

REL

User = {UsrName_hash, UsrPW_hash not null}

K = {{ UsrName(hash) }}

Task = {TaskID auto increment, UsrName_hash not null, Task, TaskNote, IsCompleted not null}

K = {{ TaskID }}

FK: TaskID → User{{ UsrName_hash }}

Data Type Specifications:

User

UsrName_hash VARCHAR(255)

UsrPW_hash VARCHAR(255)

Task

TaskID INT

UsrName_hash VARCHAR(255)

Task BLOB(65535)

TaskNote BLOB(65535)

IsCompleted TINYINT(1)

DueTime DATETIME

DB setup commands (mysql):

```
CREATE DATABASE todoApp;
```

```
CREATE USER 'todoApp'@'localhost' IDENTIFIED BY 'PW_REDACTED';
```

```
GRANT CREATE, INSERT, UPDATE, DELETE, SELECT ON todoApp.* TO  
'todoApp'@'localhost' WITH GRANT OPTION;
```

```
CREATE TABLE User (  
    UsrName_hash VARCHAR(255) NOT NULL,  
    UsrPW_hash VARCHAR(255) NOT NULL,  
    PRIMARY KEY (UsrName_hash),  
);
```

```
CREATE TABLE Task (  
    TaskID INT NOT NULL AUTO_INCREMENT,  
    UsrName_hash VARCHAR(255) NOT NULL,  
    Task BLOB(65535),  
    TaskNote BLOB(65535),  
    IsCompleted TINYINT(1) NOT NULL,  
    DueTime DATETIME,  
    PRIMARY KEY (TaskID),  
    FOREIGN KEY (UsrName_hash) REFERENCES User(UsrName_hash)  
);
```