Cinderella Database Schema

Remark:

1. There is no space “ ” within any table name, relationship name, nor attribute name!
2. Primary key (pk) is unique, not empty, not null, and its attribute name starts with CAPITAL letter.

Table:

**Entity**:

User:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| UserId | username | password | balance | phoneNumber | bonusPoints | email |

|  |  |  |
| --- | --- | --- |
| Attribute name | data type | constraints |
| UserId | Numeric(7,0) | primary key |
| username | String | unique |
| password | String <= 30 | not empty |
| balance | Numeric(10,2) |  |
| phoneNumber | Numeric(11,0) |  |
| bonusPoints | Numeric(8,0) |  |
| email | String |  |

WashMachine:

|  |  |  |  |
| --- | --- | --- | --- |
| MachineID | status | pricePerService | UsedBy |

|  |  |  |
| --- | --- | --- |
| Attribute name | data type | constraints |
| MachineID | Numeric(13,0) | primary key |
| status | Enum (or numeric if no Enum) |  |
| pricePerService | Numeric(4,2) |  |
| UsedBy | Numeric(7,0) | foreign key, from User: UserId; Unique |
| locatedAt | String | foreign key from Site: Address; Unique |
| WaitedBy | Numeric(7,0) | foreign ky from User: UserId; Unique |
| startsAt | TimeStamp |  |
| waitingCapacity | Numeric(2,0) |  |

Manager:

|  |  |  |
| --- | --- | --- |
| EmployeeAccountNumber | password | accessPreviledge |

|  |  |  |
| --- | --- | --- |
| Attribute name | data type | constraints |
| EmployeeAccountNumber | Numeric(8,0) | pk |
| password | String | not empty |
| accessPreviledge | Numeric(2,0) |  |

(Optinal)

Site:

|  |  |
| --- | --- |
| Address | OperatingHours |

|  |  |  |
| --- | --- | --- |
| Attribute name | data type | constraints |
| Address | String | pk |
| OperatingHours | Numeric(2,0) |  |

**Relationship**:

ReportDefect:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ReportID | UserId | MachineID | EmployeeAccountNumber | resolvedAtTime |

|  |  |  |
| --- | --- | --- |
| Attribute name | data type | constraints |
| ReportID | Numeric(9,0) | pk |
| UserId | Numeric(7,0) | fk, from User : UserId; |
| MachineID | Numeric(13,0) | fk, from WashMachine : MachineID; not empty; not null |
| EmployeeAccountNumber | Numeric(8,0) | fk from Manager : EmployeeAccountNumber; |
| resolvedAtTime | TimeStamp |  |

Mange:

|  |  |
| --- | --- |
| EmployeeAccountNumber | MachineID |

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute name | data type | constraints | |
| EmployeeAccountNumber | Numeric(8,0) | pk | fk from Manager : EmployeeAccountNumber; not empty; not null |
| MachineID | Numeric(13,0) | fk, from WashMachine : MachineID; not empty; not null |