



Assignment 3: A Website for Events in North Cyprus

This assignment aims to help you practice databases, HTML, CSS, browser-side scripting with JavaScript, and server-side scripting with Python Flask¹. Your main task is to develop a website to create events in north Cyprus.

You are expected to use HTML to define the content of web pages, CSS to design the web pages, JavaScript for browser-side scripting for web form validation purposes where appropriate, and Python Flask for server-side scripting. You are also expected to use an SQLite database to store and manage data.

Overview

In this assignment, you are expected to develop a simple website to create events in north Cyprus. People first need to register to create events. Active events will be publicly available which means there is no need to log in to see and search for these events.

Functionalities

The website should have the following functionalities for people who want to create an event:

- The home page should have a link to access another page that includes a web form for these people to register. They should be able to register with the following details: username, password, first name, last name, and email address. All these details are mandatory. The username should be unique for each person, and the password should include at least one upper case, one lower case and one digit and its length should be at least eight. If there is any problem, they will be directed to the registration page again and the problem will be shown to the user under the form. Otherwise, they will be directed to a page which shows the confirmation message and includes a link to go back to the home page.
- The home page should have a web form to allow these people to log in with their usernames and passwords. Once they log in, they will be directed to the home page again. If there is any problem, they will be directed to a page which shows the error message and includes a link to go back to the home page.
- After login, the home page should also have a link for these people to log out from the website. Once they log out, they will be directed to the home page again.
- After login, the home page should have a link for these people to access a page where they can create a new event. They should be able to add a new event with the following details: event name, description, location, city (which should be selected from a combo box), ticket price, and date & time. All these details are mandatory. A unique identifier will be automatically assigned to each event. If there is any problem, they will be directed to the event creation page again and the problem will be shown to the user under the form. Otherwise, they will be directed to a page which shows the confirmation message and includes a link to go back to the home page.
- After login, the home page should have a link for people to access a page where they can see their own events in a tabular structure. Next to each event, there should be a link to deactivate the event.

Name	Description	Location	City	Price	Date	Time	
...	Deactivate

The website should also allow all people to see and search for the active events as explained below. Active events are the ones which are not deactivated.

¹ <https://flask.palletsprojects.com/en/2.2.x/>

- The home page should list at most five recent active events for each city. If a particular city does not have any active event, then the website will show "No events" for that city. The events should be presented in a tabular format as shown below. You should not assume that there will be no other city in the future.

Name	City	Price	Date	Time	
...	See More

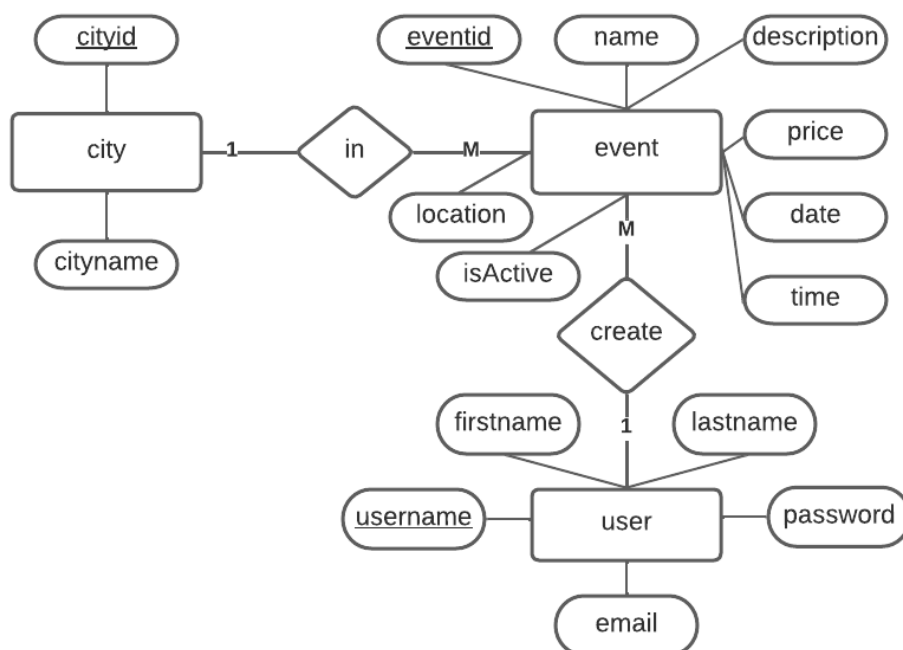
When people click a link called "See More", they will be directed to a page which shows all the details of the selected event as shown below. This page should also include a link to go back to the home page.

Name	...
Description	...
Location	...
City	...
Price	...
Date	...
Time	...

- The home page should have a text field with a button which allows searching for the active events based on keywords. The events whose names, descriptions, and/or locations include at least one of the keywords will be listed. These matching events should again be categorised based on the cities as mentioned above, and "No events" should be displayed for a city that the website does not find any matching active position.

Database

You need to create an SQLite database for this website based on the following entity-relationship diagram. You are expected to provide a separate Python script called **dbscript.py** to create necessary tables and insert necessary records into these tables.



You will also need to add the following details to the city table.

cityid	cityname
1	Lefkosa
2	Girne
3	Guzelyurt
4	Gazi Magusa
5	Lefke
6	Iskele

Rules

- You need to write your program by using **Python 3.x**.
- You can **only** use all built-in functions and modules, apart from Flask.
- You need to create your CSS and JavaScript files as external files, and include your HTML pages.
- You are not allowed to use any design template.
- You also need to create a file called **ReadMe.txt** which contains the following items. Please note that **if you do not submit ReadMe.txt, your submission will not be evaluated**.
 - Team members
 - Which version of Python 3.x you have used
 - Which operating system you have used
 - How you have worked as a team, especially how you have divided the tasks among the team members (who was responsible for what?), how you have communicated, how you have tested the program, etc.
- You need to put all your files (including your database file with the .db extension) into a folder that is named with your student id(s) and submit the compressed version of the folder in the **.zip** format.
- **Only one team member** should submit the assignment.
- **Code quality, modularity, efficiency, maintainability, and appropriate comments** will be part of the grading.

Grading Policy

The assignment will be graded as follows:

Grading Item	Mark (out of 100)
Database Creation Script	5
Login, Logout and Session Management	10
Register	5
Access User Events	10
Deactivate Events	10
Most Recent Active Event Categorised by City	10
Filter Event Categorised by City	20
See the Details of the Selected Event	10
Navigation within the website	10
Form Validation with JavaScript	5
Design with CSS	5