

Hands-On Database, 2e (Conger)
Chapter 2 Gathering Information

2.1 Multiple Choice

1) Which best describes the function of a form?

- A) A form is used to summarize information
- B) A form is used to gather input from users
- C) A form is always electronic
- D) A form describes a procedure

Answer: B

Diff: 2 Page Ref: 23

2) Something a database must do to fulfill its purpose is called a:

- A) Requirement
- B) Procedure
- C) Report
- D) Form

Answer: A

Diff: 2 Page Ref: 22

3) Which of the following best defines what is meant by a database domain?

- A) The name of the database
- B) The type of database, ie., a transaction database
- C) The focus of the database. The business problem it is designed to solve
- D) The country the database is created in

Answer: C

Diff: 3 Page Ref: 22

4) Which best describes what is meant by the term stakeholder?

- A) The customer
- B) Anyone who uses is affected by the database
- C) The owner of the company that is commissioning the database
- D) The IT Staff who will maintain the database

Answer: B

Diff: 3 Page Ref: 22

5) Work shadowing or following someone through their workday serves which of the following purposes?

- A) Observing exceptions to established rules and procedures
- B) Discovering tasks and activities related to the data that may not have been captured before
- C) Observing how data flows through the system
- D) All of the above

Answer: D

Diff: 3 Page Ref: 35

6) A document that summarizes and displays data is called a:

- A) Report
- B) Procedure
- C) Form
- D) Requirement

Answer: A

Diff: 2 Page Ref: 23

7) Which of the following best describes the type of document known as a procedure?

- A) A document that summarizes and displays data
- B) A document that outlines the approved steps for completing a business process
- C) A document that gathers user input
- D) A document that describes an organization's organizational structure

Answer: B

Diff: 2 Page Ref: 23

8) Which of the following is a type of database optimized for processing transactions in real time?

- A) Business Intelligence
- B) Transaction Processing System
- C) Management Information System
- D) Data Warehouse

Answer: B

Diff: 1 Page Ref: 27

9) Which of the following is a database optimized to produce summary reports for management needs?

- A) Business Intelligence
- B) Transaction Processing System
- C) Management Information System
- D) Data Warehouse

Answer: C

Diff: 2 Page Ref: 27

10) Which of the following is a set of tools for analyzing trend and patterns in business data?

- A) Business Intelligence
- B) Transaction Processing System
- C) Management Information System
- D) Data Warehouse

Answer: A

Diff: 2 Page Ref: 27

11) Which of the following is a collection of various data sources including documents used for data mining?

- A) Business Intelligence
- B) Transaction processing system
- C) Management Information System
- D) Data Warehouse

Answer: D

Diff: 3 Page Ref: 27

12) Which of the following describe common uses of XML?

- A) File format for documents
- B) Data Transfer
- C) Both A and B
- D) None of the above

Answer: C

Diff: 3 Page Ref: 27

13) What is a question that does not have a fixed answer called?

- A) A close ended question
- B) An open ended question
- C) A confusing question
- D) None of the above

Answer: B

Diff: 2 Page Ref: 28

14) Which of the following represent best practices for interviews?

- A) Prepare questions beforehand
- B) Have someone other than the interviewer take notes
- C) Keep participants on task
- D) All of the above

Answer: D

Diff: 2 Page Ref: 28-29

15) Interviews are good for asking what kind of questions?

- A) Open-ended questions
- B) Close-ended questions
- C) Confusing questions
- D) None of the above

Answer: A

Diff: 2 Page Ref: 28

- 16) When interviewing stakeholders about a new database you may find some people resistant to the proposed changes. Which of the following represents the best practice for dealing with them?
- A) Dismiss their concerns and focus on the requirements
 - B) Refer them to their supervisor
 - C) Listen to their concerns. They may have valid reasons for feeling as they do
 - D) Reassure them that it will all turn out for the best

Answer: C

Diff: 3 Page Ref: 31

- 17) A question that has a fixed answer or a fixed set of answers is called:

- A) An open-ended question
- B) A technical question
- C) A closed question
- D) A questionnaire

Answer: C

Diff: 2 Page Ref: 32

- 18) Multiple choice questions are good examples of what kind of question?

- A) An open-ended question
- B) A closed question
- C) A technical question
- D) A questionnaire

Answer: B

Diff: 2 Page Ref: 32

- 19) Which of the following is a disadvantage of a questionnaire?

- A) It is harder to evaluate the honesty of the response
- B) They are more expensive than interviews
- C) They are harder to summarize than interviews
- D) Both B and C

Answer: A

Diff: 3 Page Ref: 32

- 20) Which of the following best defines the term exception?

- A) An error in the system
- B) Something the system does not deal with
- C) A violation of rules
- D) A variation on how things are done or recorded, an alternative process

Answer: D

Diff: 2 Page Ref: 22

21) Which of the following best defines the term requirement?

- A) Something a database must do to fulfill its purpose
- B) A rule about database structure
- C) A business procedure
- D) The topic of the database

Answer: A

Diff: 2 Page Ref: 22

22) If you encounter a term or abbreviation in a form that you don't understand, you should:

- A) Take a guess at its meaning and move on
- B) Assume it is not important
- C) Make sure you ask until the term is clarified
- D) Make a mental note to pursue it sometime later

Answer: C

Diff: 3 Page Ref: 23

23) When determining who to interview you should:

- A) Only interview the managers and people in charge
- B) Interview everyone who has a stake in the database
- C) Only interview the IT staff who will maintain the database
- D) Interview whoever is most available at the time

Answer: B

Diff: 2 Page Ref: 22

24) Which of the following is a term that refers to the focus or topic of a database?

- A) Domain
- B) Form
- C) Report
- D) Procedure

Answer: A

Diff: 1 Page Ref: 22

25) Anyone who interacts with or who is involved with the database is called:

- A) A manager
- B) A customer
- C) A stakeholder
- D) A database developer

Answer: C

Diff: 1 Page Ref: 22

26) A document which has the primary purpose of summarizing and displaying data is called:

- A) A form
- B) A procedure
- C) A memo
- D) A report

Answer: D

Diff: 1 Page Ref: 23

27) A document which has the primary purpose of gathering data input is called:

- A) A form
- B) A procedure
- C) A memo
- D) A report

Answer: A

Diff: 1 Page Ref: 23

28) Which of the following best describes Data Mining?

- A) Data on the mining industry
- B) Using business intelligence techniques on a variety of data sources brought together in a data warehouse
- C) Summarizing basic business data
- D) None of the above

Answer: B

Diff: 2 Page Ref: 27

29) Which of the following should you use as part of your documentation of the data gathering process?

- A) Copies of all forms and reports reviewed
- B) Notes from interviews
- C) Summaries of questionnaires
- D) All of the above

Answer: D

Diff: 2 Page Ref: 35

30) Open-ended questions are best used in:

- A) Questionnaires
- B) Never use open ended questions
- C) Forms
- D) Interviews

Answer: D

Diff: 2 Page Ref: 28

31) Which of the following are types of close-ended questions?

- A) Multiple choice
- B) True false
- C) Ranking
- D) All the above

Answer: D

Diff: 2 Page Ref: 32

32) Data transfer and file formats are common uses for:

- A) XML
- B) SQL
- C) Databases
- D) Management Information Systems

Answer: A

Diff: 1 Page Ref: 27

33) The focus of a database, the business problem it is designed to solve is called:

- A) The name of the database
- B) The domain of the database
- C) Database Requirements
- D) None of the above

Answer: B

Diff: 2 Page Ref: 22

34) Which of the following best describes Data Services?

- A) Help repair and restore databases
- B) Make cloud database data and resources available to applications
- C) Let you know precisely where the database is located
- D) Provides security for databases

Answer: B

Diff: 3 Page Ref: 28

35) Which best defines the term database requirement?

- A) Something a manager wants from the database
- B) An exception to a rule or practice
- C) Something a database must do to fulfill its business function
- D) The amount of RAM needed by the Database software

Answer: C

Diff: 2 Page Ref: 22

36) Observing people at work to see how they interact with the data is called:

- A) Work shadowing
- B) Interviewing
- C) Preparing questionnaires
- D) All of the above

Answer: A

Diff: 1 Page Ref: 34

37) Databases that reside on the internet and are usually accessed through data services are called:

- A) Transaction databases
- B) Business intelligence databases
- C) Cloud Databases
- D) Management Information Databases

Answer: C

Diff: 3 Page Ref: 28

38) Something a database must do to fulfill its business purpose is called:

- A) A requirement
- B) A role
- C) An entity
- D) An attribute

Answer: A

Diff: 2 Page Ref: 22

39) Job shadowing consists of:

- A) Researching a job on the internet
- B) Reviewing documents
- C) Interviewing stakeholders
- D) Observing stakeholders as they work to understand how they interact with the data

Answer: D

Diff: 2 Page Ref: 22

40) The business focus of a database is called its:

- A) Domain
- B) Physical design
- C) Logical Design
- D) Requirements

Answer: A

Diff: 3 Page Ref: 22

41) Anyone who is involved in the use of the database is a:

- A) Database administrator
- B) Stakeholder
- C) User
- D) Employee

Answer: B

Diff: 2 Page Ref: 22

42) A variation in the normal procedures is called:

- A) An exception
- B) An error
- C) A business rule
- D) A requirement

Answer: A

Diff: 2 Page Ref: 22

43) A form is a document used for:

- A) Displaying and summarizing information
- B) Gathering user information
- C) Listing the appropriate steps to complete a task
- D) Providing job descriptions and rules

Answer: B

Diff: 2 Page Ref: 23

44) A report is a document used for:

- A) Displaying and summarizing information
- B) Gathering user information
- C) Listing the appropriate steps to complete a task
- D) Providing job descriptions and rules

Answer: A

Diff: 2 Page Ref: 23

45) A procedure is a document used for:

- A) Displaying and summarizing information
- B) Gathering user information
- C) Listing the appropriate steps to complete a task
- D) Providing job descriptions and rules

Answer: C

Diff: 2 Page Ref: 23

2.2 True False

1) Documents are an important source of information about database content.

Answer: TRUE

Diff: 1 Page Ref: 22

2) It is never useful to work shadow--that is to follow people around as they work.

Answer: FALSE

Diff: 1 Page Ref: 22

3) One should never account for exceptions.

Answer: FALSE

Diff: 1 Page Ref: 22

- 4) A requirement is something a database needs to do in order to fulfill its purpose.
Answer: TRUE
Diff: 2 Page Ref: 22
- 5) You only need to include the most important stakeholders in the database discussions.
Answer: FALSE
Diff: 2 Page Ref: 22
- 6) Forms are used for gathering input.
Answer: TRUE
Diff: 2 Page Ref: 23
- 7) Forms are the only business documents you need to be interested in.
Answer: FALSE
Diff: 2 Page Ref: 23
- 8) It is best to review many kinds of business documents.
Answer: TRUE
Diff: 1 Page Ref: 23
- 9) A transaction database is optimized to track transactions in real time.
Answer: TRUE
Diff: 2 Page Ref: 27
- 10) Management Information Systems are optimized to return summary information.
Answer: TRUE
Diff: 2 Page Ref: 27
- 11) Business Intelligence is another term for corporate spying.
Answer: FALSE
Diff: 1 Page Ref: 27
- 12) Business Intelligence tools are often included with database management systems.
Answer: TRUE
Diff: 2 Page Ref: 27
- 13) Business Intelligence is a set of tools for analyzing trends and patterns in business data.
Answer: TRUE
Diff: 3 Page Ref: 27
- 14) Data mining is data related to the mining industry.
Answer: FALSE
Diff: 1 Page Ref: 27

15) Data mining uses business intelligence tools and techniques on a variety of data sources brought together in a data warehouse.

Answer: TRUE

Diff: 2 Page Ref: 27

16) XML consists of marked up unicode text that follows a few strict rules.

Answer: TRUE

Diff: 2 Page Ref: 27

17) XML is increasingly used for file formats and data transfer.

Answer: TRUE

Diff: 2 Page Ref: 27

18) Interviews are not good ways for gathering information about the database contents and requirements.

Answer: FALSE

Diff: 1 Page Ref: 28

19) Interviews are good for asking open ended questions.

Answer: TRUE

Diff: 2 Page Ref: 28

20) Open ended questions are questions that don't have fixed answers.

Answer: FALSE

Diff: 2 Page Ref: 28

21) You should attempt to gather the points of view of every stakeholder.

Answer: TRUE

Diff: 2 Page Ref: 28

22) You should always take your own notes at interviews.

Answer: FALSE

Diff: 2 Page Ref: 29

23) Questionnaires are good for asking open ended questions.

Answer: FALSE

Diff: 2 Page Ref: 32

24) You should try to make sure you get a representative response when you give a questionnaire.

Answer: TRUE

Diff: 2 Page Ref: 33

25) Job shadowing is a way to see how data are used on a daily basis.

Answer: TRUE

Diff: 2 Page Ref: 34

26) Job shadowing is a good way to observe exceptions to the usual procedures and rules.

Answer: TRUE

Diff: 2 Page Ref: 35

27) You should keep a copy of all your interview questions and notes for you database documentation.

Answer: TRUE

Diff: 2 Page Ref: 35

28) It is not important to review reports when gathering information about the database.

Answer: FALSE

Diff: 2 Page Ref: 22

29) Reports are documents that summarize and display data.

Answer: TRUE

Diff: 1 Page Ref: 22

30) Documents like procedures and manuals can provide valuable insight into business processes relevant to the database.

Answer: TRUE

Diff: 2 Page Ref: 22

31) You should always prepare for an interview.

Answer: TRUE

Diff: 1 Page Ref: 29

32) Confidentiality can be an issue when gathering information for databases.

Answer: TRUE

Diff: 2 Page Ref: 28

33) You must make sure you understand all the terms and abbreviations in forms.

Answer: TRUE

Diff: 2 Page Ref: 23

34) The domain is the country in which the database is constructed.

Answer: FALSE

Diff: 2 Page Ref: 22

35) The domain is the focus or knowledge area of a database.

Answer: TRUE

Diff: 2 Page Ref: 22

36) A cloud database is a database that is accessed through the Internet.

Answer: TRUE

Diff: 2 Page Ref: 28

37) A cloud database is a database that has an unclear purpose.

Answer: FALSE

Diff: 2 Page Ref: 28

38) Data Services make cloud database data and resources available to applications.

Answer: TRUE

Diff: 2 Page Ref: 28

39) Cloud services are made possible by massive database installations.

Answer: TRUE

Diff: 2 Page Ref: 28

40) Cloud computing has no future.

Answer: FALSE

Diff: 2 Page Ref: 28

41) Cloud computing is likely to grow rapidly in the near future.

Answer: TRUE

Diff: 2 Page Ref: 28

42) Cloud computing consists of using services on the internet to provide for business needs.

Answer: TRUE

Diff: 2 Page Ref: 28

43) Only the people who actually work with the data in the database are stakeholders.

Answer: FALSE

Diff: 2 Page Ref: 22

44) Procedures are never useful when analyzing databases.

Answer: FALSE

Diff: 2 Page Ref: 23

45) Even Annual Reports might offer useful information to a database developer.

Answer: TRUE

Diff: 2 Page Ref: 23

2.3 Essay Questions

1) Tomorrow you are going to interview the primary stakeholders for a non-profit that provides temporary financial assistance to members of the community for things like rent, groceries, utility bills, etc. They want a database to track their donors, their clients and the assistance that they provide them. What would you do to prepare for the interview?

Answer: Develop questions for each of the stakeholders. Figure out the time available and allot time for each question. Decide who or how notes will be taken.

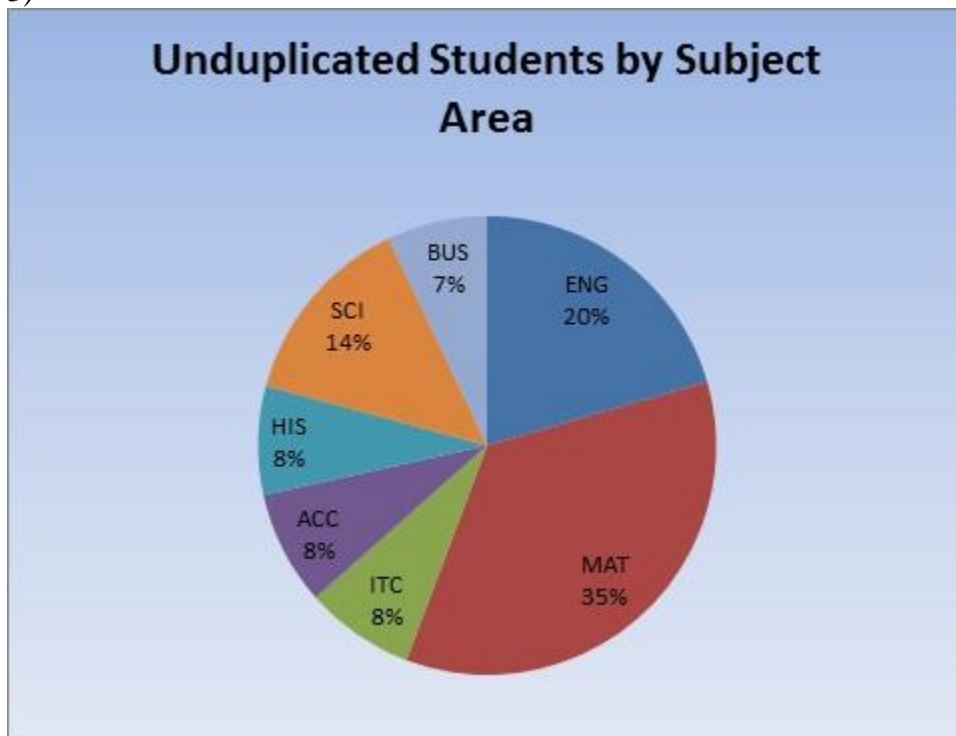
Diff: 3 Page Ref: 29-30

2) Explain how work shadowing can help in the data gathering process?

Answer: It can provide a clearer picture of how data is acquired and used in the system. It also can reveal aspects of the data use that failed to be revealed in business documents or interviews. Further it can reveal exceptions to the rules and procedures which may need to be incorporated into the database structure.

Diff: 3 Page Ref: 35-36

3)



Look at the above Report from the book. What implications can you draw from it about the data that must be stored in database?

Answer: The database must store information about the courses students have asked for tutoring in and which students have requested the tutoring. The database must also be able to differentiate individual students and remove duplicate tutoring sessions.

Diff: 3 Page Ref: 26

4) Why do you think that it is important to interview all of the stakeholders when gathering information about a database?

Answer: Each stakeholder will have a different perspective on how the data is used and what data is required for their purposes. Also the database must meet the needs of all the stakeholders who will use it.

Diff: 3 Page Ref: 22

5)



The image shows a 'Software Request' form. It contains several input fields: 'R#' with value '09321112', 'C#' with value '20134', 'Date' with value '4/12/2011', 'EID' with value '21222', 'Name' with value 'Steve Larson', 'Office Phone' with value '2065551253', 'Status' with value 'Pending', and a 'Description' field with the text 'I would like to install SQL Server Express to track contacts and leads'.

Software Request					
R#	09321112	C#	20134	Date	4/12/2011
EID	Name		Office Phone		
21222	Steve Larson		2065551253		
Status	Pending				
Description	I would like to install SQL Server Express to track contacts and leads				

Look at the software request form above. What questions would you ask about this form?

Answer: I would ask when the form is used and by whom. I would also ask clarification for the terms R#, C# and EID. I would also ask what the various status values could be and who determines them.

Diff: 3 Page Ref: 22

6) While conducting an interview, you find one of the participants to be unresponsive and quiet. When you draw him out to express his opinion, he explains that he doesn't like the idea of creating a new database. The way they have been doing things has worked for a long time, and he doesn't see a need to change it. Changing it just means more work and it probably won't work as well as the current system. How would you handle such a participant?

Answer: Listen to their concerns. They may have legitimate reasons to not trust the new procedures the database may introduce. Try to address the issues, by pointing out the reasons why a new database is needed. Finally, promise to meet with them later to address their concerns in more detail.

Diff: 3 Page Ref: 31

7) What are some of the best practices for creating questionnaires?

Answer: Questionnaires should use close ended questions such as true, false or multiple choice. It is important to make sure that the questions are clear and unambiguous. Having other people read the questions can help make sure the questions are clear and make sense. Also, when distributing a questionnaire it is important to get as comprehensive an example back as possible.

Diff: 3 Page Ref: 33

8) What are the main differences between a transaction database and a management information system?

Answer: A transaction database is optimized to handle as many transactions as necessary in real time. That means its primary concern is processing speed. A management information system is optimized for running queries and creating summaries that are useful to business managers. A management information system does not have to be as fast as a transaction database. Often the management information system uses the data copied from a transaction database, since the reports typically don't have to be accurate to the current moment.

Diff: 3 Page Ref: 27

9) When gathering data for a new database what kinds of documents should you look at and why?

Answer: You should look at all the documents that are relevant. Forms are important because they are used to gather the data the database will need. Reports can reveal data that must be included in order to create the summaries that the business requires. Procedures and manuals can help understand how the data is acquired and processed and what rules are applied to it. Even memos and quarterly statements can be useful by providing context for the use and purposes of the data to be stored in the database.

Diff: 3 Page Ref: 23

10) Explain what documentation you should keep from gathering data about the database.

Answer: You should keep copies of all the documents looked at, with the notes explaining obscure terms and abbreviations. You should also keep copies of all your interview notes. Copies of questionnaires and summaries of the responses are also important. In addition, any notes about work shadowing and observations about the use of the data should be kept.

Diff: 3 Page Ref: 36

11) Explain some of the advantages of Cloud database services.

Answer: Cloud services offer companies the opportunity to expand their infrastructure without worrying about maintenance and the expense of the equipment. Cloud services are especially useful for handling peak loads. For example, a retailer may have twice the normal load during the Christmas holiday. Rather than paying for infrastructure that is idle most of the year, they can purchase cloud services to handle the peak.

Diff: 3 Page Ref: 28