SQLite PHP: Inserting Data



Summary: in this tutorial, we will show you how to use PHP PDO to insert data into SQLite tables

We will use the projects and tasks table that we created in the creating table tutorial (https://www.sqlitetutorial.net/sqlite-php/create-tables/).

To insert data into a table, you follow these steps:

- 1. Connect to the SQLite database (https://www.sqlitetutorial.net/sqlite-php/connect/) by creating a new PDO instance with the path to the SQLite database file.
- 2. Compose an INSERT statement (https://www.sqlitetutorial.net/sqlite-insert/) . If you want to supply the values for the INSERT statement, you use the named placeholders in the form : name which name is the parameter that you will provide the value.
- 3. Call the prepare() method of the PDO object to prepare the INSERT statement for execution. This method returns a PDOStatement object.
- 4. Bind values to the parameters by calling the bindValue() method of the PDOStatement object.
- 5. Execute the statement by calling the execute() method of the PDOStatement object.
- 6. In case the table has a generated autoincrement (https://www.sqlitetutorial.net/sqlite-autoincrement/) column as the primary key (https://www.sqlitetutorial.net/sqlite-primary-

key/), you can get the inserted id by calling the <code>lastInsertId()</code> method of the PDO object.

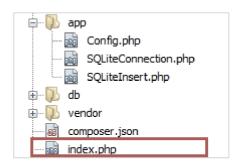
The following SQLiteInsert class has two methods for inserting data into tables. The insertProject() method inserts a new project into the projects table and the insertTask() method inserts a new task into the tasks table.

```
<?php
namespace App;
* PHP SQLite Insert Demo
class SQLiteInsert {
     * PDO object
    * @var \PD0
    private $pdo;
     * Initialize the object with a specified PDO object
    * @param \PDO $pdo
    public function construct($pdo) {
        $this->pdo = $pdo;
    }
     * Insert a new project into the projects table
     * @param string $projectName
     * @return the id of the new project
    public function insertProject($projectName) {
        $sql = 'INSERT INTO projects(project name) VALUES(:project name
```

```
$stmt = $this->pdo->prepare($sql);
        $stmt->bindValue(':project_name', $projectName);
        $stmt->execute();
        return $this->pdo->lastInsertId();
    }
     * Insert a new task into the tasks table
     * @param type $taskName
     * @param type $startDate
     * @param type $completedDate
     * @param type $completed
     * @param type $projectId
     * @return int id of the inserted task
   public function insertTask($taskName, $startDate, $completedDate, $
        $sql = 'INSERT INTO tasks(task_name,start_date,completed_date,c
                . 'VALUES(:task name,:start date,:completed date,:compl
        $stmt = $this->pdo->prepare($sql);
        $stmt->execute([
            ':task name' => $taskName,
            ':start date' => $startDate,
            ':completed date' => $completedDate,
            ':completed' => $completed,
            ':project id' => $projectId,
        ]);
        return $this->pdo->lastInsertId();
}
```

In the insertTask() method, instead of binding values, we pass the inserted values as an array to the execute() method.

We use the following code in the index.php file to insert projects and their associated tasks into the projects and tasks table.



```
<?php
require 'vendor/autoload.php';
use App\SQLiteConnection;
use App\SQLiteInsert;
$pdo = (new SQLiteConnection())->connect();
$sqlite = new SQLiteInsert($pdo);
// insert a new project
$projectId = $sqlite->insertProject('PHP SQLite Demo');
$sqlite->insertTask('Prepare the sample database schema', '2016-06-01',
$sqlite->insertTask('Create new tables ', '2016-05-01', null, 0, $proje
$sqlite->insertTask('Insert some sample data', '2016-05-01', '2016-06-0
// insert a second project
$projectId = $sqlite->insertProject('Mastering SQLite');
// insert the tasks for the second project
$sqlite->insertTask('Go to sqlitetutorial.net', '2016-06-01', null, 0,
$sqlite->insertTask('Read all the tutorials.', '2016-06-01', null, 0, $
$sqlite->insertTask('Use Try It page to practice the SQLite commands.',
$sqlite->insertTask('Develop a simple SQLite-based application', '2016-
```

In this tutorial, we have shown you how to use the PDOStatement to insert data into the SQLite tables.