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Due: 22.01.2020

Python and SQL

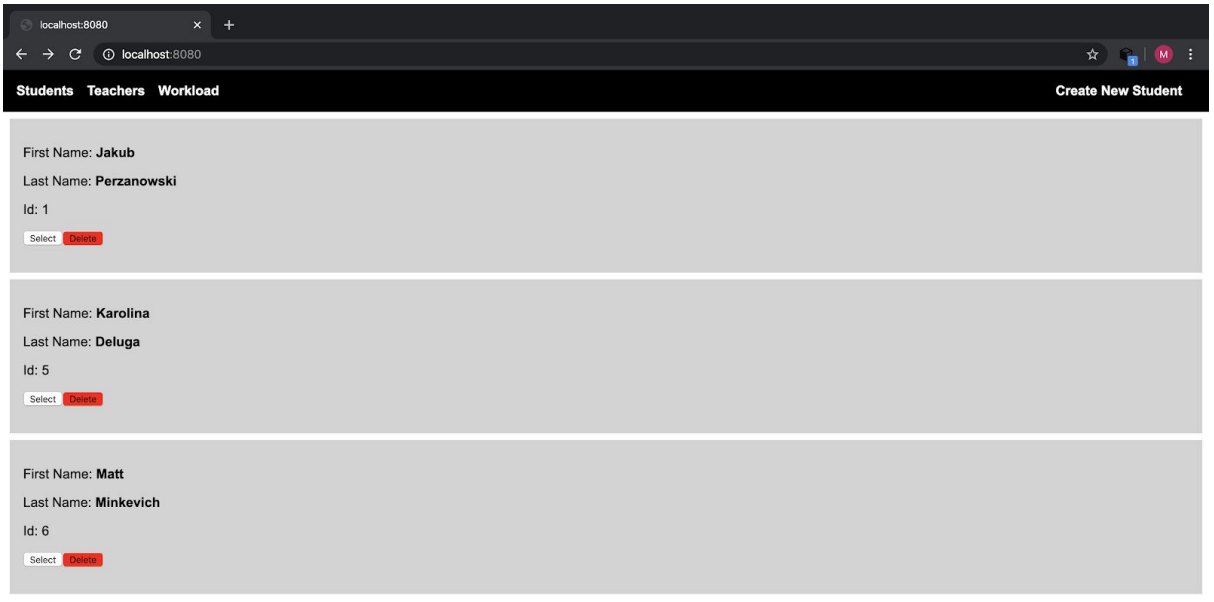
This web app was created with no particular intentions or ideas and has a goal to show some basic knowledge of SQLite 3 using a micro framework called Bottle. The project features insert, delete, and join SQL statements.

Data Organization

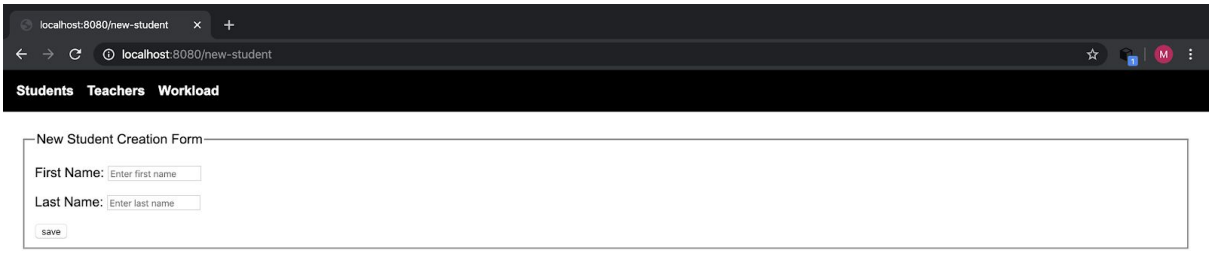
The database is made up of 3 tables called ‘students’, ‘teachers’, and ‘lessons’. The students’ table has an id as a primary key, and string columns for first name and last name. The same pattern applies to the teachers’ table. The lessons table has two foreign keys named ‘student_id’ and ‘teacher_id’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

Description

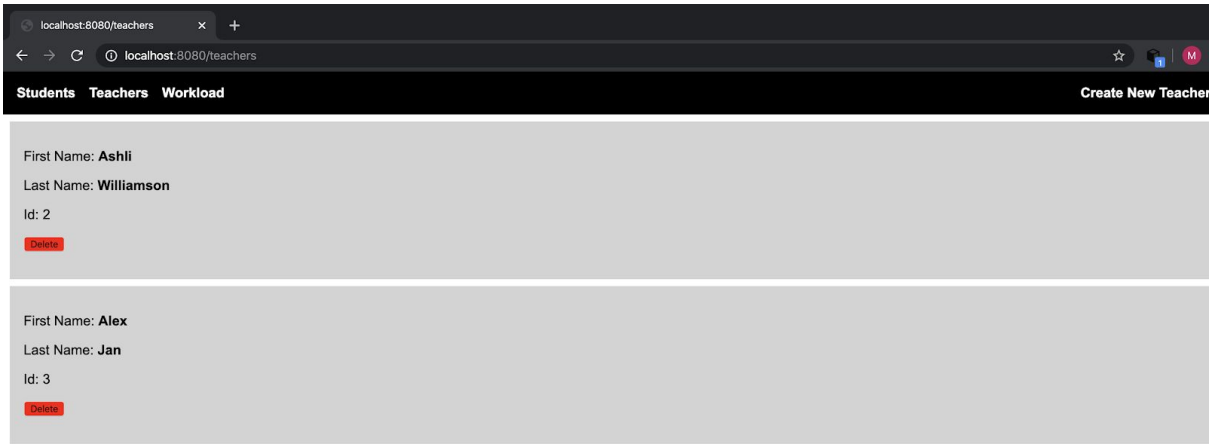
1. The home screen (‘Students’ tab) features the list of all created students by their first name, last name, and student id. The user can delete a particular user or select which will lead him to a personal student’s cart with lessons.



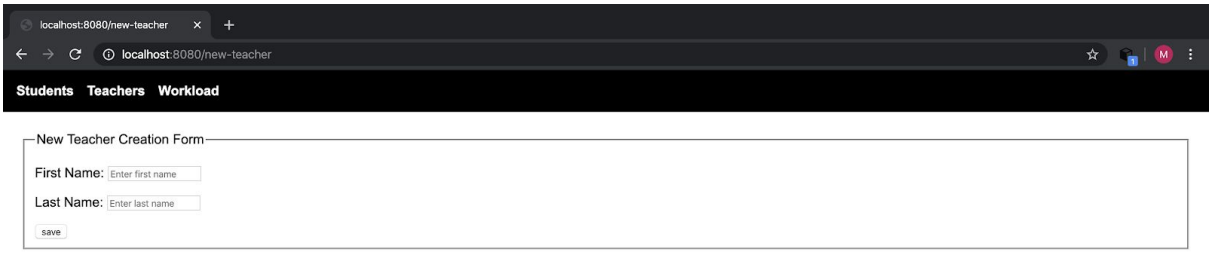
2. ‘Create New Student’ forwards to the form where a user can type in a first name and a last name of a student.



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



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



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.

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