

Python and SQL

This web app was created with no particular intentions or ideas and has a goal to show some basic knowledge of SQLite 3 using a micro framework called Bottle. The project features insert, delete, and join SQL statements.

Data Organization

The database is made up of 3 tables called 'students', 'teachers', and 'lessons'. The students' table has an id as a primary key, and string columns for first name and last name. The same pattern applies to the teachers' table. The lessons table has two foreign keys named 'student_id' and 'teacher_id' which match with those in respective tables. Tables called students and teachers have one-to-many relationship with the lessons table.

Description

1. The home screen ('Students' tab) features the list of all created students by their first name, last name, and student id. The user can delete a particular user or select which will lead him to a personal student's cart with lessons.

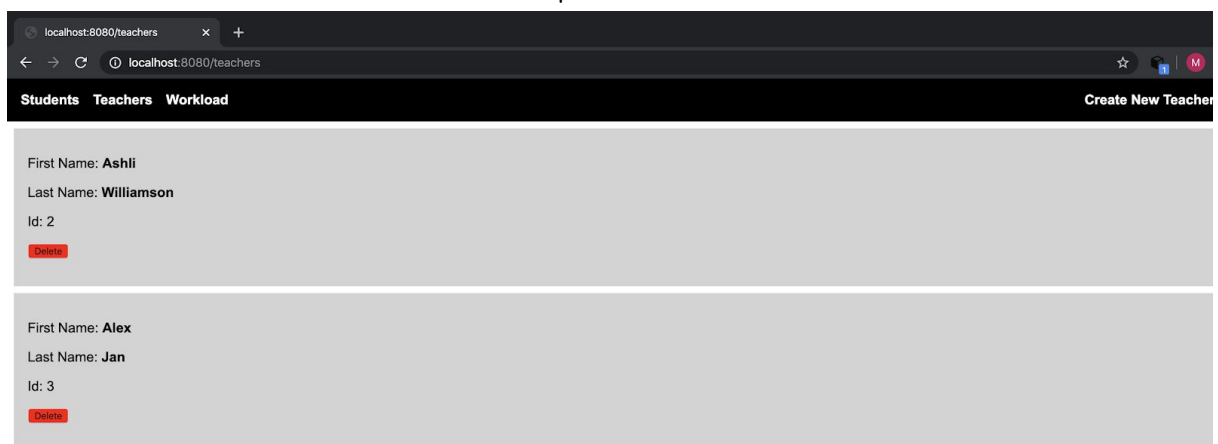


2. 'Create New Student' forwards to the form where a user can type in a first name and a last name of a student.



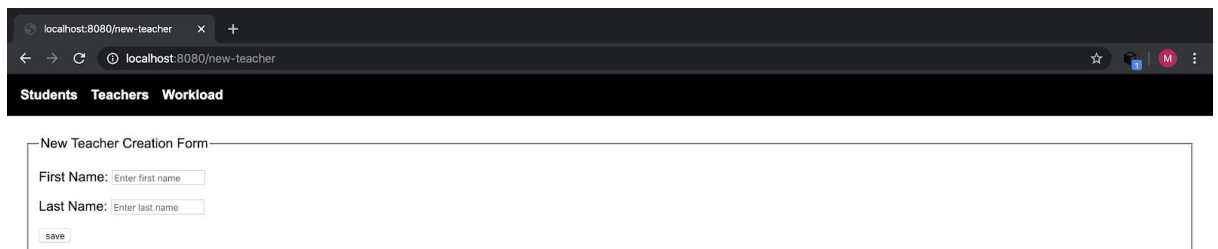
The screenshot shows a web browser window with the address bar displaying 'localhost:8080/new-student'. The browser's address bar also shows 'localhost:8080/new-student'. Below the address bar is a navigation bar with three tabs: 'Students', 'Teachers', and 'Workload'. The 'Students' tab is currently selected. The main content area displays a form titled 'New Student Creation Form'. The form contains two input fields: 'First Name' with a placeholder 'Enter first name' and 'Last Name' with a placeholder 'Enter last name'. Below these fields is a 'save' button.

3. The 'Teachers' tab has the same interpretation as the one with students however the selection feature is not present.



The screenshot shows a web browser window with the address bar displaying 'localhost:8080/teachers'. The browser's address bar also shows 'localhost:8080/teachers'. Below the address bar is a navigation bar with three tabs: 'Students', 'Teachers', and 'Workload'. The 'Teachers' tab is currently selected. The main content area displays a list of teachers. Each teacher entry shows their 'First Name', 'Last Name', and 'Id'. Below each entry is a 'Delete' button. The first teacher entry is 'Ashli Williamson' with Id: 2. The second teacher entry is 'Alex Jan' with Id: 3. A 'Create New Teacher' button is visible in the top right corner of the main content area.

4. 'Create New Teacher' forwards to the form where a user can type in a first name and a last name of a teacher.



The screenshot shows a web browser window with the address bar displaying 'localhost:8080/new-teacher'. The browser has a dark theme. Below the address bar is a navigation bar with three tabs: 'Students', 'Teachers', and 'Workload'. The 'Teachers' tab is active. The main content area is titled 'New Teacher Creation Form'. It contains two text input fields: 'First Name' with a placeholder 'Enter first name' and 'Last Name' with a placeholder 'Enter last name'. Below these fields is a 'save' button.

5. When a user selects a particular student, he is presented with a personal student's cart where he can look for the number of lessons saved in the database, add new or modify the old ones.



The screenshot shows a web browser window with the address bar displaying 'localhost:8080/?select=Select'. The browser has a dark theme. Below the address bar is a navigation bar with three tabs: 'Students', 'Teachers', and 'Workload'. The 'Students' tab is active. The main content area is titled 'Students'. It displays a message: 'You have selected **Jakub Perzanowski**'. Below this message are two forms for Ashli Williamson and Alex Jan. Each form has a 'Number of lessons' input field and a 'save' button. The 'Number of lessons' field for Ashli Williamson contains the value '15', and the field for Alex Jan contains the value 'None'.

6. The tab 'Workload' builds a graph of the total number of lessons grouped by teachers.

