1. Summarize the topics you have learnt new form this course.

→ System Analysis and design (SSAD) is the name of this course. I have learned a lot of new things from this course. If I want to summarize of those topic that i learned new from this course then I have to started from the beginning. from the name of this course we know it that here we need to ~~mar~~ analyse many thing. For analysing we need information. I know what is information, but I learned newly the 4 types of information, and those are. Strategic, Tactical, operational, and statutory. strategic information needed for long range planning and direction.

Tactical information needed to take short range decisions to improve profitability and performance.

operational information needed to day to day operations of the organization.

Statutory : Needed by law to sent to goverment authorities.

Then I learned Life cycle of system Analysis and Design; which is very important to know as a developer for develop a system.

In life cycle of system Analysis and Design there have nine step which are more important to know and i learned those steps from this course and those are.

1. Requirements determinations.
2. Requirements specifications.
3. Feasibility Analysis.

4. Find specification.

5. Hardware study.

6. system Design.

7. system Implemention.

8. System Evaluation.

9. system modification.

Then I learned Role of system Analyst.

Defining Requirements - involes interviewing users.

Prioritizing Requirements - obtain users consensus.

Fact Gathering - Data, Facts opinions of managers.

Analysis and evaluation - Arrives at appropiate system.

Solving problem - suggest many alternative solutions.

Quantify cost and benefits.

Drawing up specification - Accepted by users.

Then I learned some tools which is used by system Analyst and those are

* Data flow Diagram (DFD)
* Decision tables.
* Modeling Language such as UML.
* Normalization of Databases.
* Testing tools.
* ISO/CMM procedure manuals.

This topics are from the basic knowledge of SAAD Now I would like to say something about those topic which is more interesting for me and I enjoyed to learned that topic.

I learnd Structured English and which is similar to a programming language such as pascal. It does not have strict syntax rule as programming language.

Then I learned the operation/operators of structured English.

Those operators are- Arithmetic : +, -, /, *

Relational : >, >=, <, <=, =, !=

Logical : and, or, not.

keywords: if, then, else, repeat, until, while, do, case, until, while, do, case, for, search, retrieve, read write,

Delimiters - {, }, end, end if, end for.

Then I learned about DFD (Data flow diagram) and role/rules of DFD.

Data can flow from - external entity to process and data cannot flow from - external entity to external entity.

I learned about Feasibility Analysis. Feasibility analysis formulate goals of the system and quantify goals. It is can assess cost of each alternative.

Then I learned entity and Relations. Entity set sets and relationship sets are useful in designing data bases. I knew it newly that Relation name is entity name.

Then I learned about Data Dictionary. Data dictionary is catalogue of all data used in an application, their names, type and their origin. Data dictionary gives a single point reference of data repository of an organization.

Then I know about Format of Data dictionary. Data dictionary gives in detail the characteristics of a data element.

Typical characteristics are:

Data name: should be descriptive and self explanatory.

Data description: What is represent.

origin: Where the data originates.

Destination: where data will flow and will be used.

Data type: Numeric, alphanumeric, letters, binary, Integer, Decimal, real unit.

Then I learned about Data input Methods

on-line: user directly Enters data using screen Prompts.

Off-line: Forms filled by users.

2. Do you think any new topics should be added that will help students in his career as system Analyst?

→ Although I have learned a lot in this course, I think there have some new topics I need to know in order to work on it in the future. so let's describe those topics.

Firstly I want to say about intelligent system analysis and design. In this course I learned about information system there are more difference about information system and intelligent system, let's describe it.

Intelligent computing systems learn and interact naturally with people to encompass what either humans or machine could do on their own. Any intelligent system is designed to constitude its functional capabilites.

Appoaches of designing Intelligent system. The primary goals of designing intelligent systems are as under machines to solve problems through human-like reasoning; knowledge representation and processing in the human mind, structure and function. Most current intelligent systems are devdped by utilizing approaches of following fields;

A. Artificial Intelligence.

B. Soft computing.

Then I would like to describe another new topic, and that is knowledge base Analysis and design (KBAD).

KBAD combines system engineering and program management disciplines to enable the development of a knowledgebase that can

enable cost- effective decision making.
KBAD spans the acquisition lifecycle enabling support for design, development, integration, test, operations and sustainment. KBAD focuses on using a variety of techniques and tools, brought together in a common database using special software to migrate data between tools. KBAD was developed over the past 15 years and brings lessons learned from those years of experience.

Then I would like to say about system design, in this course we learned many things and many technique about system design but we don't know the type of system design. There are

two types of system Design:

1. physical system design.
2. Logical system design.

physical design: The physical design is a graphical representation of a system showing the system's internal and external entities, and the flows of data into and out of these entities. The physical portion of system design can generally be broken down into three sub-tasks:

(i) user interface Design.

(ii) Data Design.

(iii) process Design.

Logical design: The logical of a system pertains to an abstract representation of the data flows, ~~but~~ inputs and outputs of the system. This is often conducted via modelling, using an over-abstract (and sometimes graphical) model of the actual system. To represent the logical design of a system we can use different diagrams like entity Relationship Diagram. In this way we can furnish an abstraction of the total system through logical design in an orderly explanatory way.

3. Discuss the advantage and limitations of online class system.

→ In this pandemic time, everything has come under the control of online system. So our class system is now also online based.

Here have some Advantage and limitations of this online system. Let's discuss those things.

Advantage of online class system:-

1. If anyone missed any class for any problem, then he/she can watch the lecture video later and can complete his/her missed topic.

2. Those students who are accustomed to taking notes, the online system is

very helpful for those students, as it is now much easier to take notes on any topic by watching the lecture video, now he/she can makes their notes to take time and with proper knowledge.

3. We can learn professionalism from the online class system. When we submited any assignment or anything else in wrong way, then our teacher taught us the proper way to write an email or professionally.

4. The online system has saved our money and time, even it is good to study at varsity but going to the campus we need vechical cost, which is being saved in the online system.

Limitation of the online system:

1. Though the online system has saved our money but this system ruined our varsity memories. For my campus memory ~~i want back~~ i don't like this online system.

2. We know Bangladesh is an under-developed country, so here internet connection is more poor. ~~Poor~~ . That's why many students faces internet problem any for internet he/she missed their class/CT etc.

3. In online ~~std~~ system, some student choose the unethical way that is a problem for other student.

4. State your suggestion to overcome the limitations (using unethical means of students) of online based exam system.

→ There have many problems in online based exam system. firstly I want to say about internet problem. for overcoming this problem student can take their backup option like as mobile use data for safe. Their is a major issue of this online based exam system and that is ~~one~~ unethical steps. some students choose the unethical way into online exam. for overcoming this problem we can do something and those are.

1. The vedio camera must be kept on at all times during the exam time.

2. The teacher has to constantly monitor what the students are doing.

3, After sometime checking or asking all students that what he/she is doing. asking all students then others are automaticlly scared and they will not to do anything unethical.

Like these there have more way but at the end of the day some students are unethical and they find their way at any cost. But following these steps we can reduce these unethical ways. But some students have actual problem, they are not unethical. At the end of this topic I can say that following these step we can reduce unethical ways.