Yuvika Nibber

Assignment 5

1. Cascading authorizations are when a user is granted access and they can grant access to multiple other users.
2. The disadvantages to database encryption are key management and inflexibility.
3. Course Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Course Name | Number | Day | Time | Room Number | Max Enrollment |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

The course number is a primary key.

|  |  |
| --- | --- |
| Faculty Name | Course Number |
|  |  |
|  |  |
|  |  |

|  |  |
| --- | --- |
| Student Name | Course Number |
|  |  |
|  |  |
|  |  |

The Course Number is the Foreign key.

The course number is the foreign key and primary key.

1. A. The owners name is updated by adding more rows in the table. Owners’ data could be incorrect or not consistent. The user can modify some corrections and at times leave other corrections uncorrected. This could cause the data to be inconsistent.

B.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Pet\_ID | Pet\_name | Type | Breed | DOB | Owner Phone |
| 1 | Kino | Dog | Poodle | 3/27/97 | 5551236 |
| 2 | Teddy | Cat | Chartreux | 4/2/98 | 1232343 |
| 3 | Filo | Dog | Poodle | 2/24/02 | 2343454 |
| 4 | AJ | Dog | Collie Mix | 11/12/95 | 3456567 |
| 5 | Cedro | Cat | Unknown | 12/10/96 | 7865432 |
| 6 | Woolley | Cat | Unknown | 10/2/00 | 9870678 |
| 7 | Buster | Dog | Collie | 4/4/01 | 4565433 |

|  |  |  |
| --- | --- | --- |
| Owner Name | Owner Phone | Owner Email |
| M. Downs | 5551236 | [md@abc.com](mailto:md@abc.com) |
| M. Downs | 1232343 | [md@abc.com](mailto:md@abc.com) |
| R. James | 2343454 | [rj@abc.com](mailto:rj@abc.com) |
| Liz Frier | 3456567 | [liz@abc.com](mailto:liz@abc.com) |
| R. James | 7865432 | [rj@abc.com](mailto:rj@abc.com) |
| M. Trent | 9870678 | [mt@abc.com](mailto:mt@abc.com) |
| Ronny | 4565433 | ron@abc.com |

1. A. This statement gives the id, name and surname from the database where the name is John and surname is Smith.

B. Name will be Jo, last name Smith and the results will be printed.

C. First name will be Jo and last name Smith but this time it will drop the table. The SQL is separated by semicolon.

1. A. Select accounts from users where login is doe and pass are secret and pin is 123.

B. The SQL injection attack is selected account from users where login is doe or 1 = 1 and pass is secret, and pin is 123 or 1 = 1.

1. Roles of individuals in plumbing contractor using role-based access control system. The database has the information of the parts and the vendors. It has the part number, description, color, size, stock number etc. It also has the vendors name, address, purchase orders, orders that are pending, completed, ordered or closed.

Roles of accounts payable clerk has access to the data items such as the part information and the vendor information, so they are responsible for operations such as read and write.

Role of the installation foreman has access to the data of the part. They can make changes to the part information, but they are not allowed to make changes to the vendor information.

1. Role 1 is the classified field value and role 2 is unclassified. Role 2 users see the cargo table. The cargo hold C is empty, but role 2 user does not know about the details of the field and vegetables are inserted into C on flight 1254. However, the user is will not be able to insert into C field due to restrictions. Role 2 user reduces the details of secret shipment on flight 1254 by cross checking the flight information table.
2. GRANT privilege\_type  
   ON object  
   TO {user|PUBLIC |role\_name}  
   [with available grant options];

Grant select on Palpatine to Luke. Grant select on Palpatine to leih.

1. Yes, the information will be leaked because the query restriction technique has problem in it. Query provides hints to the attacker. The query denial leaks the information.