng,Lee Jia Jie, Ng Eason,Lee Jing Jet}**

The most widely used system development methodology is the Systems Development Life Cycle (SDLC).

**Required:**

(a) Explain the purpose of System Development Life Cycle (SDLC).

The systems development life cycle (SDLC) is to enhance and improve the system, understand the system requirements, control overall software development process.

(b) With the aid of diagram, briefly describe the SIX (6) stages of the system development life cycle (SDLC) of an information system.

System Planning

Recognise whether there is a problem then we will need to diagnose the problem in more detail. Lastly we need to justify whether the new system is viable.

System Analysis

Define project goals into defined functions and operations of the intended application. This involves the process of gathering and interpreting facts, diagnosing problems, and recommending improvements to the system. Project goals will be further aided by analysis of end-user information needs and the removal of any inconsistencies and incompleteness in these requirements.

System Design

At this step, they will need to know about the user's need to create a blueprint for system development. they will need to consider and select the most appropriate alternative of the user requirement. They will need to design the user’s needs. Example like input, output, process, code, database etc

System Development

They will start to develop the code for the system and try their level best to organise the programming code in manner so that the results or products are completed within a shorter time and it is cost-effectively. Also, they will find out any problems or issues that cause the system malfunctioning or failure or do not reach what the customers want and so some approaches will be carried out to track and fix these problems.

System Implementation

This is the final stage of initial development, where the software is put into production and runs actual business.

System Maintenance

During the maintenance stage of the SDLC, the system is assessed/evaluated to ensure it does not become obsolete. This is also where changes are made to initial software. After the systems have been released for a period of time such as 3 years and there are some suggestions of enhancements to improve the capability of the systems.