SouthWest University

Lab report

Couse name Fundamentals of Database Systems

Semester 2023 - 2024 - 2

Grade 2022 Class CS4

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| Lab 2 | |  | | | |
| Experimental types | | ☑validation experiment  □comprehensive experiment  □design experiment | | | |
| * Goal: * Practicing creating users; * Granting and retrieving permissions; * Verify whether permission management is working. | | | | | |
| * Experimental contents and process. You should list the source code and screen shots showing the output results of your code.   First I created a new account:  Then I renamed it:    Dropping it:  Locking and unlocking the account:    Creating roles:    Dropping roles:    Granting roles to users:    Adding permissions to account:  Granting all permissions:    Verifying permissions:        Revoking permissions:    Revoking roles:    Now, let’s put them together and verify their permissions:    I created a new account without granting him any permissions.    Then, I granted him permission of selecting a specific row on a specific table:      Success!  As you can see, I only have access to this specific attribute in this specific table in this schema. It should’ve be like this :  I can’t see other attributes, neither can I modify them.  During the process, I met some issues. I’ll clarify them later. | | | | | |
| * Experimental summary and analysis.   I’m glad that I’ve acquired more knowhow on databases. Now I’ve mastered how to manage permissions by using grant and revoke.  Besides, I’ve also run into problems when practicing using roles. By using search engines, I managed to tackle them. ‘Roles’ aren’t active on default settings, and you’d have to manually activate them before using their permission. By using ‘CURRENT\_ROLE()’ function, you can verify whether one role is active: .  Then you can set default role:  .  If you don’t want repeat this procedure each time logging in, you can try modifying system variable ‘activate\_all\_roles\_on\_login’.  By setting this variable as true, you wouldn’t need to activate roles again and again. | | | | | |
|  | Criteria | | | | scale |
| Goal | | | | A B C D E |
| Process | | | |
| Design | | | |
| Algorithm | | | |
| Code | | | |
| Data/Results | | | |
| Summary | | | |
| Written | | | |
| Score | |  | Tutor Signature：Quan Zou | |
| * Lab Evaluation Criteria   A: This lab is exceptional, working and meeting all of the specifications.The code is exceptionally well organized and very easy to follow.The code could be reused as a whole or each routine could be reused.The documentation is well written and clearly explains what the code is accomplishing and how.The program was delivered on time.The code is extremely efficient without sacrificing readability and understanding.  B: This lab is very good--works and produces the correct results and displays them correctly. It also meets most of the other specifications. The code is fairly easy to read. Most of the code could be reused in other programs. The documentation consists of embedded comment and some simple header documentation that is somewhat useful in understanding the code. The program was delivered within a week of the due date. The code is fairly efficient without sacrificing readability and understanding.  C: This lab is adequate, with only minor deficiencies. The program produces correct results but does not display them correctly. The code is readable only by someone who knows what it is supposed to be doing. Some parts of the code could be reused in other programs. The documentation is simply comments embedded in the code with some simple header comments separating routines. The code was within 2 weeks of the due date. The code is brute force and unnecessarily long..  D: This lab shows some effort but has at least one major deficiency.The program is producing incorrect results. The code is poorly organized and very difficult to read. The code is not organized for reusability. The documentation is simply comments embedded in the code and does not help the reader understand the code. The code was more than 2 weeks overdue. The code is huge and appears to be patched together.  E: This lab is poorly written and shows very little effort or understanding. | | | | | |