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1  class Database {
2      attr String[1] name; val Element[*] elements;
3      val Role[*] roles; val User[*] users; val SecurityRule[*] rules;}
4  abstract class Element {
5      attr String[1] name; val Field[*] #element fields;}
6  class Node extends Element {}
7  class Relationship extends Element {ref Node[1] from; ref Node[1] to;}
8  class Field {
9      attr String[1] name; attr DataType[1] dataType;
10     attr boolean[?] isRequired = true; attr boolean[?] isIndex = false;
11     ref Element[1] #fields element;}
12 class Role {
13     attr String[1] name; val Role[*] #root children;
14     ref Role[?] #children root; ref SecurityRule[*] #roles rules;}
15 class User {
16     attr String[1] name; attr String[1] pass; ref Role[*] roles;}
17 abstract class SecurityRule{
18     attr String[1] name; ref Role[+] #rules roles; attr SignType[1] sign;
19     attr Privilege[+] privileges; }
20 class SecurityRuleField extends SecurityRule {ref Field[+] fields;}
21 class SecurityRuleElement extends SecurityRule {ref Element[+] elements;}
22 enum DataType {int; double; bool; char; string; date; array;}
23 enum SignType {grant; deny;}
24 abstract class Privilege { attr String[?] condition; }
25 class Create extends Privilege; class Read extends Privilege;
26 class Update extends Privilege; class Delete extends Privilege;

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