UNIT 4: DATABASES

(*Databases - Data processing - Countable and Uncountable Nouns*)

Overall objectives: At the end of this unit, students will be able to:

- Describe steps of data processing.

- Create conversations and short talks about storage and backup solutions.

Face – to – face materials
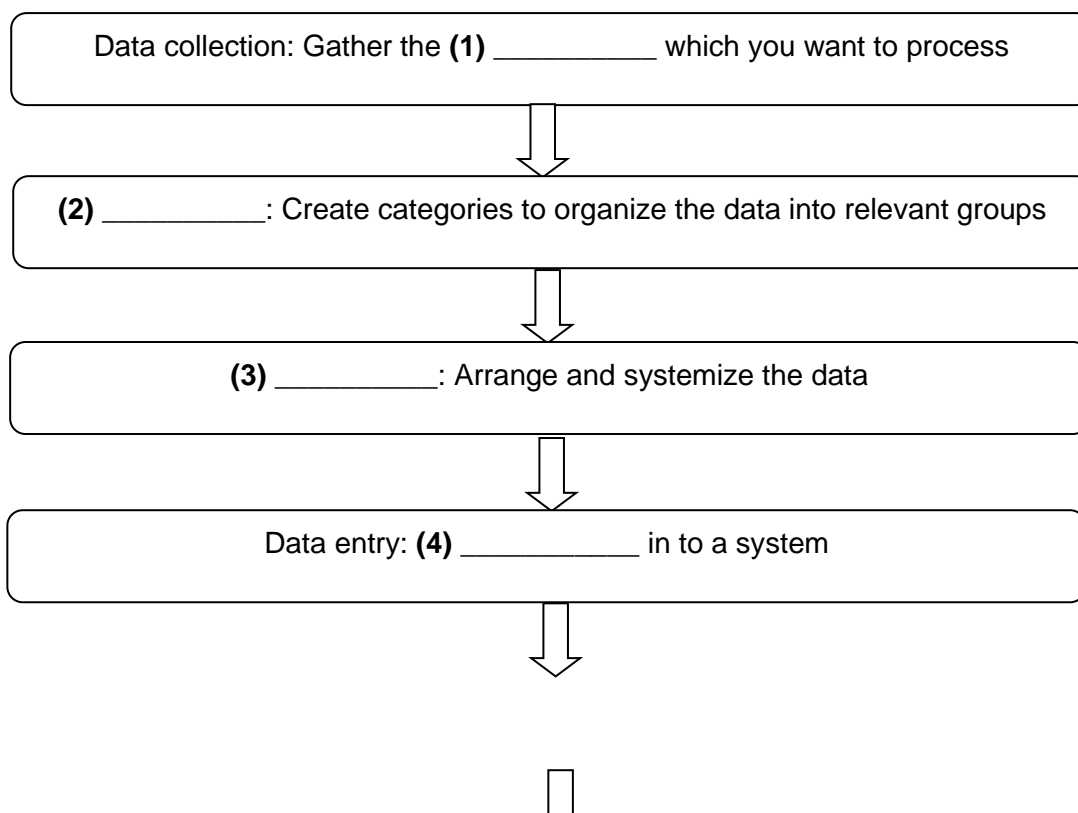
Session 1

Objective: Upon completion of this session, students will be able to describe steps of data processing.

Activity 1: Bankruptcy

- Work in two groups, take turn to choose the questions and give the answers

- Rules:

+ Each correct answer will gain a certain amount of money.

+ If the "lucky number" is picked, the money is doubled.

+ If the "half" is picked, the money is halved.

+ If the "bankrupt" is picked, the money is all gone.

+ At the end of the game, the team with higher amount of money will win the game.

Activity 2: Listening

- Work individually

- Listen to an IT expert describing the data processing steps to a colleague and fill in each gap with NO MORE THAN THREE WORDS to complete the chart below

- Compare the answer with your partner

Data collection: Gather the **(1)** _____ which you want to process

⬇

(2) _____: Create categories to organize the data into relevant groups

⬇

(3) _____: Arrange and systemize the data

⬇

Data entry: **(4)** _____ in to a system

⬇

Data validation: Clean the data and **(5)** _____ for faults and inconsistencies

(6) _____: Arrange the data into table format so that it can be analysed

Activity 3: Explaining the data processing steps

- Work individually

- Explaining data processing steps from activity 2 in your own words

- Present in front of the class.

Session 2

Objective: Upon completion of this session, students will be able to create conversations and short talks about storage and backup solutions.

Activity 4: Matching

- Work in pairs

- Match the data storage and backup solutions and their definitions

Data storage and backup solutions	Definitions
1. SSD	A. a non-volatile computer storage device containing magnetic disks or platters rotating at high speeds
2. Hard disk	B. a storage device that doesn't contain any moving parts, information is stored in microchips
3. USB flash drive	C. often referred to as simply "the cloud," is the delivery of on-demand computing resources - everything from applications to data centers - over the internet on a pay-for-use basis.
4. Cloud computing	D. also known as pen stick that includes flash memory
5. Compact disc	E. a storage device that is a combination of a solid-state drive (SSD) and a hard disk drive (HDD)
6. Hybrid hard drive	F. a portable storage medium that can be used to record, store and play back audio, video and other data in digital form.

Activity 5: Asking and giving advice

- Work in pairs

- Student A is an employee in a company and has to choose a backup solution for the company.

- Student B is an IT expert

- Practice asking and giving advice for storage and backup solutions for a small company

Student A (employee)	Student B (IT expert)
1. Greet the expert and say your name	2. Reply and say your name
3. Say your job and the name of your company	4. Introduce your job/expertise and ask A how you can help him/her
5. Tell you are choosing a storage and backup solution for the company	6. Ask about the size of the company
7. Answer the question	8. Ask about the total amount of data A wants to back up
9. Reply to the question and ask for advice	10. List two solutions (cloud storage services and external hard drive) and compare them: + Cloud storage services (Google drive, Dropbox): back up data, share files between computers + External hard drives: small enough and easy => toss/ computer bag when traveling
11. Ask about the price of each	12. Answer the questions. + Google drive: free for 15GB of storage; $1.99/month for 100GB of storage + About $20 for an average external drive with 120GB of storage
13. Say thanks	14. End the conversation

Activity 6: Free talk: Talk about the most popular storage and backup solution

- Work individually

- Prepare a short talk about the storage and backup solution that is the most popular.

Suggested questions:

1. What are the current storage and backup solutions?

2. What storage and backup solution is the most popular?

3. What are its special features?

4. What are the advantages of this solution?

5. What are the disadvantages of this solution?

5. Students' self-assessment

Look at the objectives specified at the beginning of the unit and write down what you have (not) achieved and what you need to do to improve your English.

Self – evaluation

Rate your progress

I can

I still cannot

I need to