

The artifact I'm submitting are the included code fragments where I needed to include a class for the Doctor to be able to edit the medical record. I updated the forms.py to include a form for editing medical records:

```
from django import forms
from .models import MedicalNote, Appointment, MedicalRecord

class MedicalNoteForm(forms.ModelForm):
    class Meta:
        model = MedicalNote
        fields = ['content']

class EditMedicalRecordForm(forms.ModelForm):
    class Meta:
        model = MedicalRecord
        fields = ['notes']
        widgets = {
            'notes': forms.CheckboxSelectMultiple,
        }

class AppointmentForm(forms.ModelForm):
    class Meta:
        model = Appointment
        fields = ['date', 'time']
```

Then within views.py, I needed to add a view to handle the editing portion of the medical records with JUST the Doctor role:

```
@login_required
def edit_medical_record(request, record_id):
    medical_record = get_object_or_404(MedicalRecord, id=record_id)

    if request.user.role == 'doctor':
        if request.method == 'POST':
            form = EditMedicalRecordForm(request.POST, instance=medical_record)
            if form.is_valid():
                form.save()
                return redirect('view_medical_record', patient_id=medical_record.patient.id)
        else:
            form = EditMedicalRecordForm(instance=medical_record)
            return render(request, 'edit_medical_record.html', {'form': form, 'medical_record': medical_record})
    else:
        return redirect('home')
```

I also had to add the URL pattern within the urls.py portion:

```

from django.urls import path
from . import views

urlpatterns = [
    path('add_note/<int:patient_id>/', views.add_medical_note, name='add_medical_note'),
    path('view_record/<int:patient_id>/', views.view_medical_record, name='view_medical_record'),
    path('schedule_appointment/<int:doctor_id>/', views.schedule_appointment, name='schedule_appointment'),
    path('view_appointments/', views.view_appointments, name='view_appointments'),
    path('manage_users/', views.manage_users, name='manage_users'),
    path('edit_record/<int:record_id>/', views.edit_medical_record, name='edit_medical_record'),
    # Additional paths for user management
]

```

Created a new template called “edit_medical_record”

```

HealthcareEMR > templates > edit_medical_record > html
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Edit Medical Record</title>
7  </head>
8  <body>
9      <h1>Edit Medical Record for {{ medical_record.patient.user.username }}</h1>
10     <form method="post">
11         {% csrf_token %}
12         {{ form.as_p }}
13         <button type="submit">Save Changes</button>
14     </form>
15     <a href="{% url 'view_medical_record' medical_record.patient.id %}">Back to Medical Record</a>
16 </body>
17 </html>

```

Then I updated the “view_medical_record” to include a link to edit the medical record ONLY if the user is under the role of a Doctor:

```

HealthcareEMR > templates > view_medical_record.html > html > body > ul
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>Medical Record for {{ patient.user.username }}</title>
7  </head>
8  <body>
9    <h1>Medical Record for {{ patient.user.username }}</h1>
10   <ul>
11     {% for record in medical_records %}
12       <li>
13         <strong>Record Date:</strong> {{ record.created_at }}<br>
14         {% for note in record.notes.all %}
15           <p>{{ note.content }} - <em>by {{ note.created_by.username }} on {{ note.created_at }}</em></p>
16         {% endfor %}
17         {% if user.role == 'doctor' %}
18           <a href="{% url 'edit_medical_record' record.id %}">Edit Record</a>
19         {% endif %}
20       </li>
21     {% endfor %}
22   </ul>
23   {% if user.role == 'doctor' or user.role == 'nurse' %}
24     <a href="{% url 'add_medical_note' patient.id %}">Add Medical Note</a>
25   {% endif %}
26   <a href="{% url 'home' %}">Back to Home</a>
27 </body>
28 </html>

```

In brief terms, these changes were added to the system so doctors can edit medical records, while nurses can view and add notes. The “edit_medical_record” view checks the user’s role and only allows doctors to make changes to the medical record. This artifact was started on July 20, 2024 but finished on July 21, 2024.

I met the course objectives with what I had planned, as I wanted to showcase the user roles and the permissions that each role was given. Initially, I didn’t include that the Doctor could edit the medical record. Now, that change is showcased from the above.

What I learned from this as far as creating goes, is how crucial it is for me to map out the items I want to include before I go about in coding. This helps to ensure that I’m including features that are necessary for the software to run. I have yet to face any challenges within this portion.