



Meet Your New Enrollment and Course Management System



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Penn State, CMPSC 431W, Spring '20



PennState



Improved User Interface

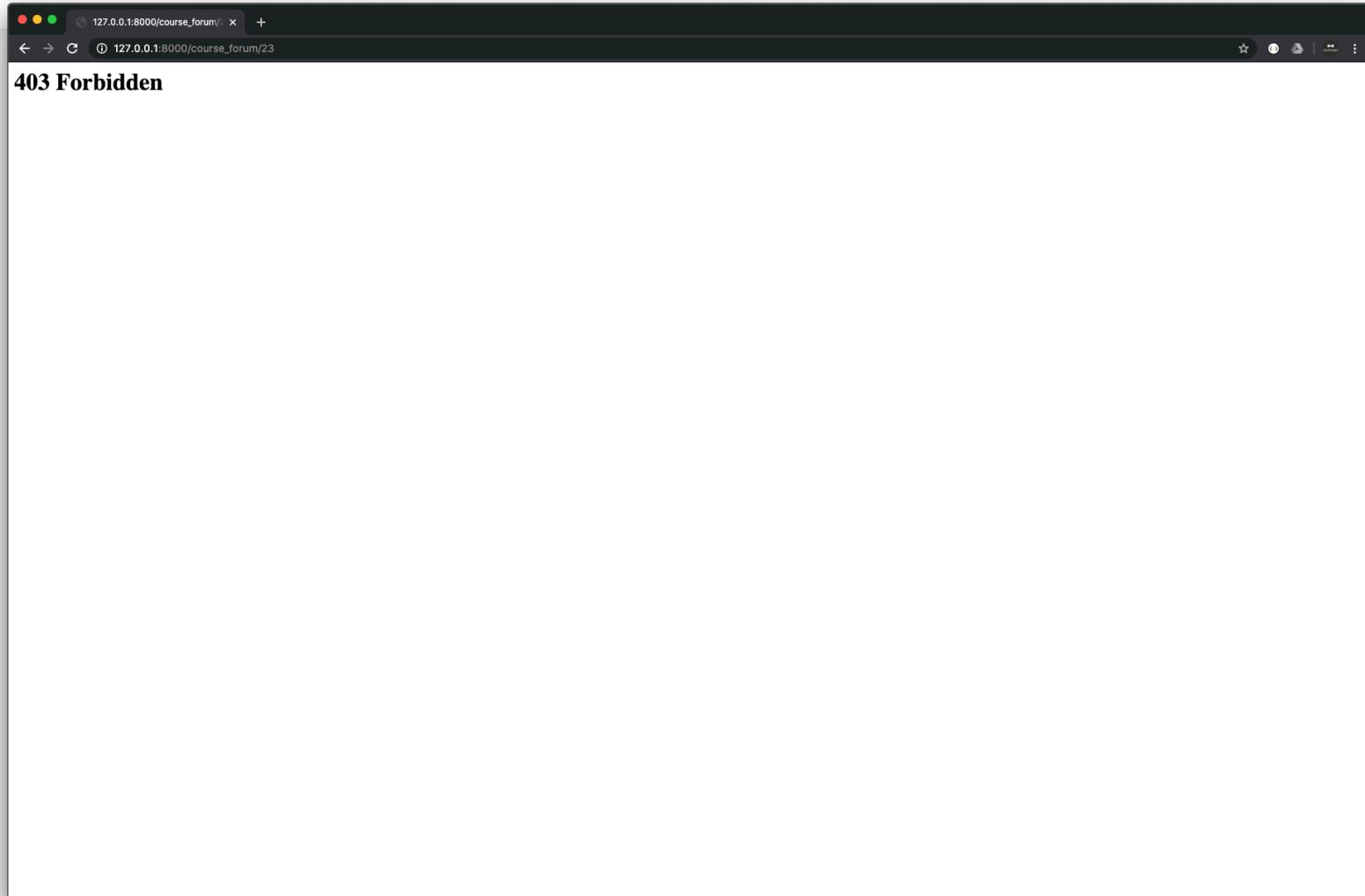
using Bootstrap 4

The image displays three screenshots of a web application interface, likely a student information system, demonstrating the use of Bootstrap 4 for an improved user interface.

- Home Page:** Shows a large banner image of a modern building at night. Below it, a "Welcome" section greets the user with their name and provides links to "My Enrolled Courses" and "My Profile".
- Profile Page:** Displays a user profile card with fields for Name, Access/Login ID, University Email, Age, Legal Gender, Primary Affiliation, and Major. It also includes sections for Additional Information and a file upload form for a profile picture.
- Final Gradebook:** A table titled "Enrollment Records for CMPEN 441, Section 2:" showing student names, access IDs, and "Update Grade" buttons for each.

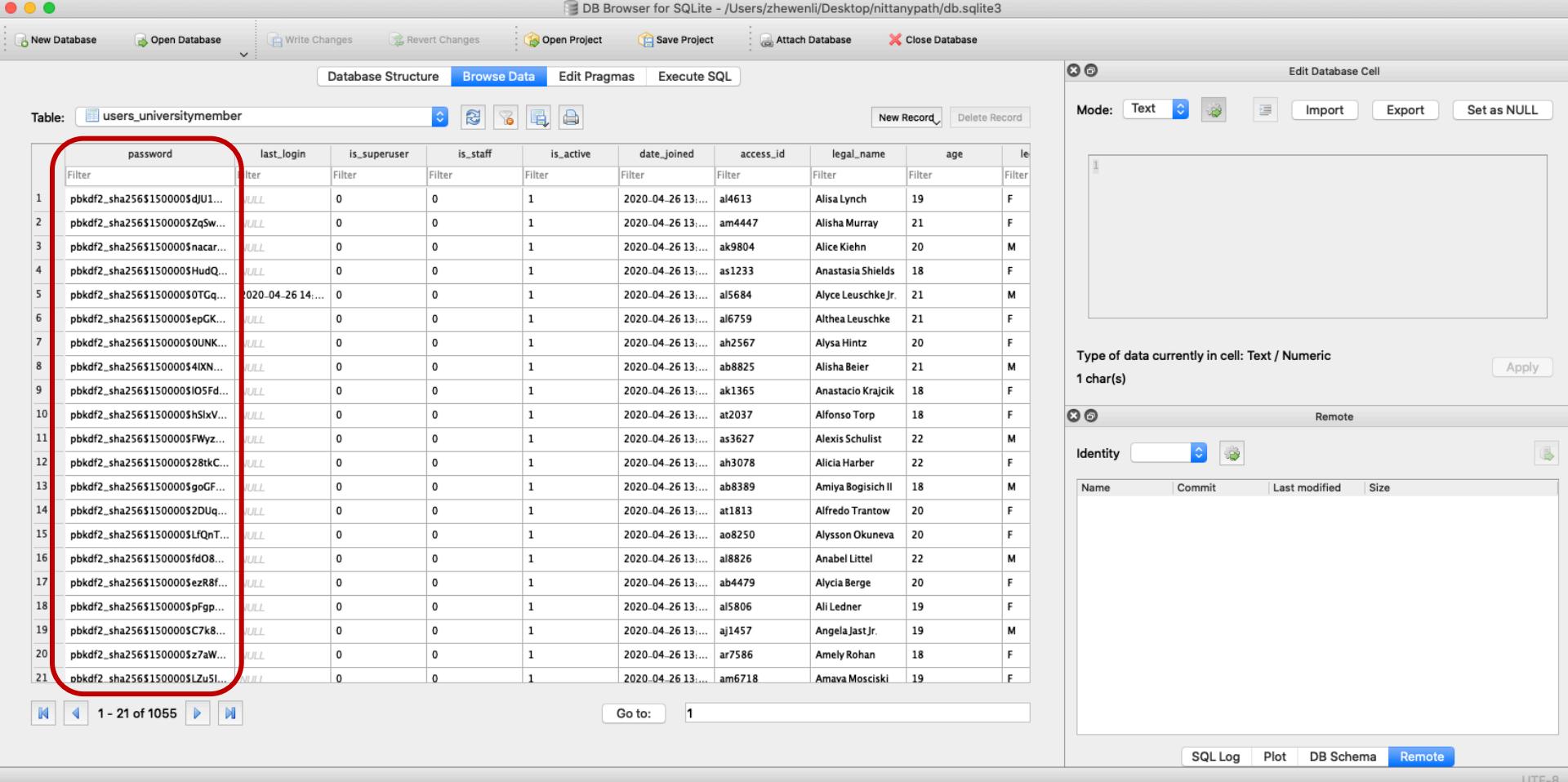
Strict Permission Control

for better security



Strict Permission Control

for better security



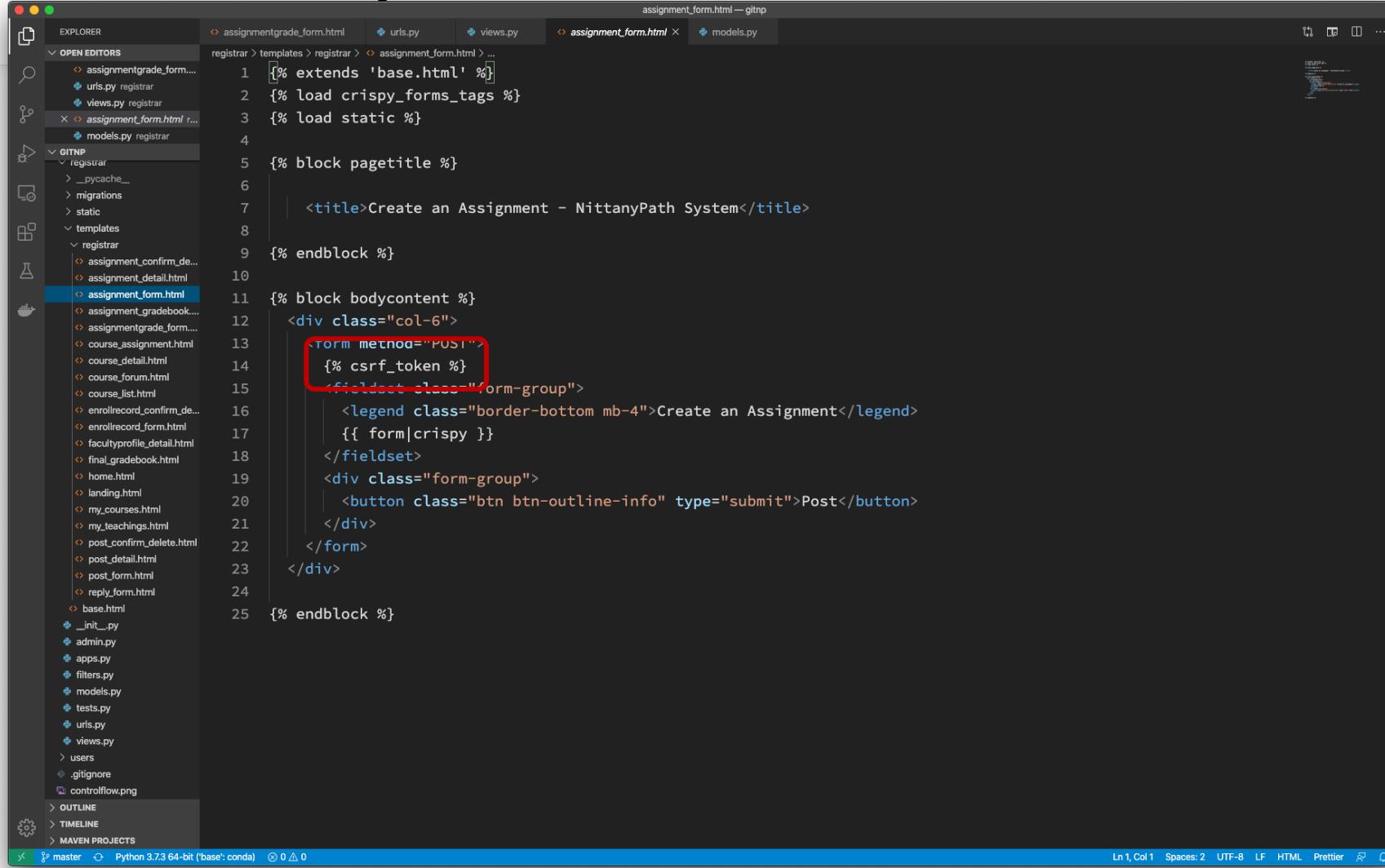
The screenshot shows the DB Browser for SQLite interface with the following details:

- Toolbar:** New Database, Open Database, Write Changes, Revert Changes, Open Project, Save Project, Attach Database, Close Database.
- Table Selection:** users_universitymember
- Table Structure:** password, last_login, is_superuser, is_staff, is_active, date_joined, access_id, legal_name, age, le
- Data View:** A grid of 21 rows of user data. The first column is numbered 1-21. The password column for all rows is highlighted with a red box.
- Bottom Navigation:** Go to: 1, SQL Log, Plot, DB Schema, Remote, UTF-8.

	password	last_login	is_superuser	is_staff	is_active	date_joined	access_id	legal_name	age	le
1	pbkdf2_sha256\$150000\$dJU1...	NULL	0	0	1	2020-04-26 13....	al4613	Alisa Lynch	19	F
2	pbkdf2_sha256\$150000\$ZqSw...	NULL	0	0	1	2020-04-26 13....	am4447	Alisha Murray	21	F
3	pbkdf2_sha256\$150000\$nacar...	NULL	0	0	1	2020-04-26 13....	ak9804	Alice Kiehn	20	M
4	pbkdf2_sha256\$150000\$HudQ...	NULL	0	0	1	2020-04-26 13....	as1233	Anastasia Shields	18	F
5	pbkdf2_sha256\$150000\$0TQg...	2020-04-26 14....	0	0	1	2020-04-26 13....	al5684	Alyce Leuschke Jr.	21	M
6	pbkdf2_sha256\$150000\$epCK...	NULL	0	0	1	2020-04-26 13....	al6759	Althea Leuschke	21	F
7	pbkdf2_sha256\$150000\$UNK...	NULL	0	0	1	2020-04-26 13....	ah2567	Alysa Hintz	20	F
8	pbkdf2_sha256\$150000\$4IXN...	NULL	0	0	1	2020-04-26 13....	ab8825	Alisha Beier	21	M
9	pbkdf2_sha256\$150000\$IOSFd...	NULL	0	0	1	2020-04-26 13....	ak1365	Anastacio Krajcik	18	F
10	pbkdf2_sha256\$150000\$hSlxV...	NULL	0	0	1	2020-04-26 13....	at2037	Alfonso Torp	18	F
11	pbkdf2_sha256\$150000\$FWyz...	NULL	0	0	1	2020-04-26 13....	as3627	Alexis Schulist	22	M
12	pbkdf2_sha256\$150000\$28tkC...	NULL	0	0	1	2020-04-26 13....	ah3078	Alicia Harber	22	F
13	pbkdf2_sha256\$150000\$goGF...	NULL	0	0	1	2020-04-26 13....	ab8389	Amiya Bogisch II	18	M
14	pbkdf2_sha256\$150000\$2DUq...	NULL	0	0	1	2020-04-26 13....	at1813	Alfredo Trantow	20	F
15	pbkdf2_sha256\$150000\$LfQnT...	NULL	0	0	1	2020-04-26 13....	ao8250	Alysson Okuneva	20	F
16	pbkdf2_sha256\$150000\$fdO8...	NULL	0	0	1	2020-04-26 13....	al8826	Anabel Littel	22	M
17	pbkdf2_sha256\$150000\$ezR8f...	NULL	0	0	1	2020-04-26 13....	ab4479	Alycia Berge	20	F
18	pbkdf2_sha256\$150000\$pFgp...	NULL	0	0	1	2020-04-26 13....	al5806	Ali Ledner	19	F
19	pbkdf2_sha256\$150000\$C7k8...	NULL	0	0	1	2020-04-26 13....	aj1457	Angela Jast Jr.	19	M
20	pbkdf2_sha256\$150000\$z7aW...	NULL	0	0	1	2020-04-26 13....	ar7586	Amely Rohan	18	F
21	pbkdf2_sha256\$150000\$Lzu5I...	NULL	0	0	1	2020-04-26 13....	am6718	Amava Mosciski	19	F

Strict Permission Control

for better security



A screenshot of a code editor (Visual Studio Code) displaying a Python template file named `assignment_form.html`. The file contains Django template code. A specific line of code, which includes a call to the `csrf_token` template tag, is highlighted with a red rectangular box.

```
% extends 'base.html' %}
{% load crispy_forms_tags %}
{% load static %}

{% block pagetitle %}
<title>Create an Assignment - NittanyPath System</title>
{% endblock %}

{% block bodycontent %}

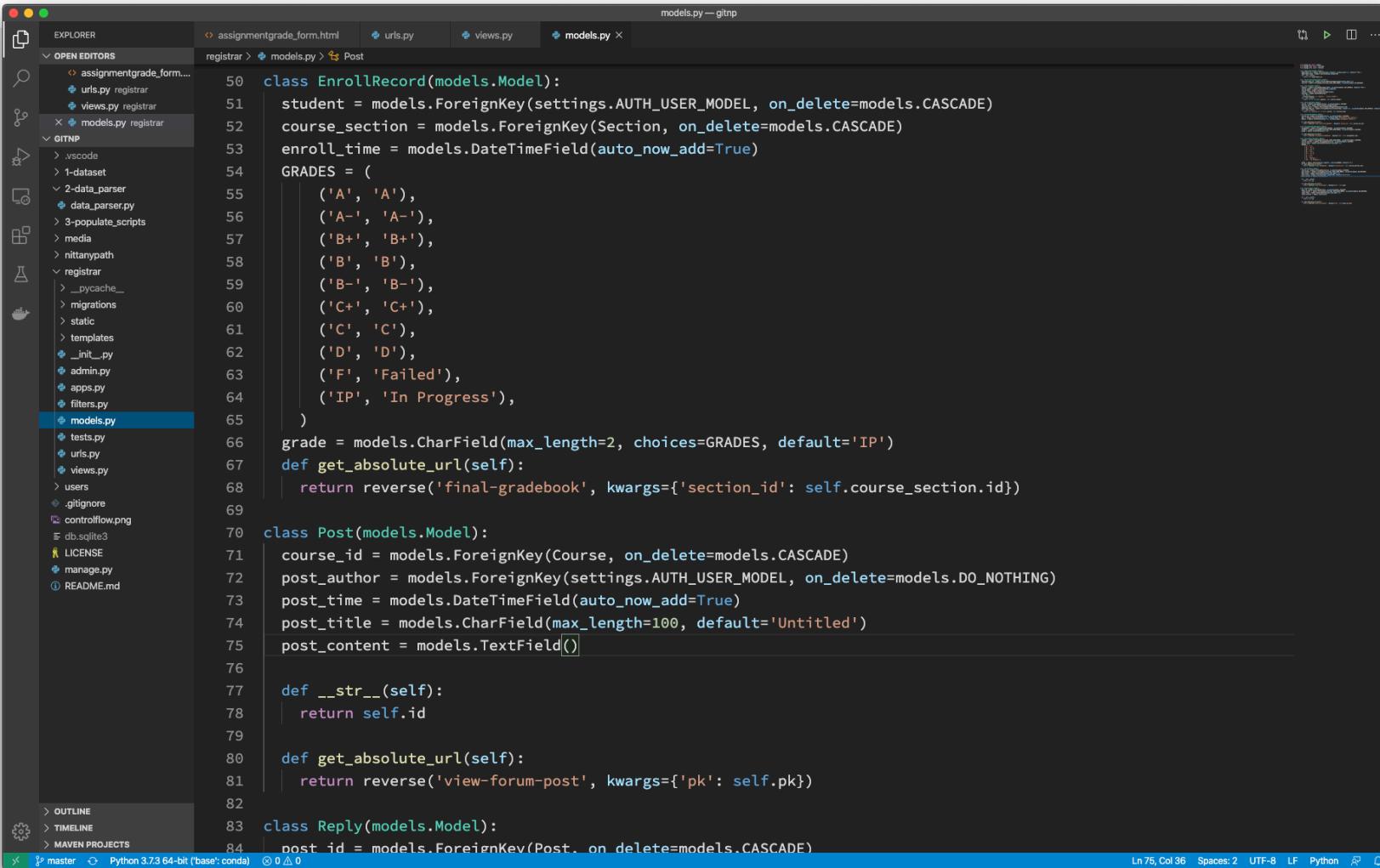

<form method="POST">
    {% csrf_token %}
    <fieldset class="form-group">
        <legend class="border-bottom mb-4">Create an Assignment</legend>
        {{ form|crispy }}
    </fieldset>
    <div class="form-group">
        <button class="btn btn-outline-info" type="submit">Post</button>
    </div>
</form>


{% endblock %}
```

The code editor interface shows the file path `assignmentgrade_form.html` in the top bar, and the file `assignment_form.html` is open in the main editor area. The sidebar on the left shows the project structure, including files like `urls.py`, `views.py`, and `models.py`. The bottom status bar indicates the file is in master branch, using Python 3.7.3, and has 0 changes.

Natural Support for Various Databases

provided by Django and third parties



The screenshot shows a dark-themed code editor interface with the following details:

- Explorer View:** Shows the project structure with files like assignmentgrade_form.html, urls.py, views.py, and models.py.
- Editor View:** Displays the code for three Django models:
 - EnrollRecord:** A model with a ForeignKey to AUTH_USER_MODEL and another to Section. It has a DateTimeField for enrollment time and a CharField for grade with choices ('A+', 'A-', 'B+', 'B-', 'C+', 'C-', 'D+', 'F', 'Failed', 'IP').
 - Post:** A model with a ForeignKey to Course, another to AUTH_USER_MODEL, and fields for post time, title, and content.
 - Reply:** A model with a ForeignKey to Post.
- Status Bar:** Shows the file is 'models.py — gitnp', the branch is 'master', Python version is 'Python 3.7.3 64-bit (base: conda)', and the current line is 'Ln 75, Col 36'.

Easy Migration from Old System

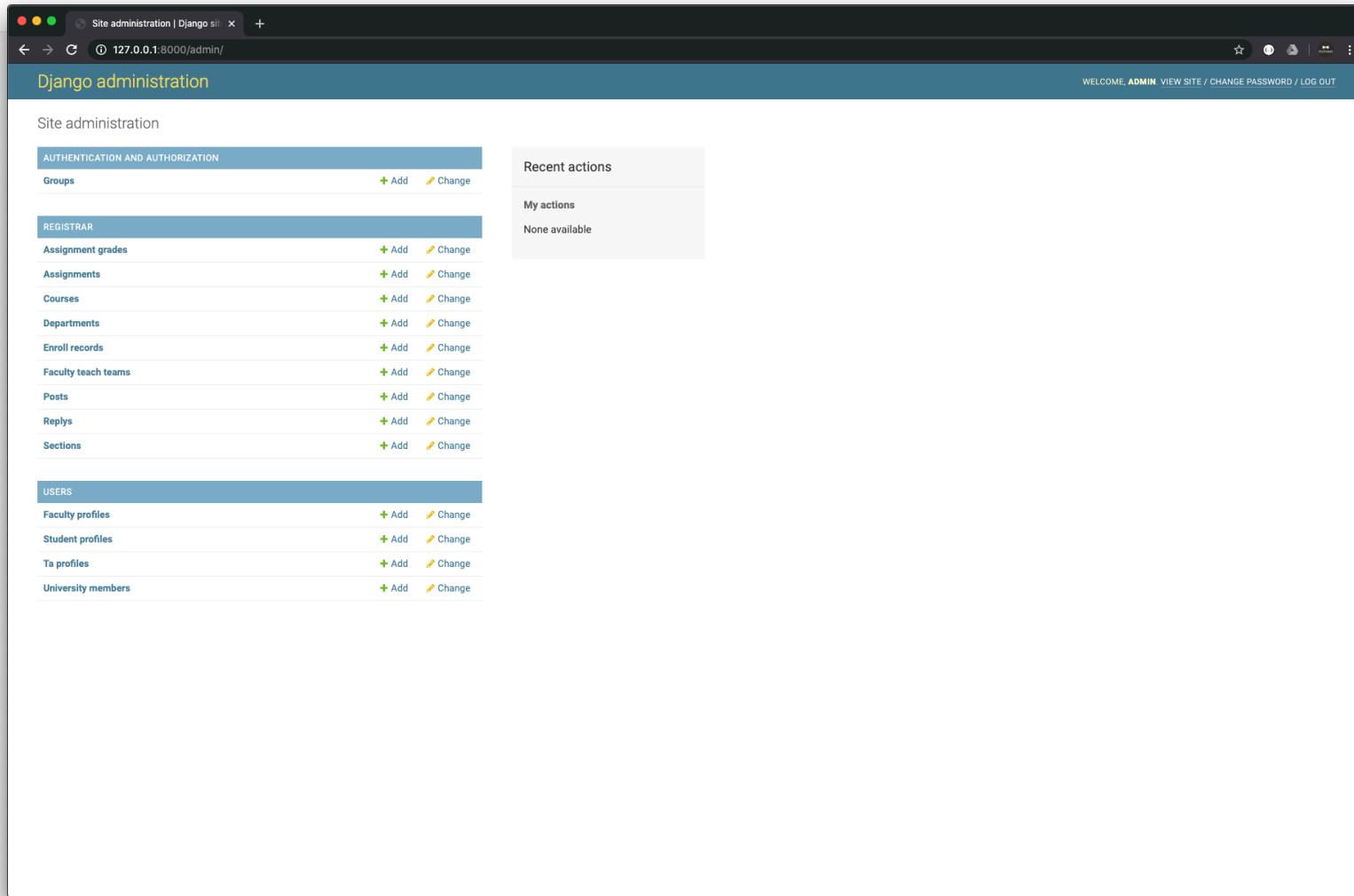
using provided population scripts

1-dataset	▶	1-Zipcodes.csv
2-data_parser	▶	2-StudentProfiles.csv
3-populate_scripts	▶	3-Courses.csv
controlflow.png		4-Sections.csv
db.sqlite3		5-Enrollments.csv
LICENSE		6-Depts.csv
manage.py		7-FacultyProfiles.csv
media	▶	8-FacultyTeachTeam.csv
nittanypath	▶	9-PostsReplies.csv
README.md		10-AssignmentGrades.csv
registrar	▶	data_parser.py
users	▶	

1-dataset	▶	1-zipcodes.py
2-data_parser	▶	2-depts.py
3-populate_scripts	▶	3-studentprofiles.py
controlflow.png		4-facultyprofiles.py
db.sqlite3		5-course.py
LICENSE		6-faculteteachteam.py
manage.py		7-section.py
media	▶	8-enrollment.py
nittanypath	▶	9-postreply.py
README.md		10-assignmentgrade.py
registrar	▶	
users	▶	

WYSIWYG Admin Page

for easy management



All Features Implemented

comparing to initial proposal

zI-phase-i.pdf

Open with Preview

CMPSC 431W

Spring 2020

 PennState

NittanyPath Project Phase I Report

Feb 18, 2020



Eric Zhewen Li, zxli163@psu.edu

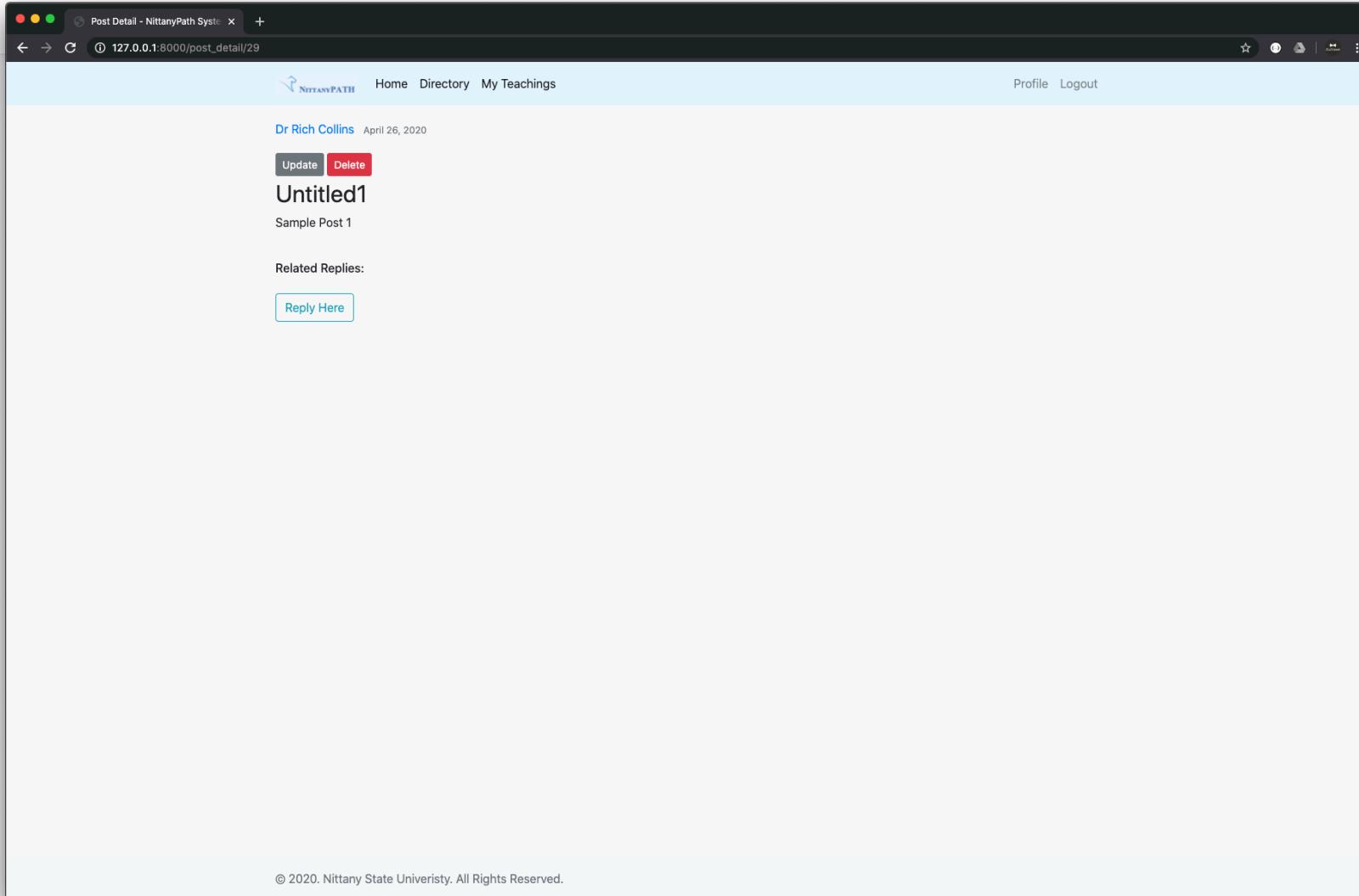
Instructor: Dr. Wang-Chien Lee

Collaborators: None

The right side of the slide shows a PDF document titled "zI-phase-i.pdf" in a preview window. The document header includes the course number "CMPSC 431W" and the semester "Spring 2020". It features the Penn State logo and the title "NittanyPath Project Phase I Report" dated "Feb 18, 2020". Below the title is the NittanyPath logo, which consists of a blue outline of a dog's head and the word "NITTANYPATH" in blue capital letters. The document body contains several sections of text, some of which are redacted with black bars. At the bottom of the page, there is contact information for the author, Eric Zhewen Li, and his email address, along with the names of the instructor and collaborator.

Redesigned Post & Reply Page

to be rolled-out in future versions



Improved Gradebook Design

to be rolled-out in future versions

The screenshot shows a web browser window titled "Final Gradebook - NittanyPath". The URL in the address bar is "127.0.0.1:8000/final_gradebook/12". The page header includes the NittanyPATH logo, navigation links for "Home", "Directory", "My Teachings", "Profile", and "Logout". The main content area has a light gray background and displays the following text:

Enrollment Records for CMPEN 441, Section 2:

Use this page to update final grades for students enrolled in this section.

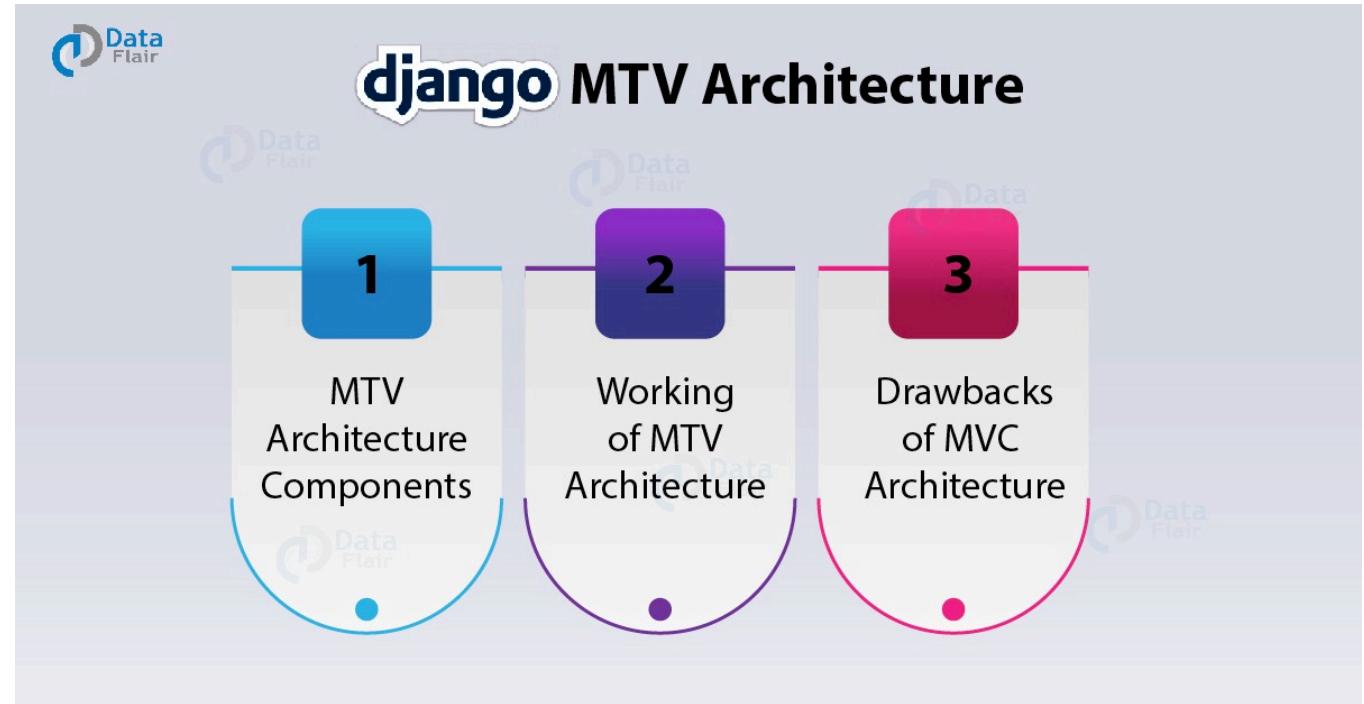
Student Name	Access ID	Action
Amiya Bogisich II	ab8389	Update Grade
Thora Predovic Sr.	tp3946	Update Grade
Mrs. Albertha Kautzer	ma3543	Update Grade
Robb Hegmann	rh4718	Update Grade
Nettie Schowalter	ns1210	Update Grade
Mafalda Cremin	mc8336	Update Grade
Vivienne Nolan	vn4576	Update Grade
Brice Pacocha	bp7844	Update Grade
Halle Mann	hm8630	Update Grade
Electa VonRueden	ev8921	Update Grade
Dr. Sage Smitham	ds5937	Update Grade
Phoebe Murazik I	pm4249	Update Grade
Keshaun Cremin	kc1302	Update Grade

Database Augmentation

to be rolled-out in future versions

- Add Time, Location, and Affiliated Sections (Lab) to Courses
- Email Reset Password Function Coming Soon
- Self-Enrollment and Waitlist Function Coming Soon

Reflection



Reflection



Reflection

The image shows a YouTube channel page for 'Django Series'. The channel banner features the Python logo and the text 'DJANGO SERIES' above 'GETTING STARTED'. Below the banner, the channel name 'Django Tutorials' is displayed, along with the number of videos (17) and views (1,400,975), and the last update date (Feb 18, 2019). A description of the series follows, stating: 'Python Django Tutorials. In this series, we will be learning how to build a full-featured Django application from scratch. We will learn how to get started with Django, use templates, create a database, upload pictures, create an authentication system, and much more.' At the bottom, there is a profile picture of Corey Schafer, his name, and a red 'SUBSCRIBE' button. To the right of the channel info, a list of 6 video thumbnails is shown, each with a title, duration, and the name 'Corey Schafer'.

Video Number	Title	Duration	Uploader
1	Python Django Tutorial: Full-Featured Web App Part 1 - Getting Started	15:32	Corey Schafer
2	Python Django Tutorial: Full-Featured Web App Part 2 - Applications and Routes	20:27	Corey Schafer
3	Python Django Tutorial: Full-Featured Web App Part 3 - Templates	45:45	Corey Schafer
4	Python Django Tutorial: Full-Featured Web App Part 4 - Admin Page	9:00	Corey Schafer
5	Python Django Tutorial: Full-Featured Web App Part 5 - Database and Migrations	38:47	Corey Schafer
6	Python Django Tutorial: Full-Featured Web App Part 6 - User Registration	45:56	Corey Schafer