

## Django Project - Movie Theater

Let's focus on Django forms, views (create, edit, list, delete), and cookies because we do not have a database yet. We will use only one cookie (JSON format). This cookie should not have any initial data.

In the previous project, many groups added initial data on a view module. This is not the place to have data. Never save data from a user on a module in a global variable. For the moment, our data system is the cookie. Later, we will learn databases, and we will store the data there.

Your cookie should behave like a database. This dictionary must have a key which will act as a primary key (id). The dictionary will have the following structure:

```
dico_data = {
    1: {
        'name': "Movie name",
        'year': 2020,
        'actors': "Actor 1, Actor 2",
    },
    2: {
        ...
    },
    ...
}
```

When you dump this dictionary with json (`json.dumps(...)`), the ids will be converted to string, and when you load it, obviously, it will be a string. Find a solution to manage conversions.

Remember GET request is when you load data and POST is when you need to modify data. A view should have one function only. Only the form view has the two functions: GET to load the form (create or edit, edit with the values of the record), and POST to save the data. That is it. You need to keep your view as simple as you can.

Please implement the following views: list, create, edit, and delete views. You will probably need some helper methods to create or edit for example. Do not duplicate code, create and edit are similar.

If the cookie does not exist, you need to create it. If from any view, loading the json does not work, you must reset the data and have an empty dictionary in the cookie at this moment.

There are some functionalities that we did not cover in class. As a software developer, you need to learn how to search and how to do things you do not know. Not everything will be learned in class, and as the software landscape is always evolving, you will need to learn by yourself, or search on the internet or ask people. You need to read the directions carefully, and not just

repeat what we do in class. I ask you something different in the project for you to show me you are reading and thinking about what I asked you, and not repeating what I show you in class.

Please replicate the website functionality I showed you in class. Do not use CSS so you do not get distracted. Do not add additional fields.

There will be no project manager for this project. If you do not know how to do something specific, check the Django documentation first, Google it, ask on Piazza (general question, not question specific to your code) and then if your classmates do not have an answer, I am here to help you. But, I want to encourage you to try to look by yourself how to do something that is new for you or how to solve issues. Also, I want you to learn how to cooperate by helping each other. Remember: I do not want you to give the solution (code), but provide guidance to your classmates.

### **Required fields:**

- Name: max length 100, min length 3, required True
- Actors: max length 1000, min length 3, required True (textarea)
- Year : integer between 1888 and 2025

You need to display the messages for each successful or error action (when creating, editing, deleting data or when you have an url that does not match any id in the cookie).

When you create a movie, you must check what is the maximum id that exists in the dictionary and add +1 to it, if the dictionary is empty, the id will be 1.

### **Condition to create:**

If the movie name already exists in the database (lowercase or uppercase does not make a difference), return an error message

name: length between 3 and 100 characters, it is a required field

year: between 1888 and 2025 (only integer)

actors: length between 3 and 1000, required field, displayed as textarea

### **Condition to edit:**

The id should be in the dictionary. Otherwise, return an error message.

To update, the same condition as to create

### **Condition to delete:**

The id should be in the dictionary. Otherwise, return an error message

list: list by increasing the id number.

## What happens if I delete the cookie from the browser?

It will be like deleting a database, so the movie list should be empty.

### Hint:

You will need a template tag to get the values of the dictionary in the template. Create a new folder `templatetags` in `core/`, and inside that folder create a new file, `core_extras.py` and copy the following code:

---

```
from django import template

register = template.Library()

@register.filter('get_value_from_dict')
def get_value_from_dict(dict_data, key):
    """
    usage example {{ your_dict|get_value_from_dict:your_key }}
    """
    if key:
        return dict_data.get(key)
```

---

And then on your template, after extending `base.html`, you can load this template tag file:

---

```
{% extends "base.html" %}

{% load core_extras %}
```

---

And then you can use the template tag in the template like this (see <https://docs.djangoproject.com/en/4.2/howto/custom-template-tags/>):

```
dico_movie|get_value_from_dict:id
```

Also, a tip: in your loop on your template, you can define a template variable like this (see <https://docs.djangoproject.com/en/4.2/ref/templates/builtins/#with>)

```
{% with movie_info=dico_movie|get_value_from_dict:id %}
.....
{% endwith %}
```