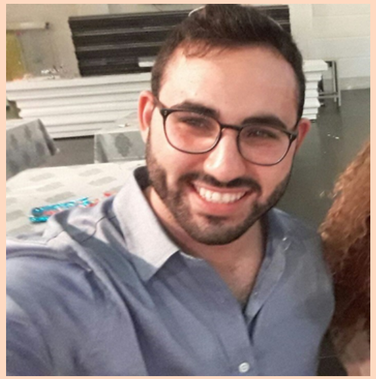
High.Teach

Demo 3

Contents:

The team:

David Cohen



Idan Rosenberg

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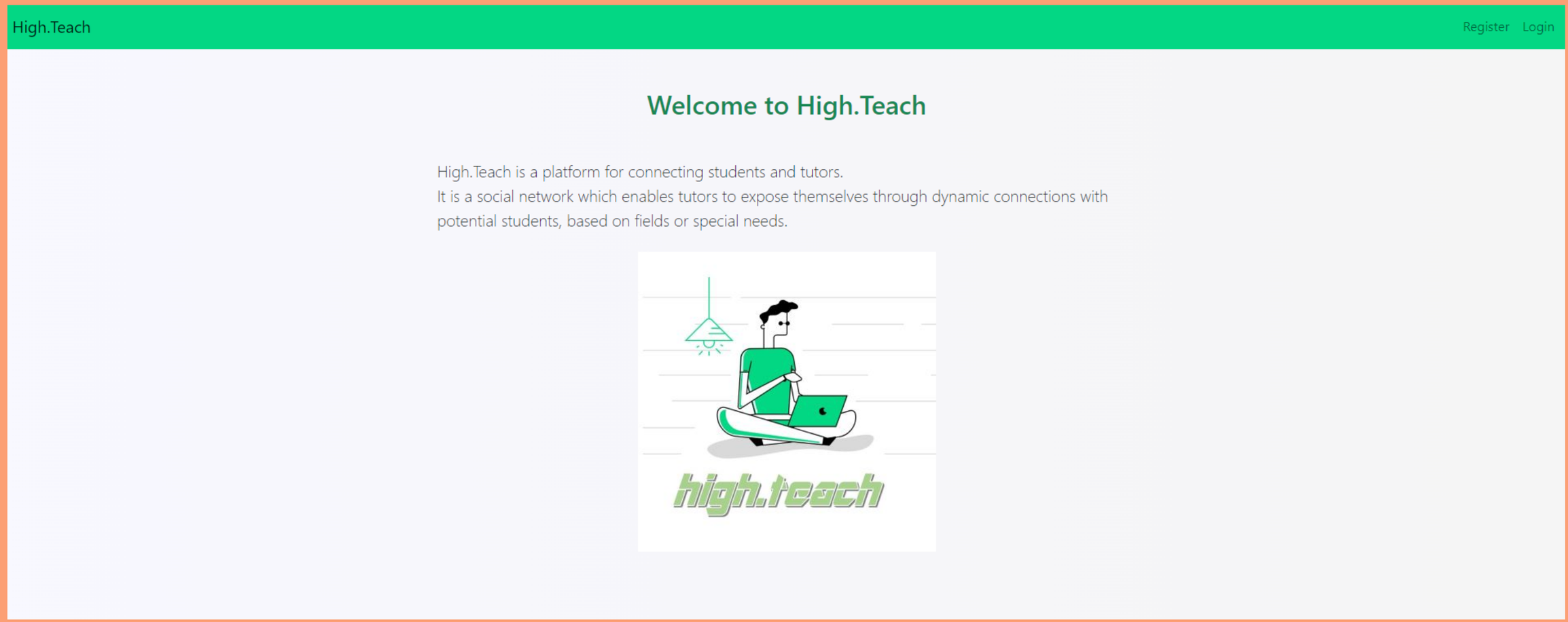
In the previous presentation we presented the different models that our application contains. The understanding of the various entities necessary for the workflow of our system.

Now, we have moved to the UI stage, the implementation of the client interface and the communication between the user's actions and the information that the server provides us.

How we worked

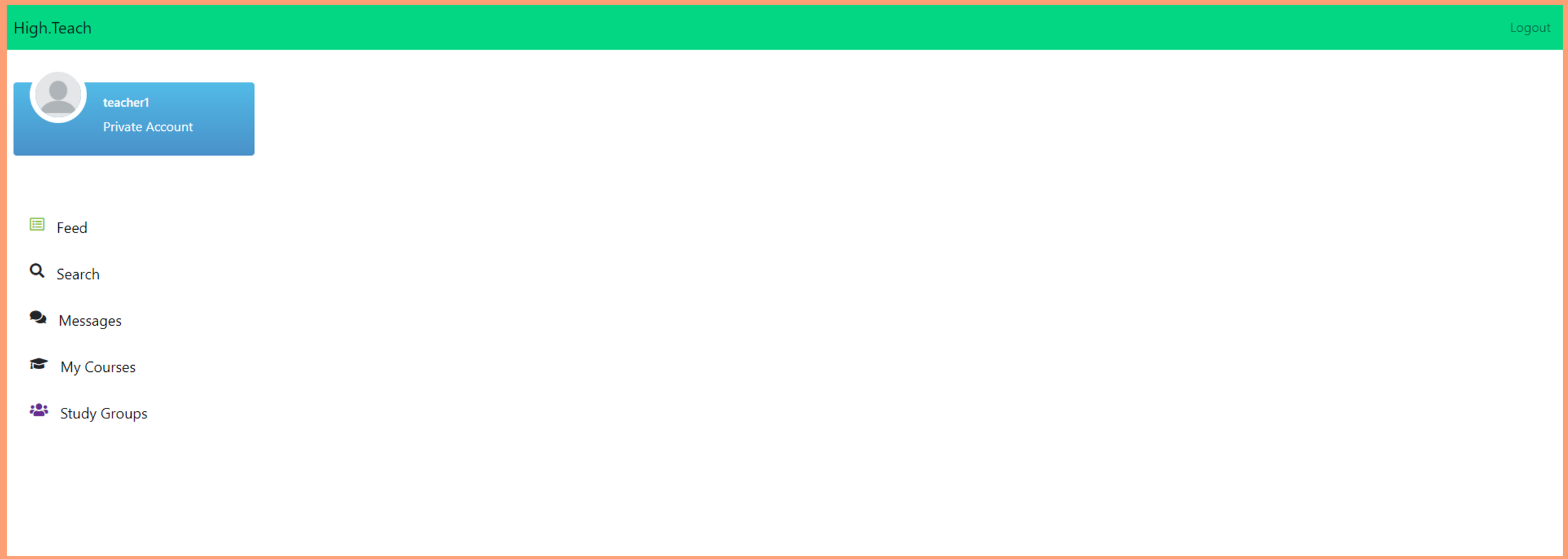
First we created a base html files for the homepage and the screen after logging in. We chose an icon of light bulb indicating the possibility of sharing knowledge and ideas across the High.Teach platform. 💡
All of these formed the first design infrastructure for the app.
We decided to start working on the features that represent the services provided on our platform: courses (which include reviews) and study groups.
The PRs planned for the coming week (toward the last demo) are PRs related to the social issue: user profile, chat and feed.

Home Page



*We offer a temporary connection method using the Admin UI

A base for the "logged in user" application



We will present now video segments showing how 3 features we've already implemented look and work from a user's point of view:

Management of Courses

127.0.0.1:8000/

High.Teach

Register Login

Welcome to High.Teach

High.Teach is a platform for connecting students and tutors.
It is a social network which enables tutors to expose themselves through dynamic connections with potential students, based on fields or special needs.

Review

Study Group

High.Teach

127.0.0.1:8000/study-group/list/

High.Teach Logout

idan
Private Account

- Feed
- Search
- Messages
- My Courses
- Study Groups

My Study Groups

Operating Systems Exc3
Group for latest assignment...
1/3 Members
Leave Group

Computability- Omer's group
Computability course at MT...
1/25 Members
Leave Group

Study group for Java
This is a study group dedica...
1/10 Members
Leave Group

Science
This is a group for science l...
3/10 Members
Leave Group

History
This is a group for history b...
2/7 Members
Leave Group

Study Group Creation

Field:

Group description:

Capacity:

Create Group

A demonstration of tests being run in GitHub actions

Courses:

```python
@pytest.mark.django_db
class TestCoursePageView:

    def test_coures_page_authorized(self, authorized_client, persist_course):
        course_response = authorized_client.get('/course/' + str(persist_course.course_id))
        assert course_response.status_code == 200
        expected_template_name = 'course_page.html'
        page_templates = course_response.templates[0].name
        assert expected_template_name in page_templates

    def test_courses_page_unauthorized(self, client, persist_course):
        course_response = client.get('/course/' + str(persist_course.course_id))
        assert course_response.status_code == 302

    def test_enroll_in_course(self, authorized_client, persist_course, persist_user):
        student_course = {'teacher_course_id': persist_course, 'student_id': persist_user}
        assert not StudentCourse.objects.filter(**student_course).exists()
        course_creation_response = authorized_client.post("/course/" + str(persist_course.course_id) + "/connect",
                                                          follow=True)
        assert course_creation_response.status_code == 200
        assert StudentCourse.objects.filter(**student_course).exists()
        expected_template_name = 'course_page.html'
        page_templates = course_creation_response.templates[0].name
        assert expected_template_name in page_templates

    def test_show_course_page(self, authorized_client, persist_course):
        response = authorized_client.get("/course/" + str(persist_course.course_id))
        assert response.status_code == 200
        course_in_page = response.context['course']
        assert persist_course.course_id == course_in_page.course_id
```

Tests - Courses

```python
@pytest.mark.django_db
class TestAddCourseView:

    def test_courses_add_authorized(self, authorized_client):
        course_response = authorized_client.get('/course/add')
        assert course_response.status_code == 200
        assert 'add_course.html' in course_response.templates[0].name

    def test_courses_add_unauthorized(self, client):
        course_response = client.get('/course/add')
        assert course_response.status_code == 302

    def test_add_course(self, authorized_client):
        teacher_course = {"course_name": COURSE_NAME, "description": DESCRIPTION,
                          "difficulty_level": DIFFICULTY, "category": CATEGORY,
                          "price": PRICE, "years_of_experience": YEARS_OF_EXP}
        assert not TeacherCourse.objects.filter(**teacher_course).exists()
        course_creation_response = authorized_client.post("/course/add", teacher_course, follow=True)
        assert course_creation_response.status_code == 200
        assert 'courses.html' in course_creation_response.templates[0].name
        assert TeacherCourse.objects.filter(**teacher_course).exists()
```

Tests - Courses

```python
@pytest.mark.django_db
class TestCourseTableView:

    def test_courses_list_authorized(self, authorized_client):
        course_response = authorized_client.get('/course/')
        assert course_response.status_code == 200
        assert 'courses.html' in course_response.templates[0].name

    def test_courses_list_unauthorized(self, client):
        course_response = client.get('/course/')
        assert course_response.status_code == 302

    def test_show_course_that_user_teaches(self, authorized_client, teacher_course_zero):
        response = authorized_client.get(reverse('show_courses'))
        assert response.status_code == 200
        courses_ids = [course.pk for course in response.context['courses']]
        assert teacher_course_zero.course_id in courses_ids

    def test_show_course_that_user_enrolled_in(self, authorized_client, persist_first_student_course):
        response = authorized_client.get(reverse('show_courses'))
        assert response.status_code == 200
        courses_ids = [course.pk for course in response.context['courses']]
        assert persist_first_student_course.student_course_id in courses_ids
```

Tests - Review

```python
@pytest.mark.django_db
class TestReviewView:
    def test_create_review(self, client, persist_user, persist_review):
        client.force_login(persist_user)
        response = client.post(reverse('create_review', args=[persist_review.course_id]), {
            'rating': persist_review.rating,
            'content': persist_review.content
        })
        assert response.status_code == 302
        assert Review.objects.exists()

    def test_invalid_review_message(self, client, persist_user, persist_review):
        client.force_login(persist_user)
        response = client.post(reverse('create_review', args=[persist_review.course_id]), {
            'content': persist_review.content
        })
        messages = list(get_messages(response.wsgi_request))
        assert len(messages) == 1
        assert str(messages[0]) == "You must enter rating"

    def test_update_review(self, client, persist_user, persist_review):
        client.force_login(persist_user)
        response = client.post(reverse('update_review', args=[persist_review.pk]),
                               data={'rating': persist_review.rating, 'content': persist_review.content})
        assert response.status_code == 302
        assert Review.objects.get(pk=persist_review.pk).rating == 1
        assert Review.objects.get(pk=persist_review.pk).content == "Greate course"
```

Tests - Review

```python
def test_delete_review(self, client, persist_user, persist_review):
    client.force_login(persist_user)
    response = client.post(reverse('delete_review', args=[persist_review.pk]))
    assert response.status_code == 302
    assert not Review.objects.filter(pk=persist_review.pk).exists()

def test_show_reviews_view(self, client, persist_user, persist_review):
    client.force_login(persist_user)
    response = client.get(reverse('reviews', args=[persist_review.course_id]))
    assert response.status_code == 200
    assert any(persist_review.pk == review.pk for review in response.context['reviews_by_course'])

def test_show_without_reviews_view(self, client, persist_user, persist_course):
    client.force_login(persist_user)
    response = client.get(reverse('reviews', args=[persist_course.course_id]))
    assert response.status_code == 200
    assert response.context['reviews_by_course'] == []
    assert b"No reviews available" in response.content
```

Tests - Study Group

```python
@pytest.mark.django_db
class TestStudyGroupUpdateView:
    def test_study_group_update_view_loaded_authorized(self, authorized_client, persist_group):
        group_detail_response = authorized_client.get(f"/study-group/update/{persist_group.pk}/")
        assert group_detail_response.status_code == 200
        assert 'study_group_update.html' in group_detail_response.templates[0].name

    @pytest.mark.parametrize("new_field, new_desc", [("new field", "this is a new group description")])
    def test_update_group_details_not_owner(self, make_study_group_of_varied_size, authorized_client, new_field,
                                            new_desc):
        group_not_owner_of = make_study_group_of_varied_size(1, 5)
        response = authorized_client.post(f"/study-group/update/{group_not_owner_of.pk}/",
                                          {"field": new_field, "group_description": new_desc})
        assert response.status_code == 403


@pytest.mark.django_db
class TestJoinLeaveGroupButton:
    def test_leave_group(self, client, persist_user, persist_group):
        client.force_login(persist_user)
        persist_group.join_group(persist_user)
        assert persist_group.is_user_in_group(persist_user)
```

Tests - Study Group

```python
@pytest.mark.django_db
class TestJoinLeaveGroupButton:
    def test_leave_group(self, client, persist_user, persist_group):
        client.force_login(persist_user)
        persist_group.join_group(persist_user)
        assert persist_group.is_user_in_group(persist_user)

        post_response = client.post(f"/study-group/join_leave/{persist_group.pk}/")

        assert post_response.status_code == 302
        assert post_response.url == reverse("study_groups_list_for_user")
        assert not persist_group.is_user_in_group(persist_user)

    def test_join_group(self, client, persist_user, persist_group):
        client.force_login(persist_user)
        assert not persist_group.is_user_in_group(persist_user)

        post_response = client.post(f"/study-group/join_leave/{persist_group.pk}/")

        assert post_response.status_code == 302
        assert post_response.url == reverse("study_groups_list_for_user")
        assert persist_group.is_user_in_group(persist_user)
```

Tests - Study Group

```python
def test_join_leave_non_existent_group(self, authorized_client, persist_group):
    StudyGroup.objects.get(pk=persist_group.pk).delete()
    post_response = authorized_client.post(f"/study-group/join_leave/{persist_group.pk}/")

    assert post_response.status_code == 404

@pytest.mark.parametrize("non_full, capacity", [(0, 5)])
def test_join_group_button_text(self, make_study_group_of_varied_size, authorized_client,
                                non_full, capacity):
    non_empty_group = make_study_group_of_varied_size(non_full, capacity)
    response = authorized_client.get(f"/study-group/detail/{non_empty_group.pk}/")
    assert b"Join Group" in response.content

@pytest.mark.parametrize("full, capacity", [(1, 1)])
def test_full_group_button_text(self, make_study_group_of_varied_size, authorized_client,
                                full, capacity):
    non_empty_group = make_study_group_of_varied_size(full, capacity)
    response = authorized_client.get(f"/study-group/detail/{non_empty_group.pk}/")
    assert b"Group Full" in response.content
```

Tests - Study Group

```
    assert b"Group Full" in response.content

@pytest.mark.parametrize("num_of_members, capacity", [(1, 2)])
def test_leave_group_text_button(self, make_study_group_of_varied_size, num_of_members, capacity,
                                 persist_user, client):
    study_group = make_study_group_of_varied_size(num_of_members, capacity)
    study_group.join_group(persist_user)

    client.force_login(persist_user)
    response = client.get(f"/study-group/detail/{study_group.pk}/")
    assert b"Leave Group" in response.content
```

Tests - Study Group

```python
@pytest.mark.django_db
class TestStudyGroupListView:
    def test_study_group_list_view_loaded_authorized(self, authorized_client):
        study_group_list_response = authorized_client.get('/study-group/list/')
        assert study_group_list_response.status_code == 200

    def test_study_group_list_view_loaded_unauthorized(self, client):
        study_group_list_response = client.get('/study-group/list/')
        assert study_group_list_response.status_code == 302

    @pytest.mark.parametrize("field, group_description, capacity",
                             [("Test Group", "Description", 5)])
    def test_create_new_study_group(self, authorized_client, field, group_description, capacity):
        study_group_creation_form_args = {"field": field, "group_description": group_description, "capacity": capacity}

        assert not StudyGroup.objects.filter(**study_group_creation_form_args).exists()
        group_creation_response = authorized_client.post("/study-group/list/", study_group_creation_form_args)

        assert group_creation_response.status_code == 302
        assert group_creation_response.url == reverse("study_groups_list_for_user")
        assert StudyGroup.objects.filter(**study_group_creation_form_args).exists()
```

Tests - Study Group

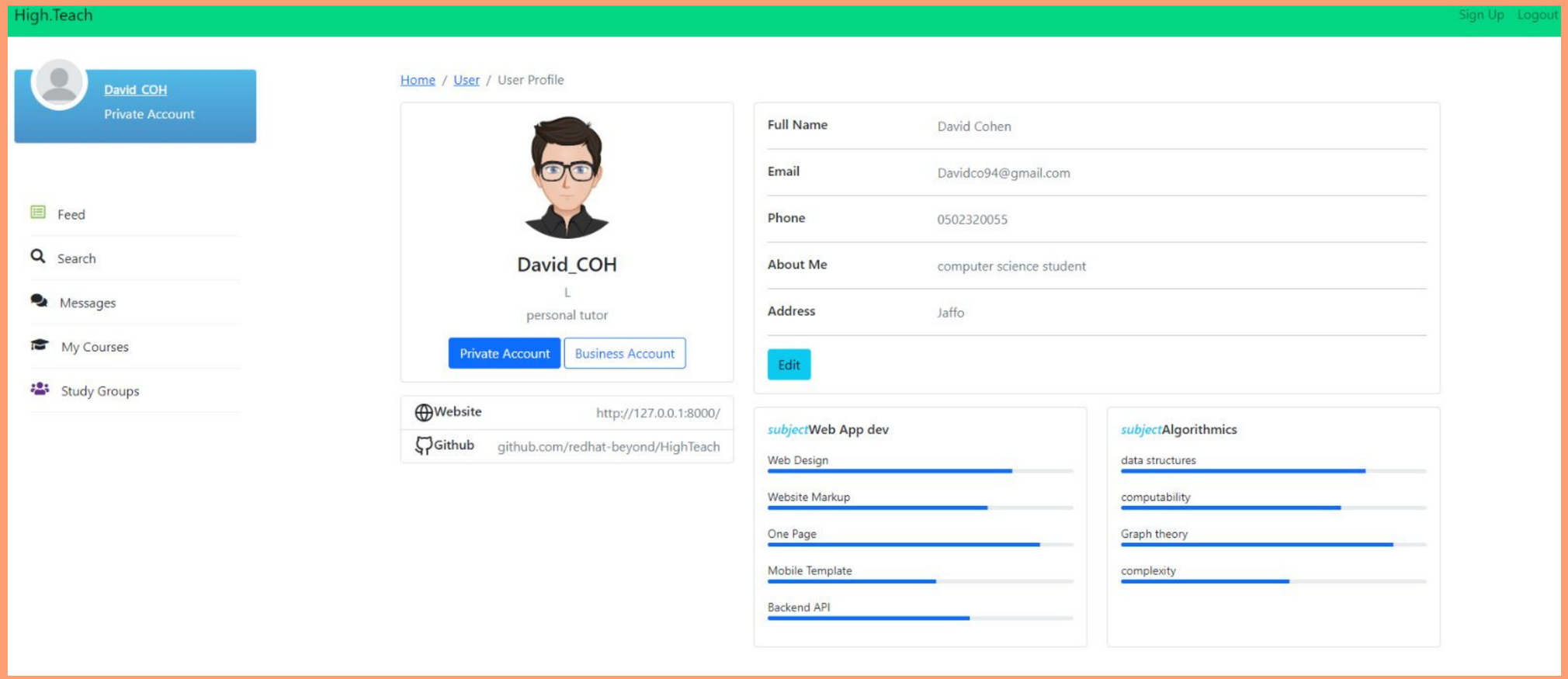
```python
@pytest.mark.django_db
class TestStudyGroupDetailView:
    def test_study_group_detail_view_loaded_authorized(self, authorized_client, persist_group):
        group_detail_response = authorized_client.get(f"/study-group/detail/{persist_group.pk}/")
        assert group_detail_response.status_code == 200
        assert 'study_group_detail.html' in group_detail_response.templates[0].name

    def test_study_group_detail_view_loaded_unauthorized(self, client, persist_group):
        study_group_list_response = client.get(f"/study-group/detail/{persist_group.pk}/")
        assert study_group_list_response.status_code == 302

    def test_display_edit_group_when_owner(self, client, persist_user, persist_group):
        client.force_login(persist_user)
        response = client.get(f"/study-group/detail/{persist_group.pk}/")
        assert b"Edit Group info" in response.content

    def test_not_display_edit_group_when_not_owner(self, client, persist_second_user, persist_group):
        client.force_login(persist_second_user)
        response = client.get(f"/study-group/detail/{persist_group.pk}/")
        assert b"Edit Group info" not in response.content
```

A demonstration of the application tests being run in GitHub actions

```
89%]
tests/study_group/test_study_group_views.py::TestStudyGroupUpdateView::test_study_group_update_view_loaded_authorized PASSED
[ 90%]
tests/study_group/test_study_group_views.py::TestStudyGroupUpdateView::test_update_group_details_not_owner[new field-this is
a new group description] PASSED [ 91%]
tests/study_group/test_study_group_views.py::TestJoinLeaveGroupButton::test_leave_group PASSED [ 92%]
tests/study_group/test_study_group_views.py::TestJoinLeaveGroupButton::test_join_group PASSED [ 93%]
tests/study_group/test_study_group_views.py::TestJoinLeaveGroupButton::test_join_leave_non_existent_group PASSED [ 94%]
tests/study_group/test_study_group_views.py::TestJoinLeaveGroupButton::test_join_group_button_text[0-5] PASSED [ 95%]
tests/study_group/test_study_group_views.py::TestJoinLeaveGroupButton::test_full_group_button_text[1-1] PASSED [ 96%]
tests/study_group/test_study_group_views.py::TestJoinLeaveGroupButton::test_leave_group_text_button[1-2] PASSED [ 97%]
tests/study_group/test_study_group_views.py::TestStudyGroupListView::test_study_group_list_view_loaded_authorized PASSED [
98%]
tests/study_group/test_study_group_views.py::TestStudyGroupListView::test_study_group_list_view_loaded_unauthorized PASSED [
99%]
tests/study_group/test_study_group_views.py::TestStudyGroupListView::test_create_new_study_group[Test Group-Description-5]
PASSED [100%]
```

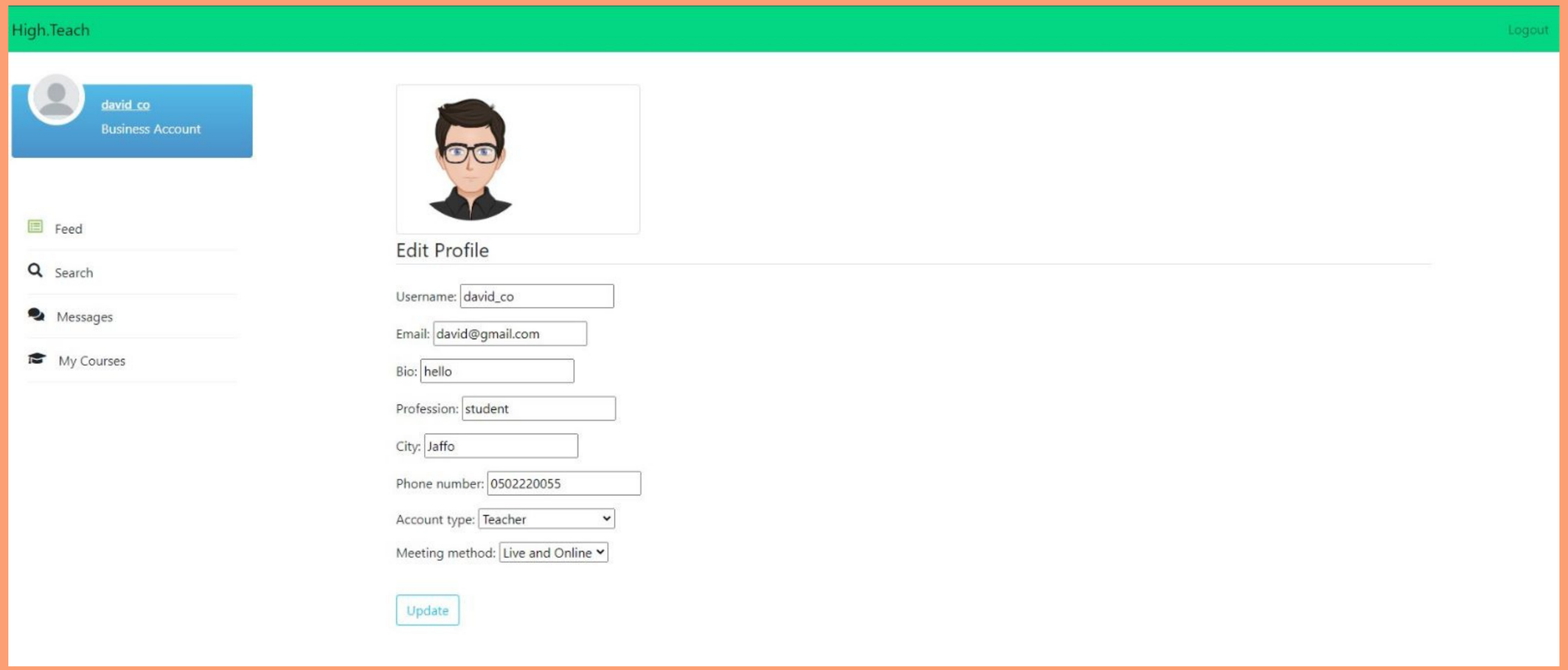
Future Features

User Profile:



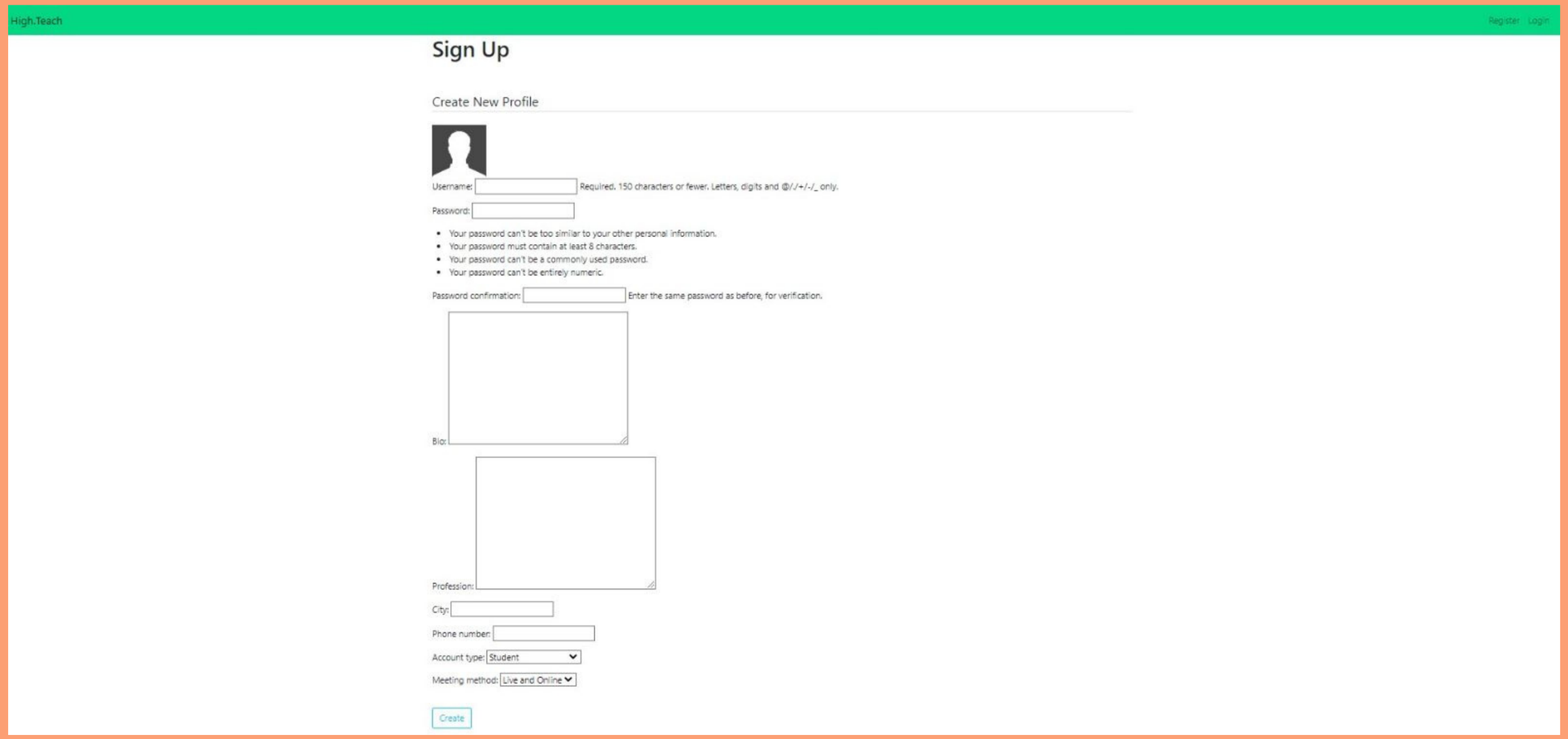
Future Features

Edit User Profile:



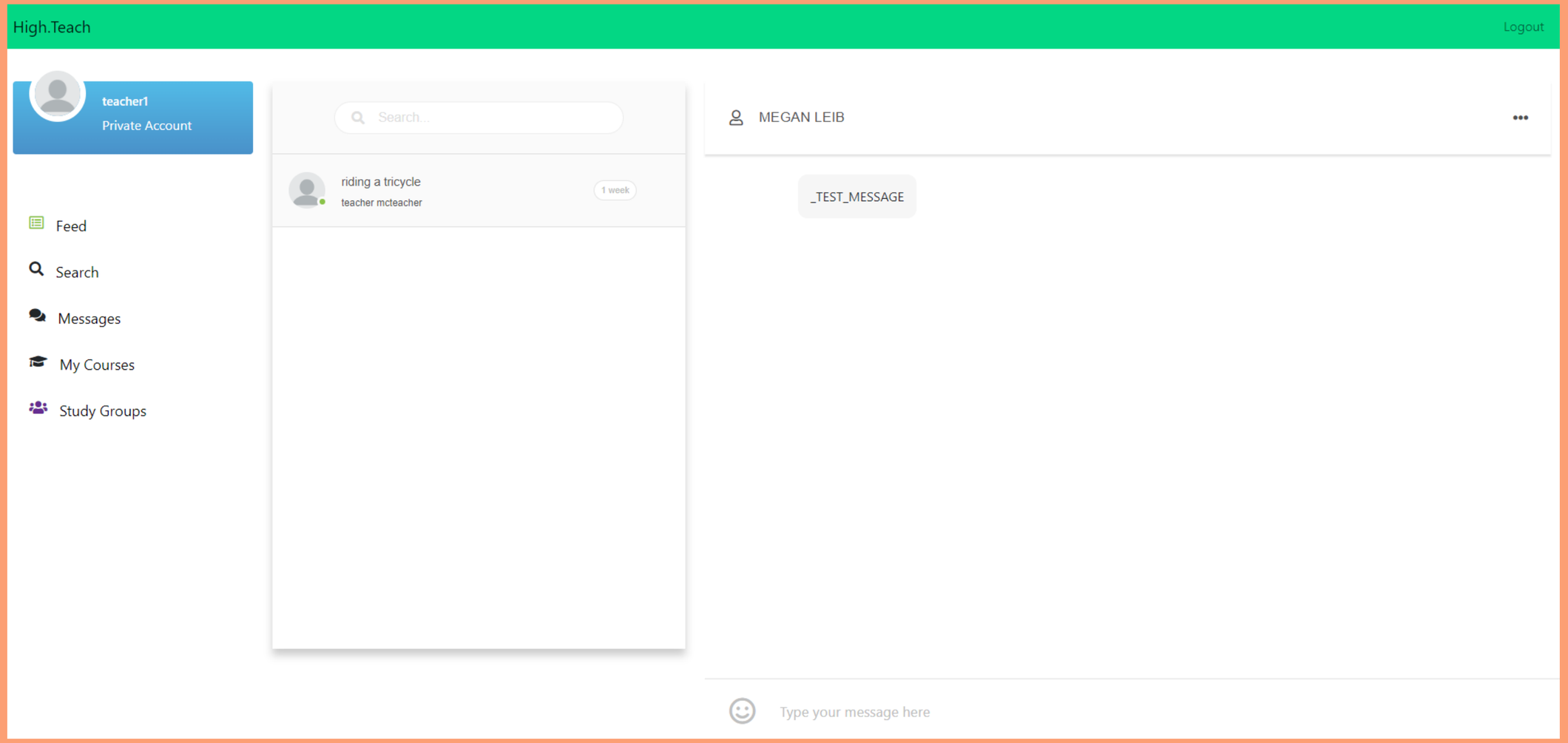
Future Features

Sign Up:



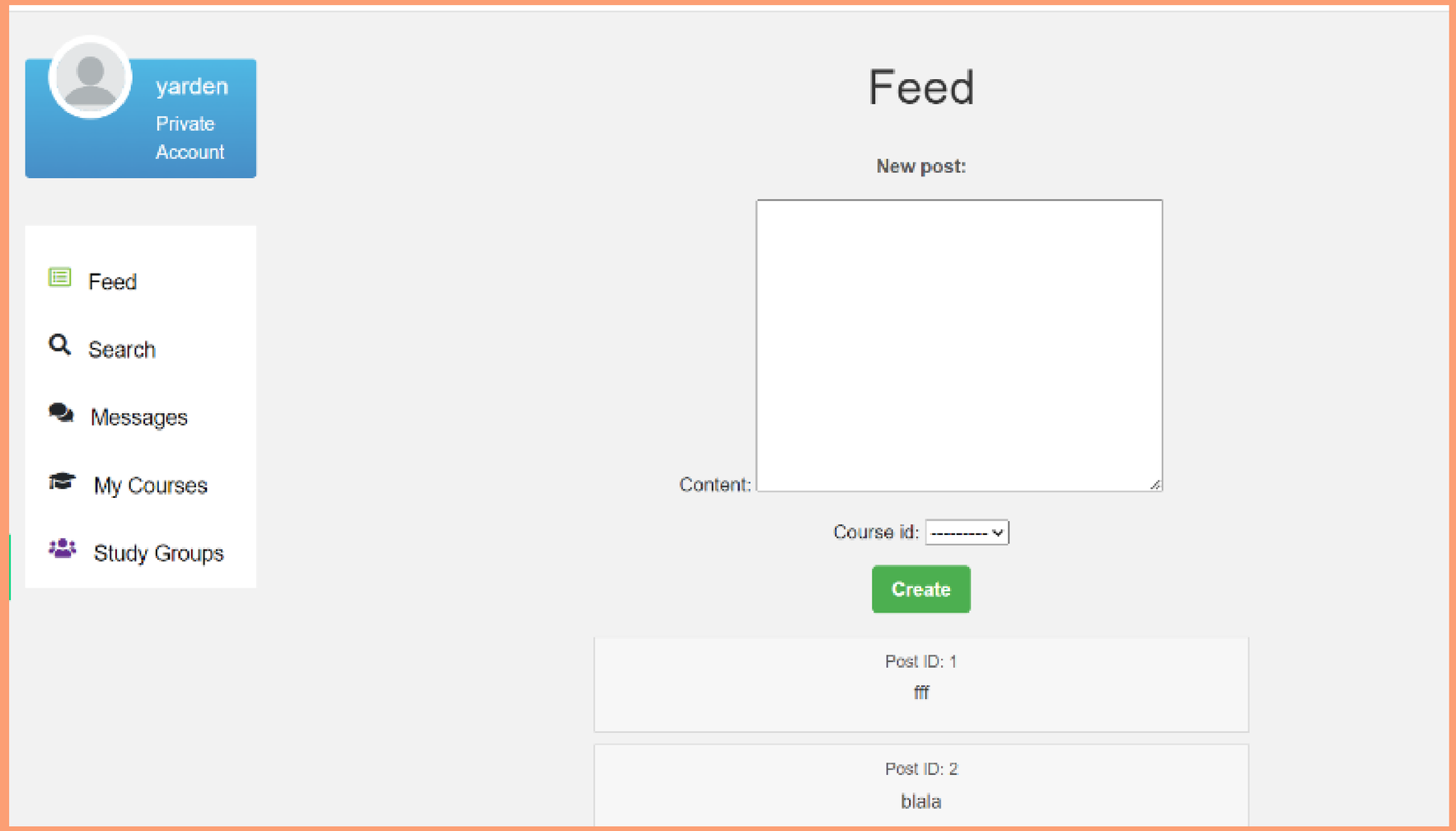
Future Features

Chat:



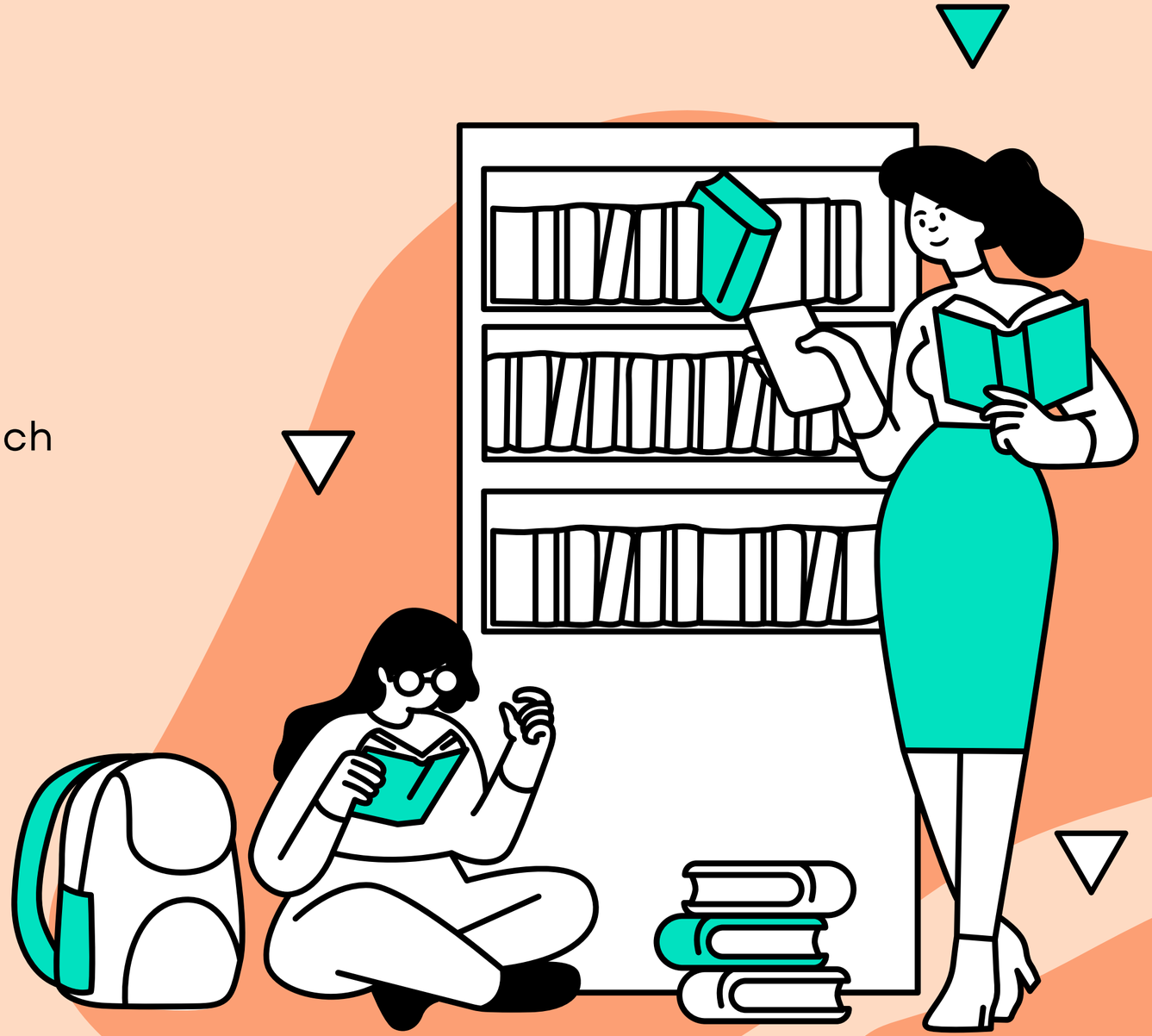
Future Features

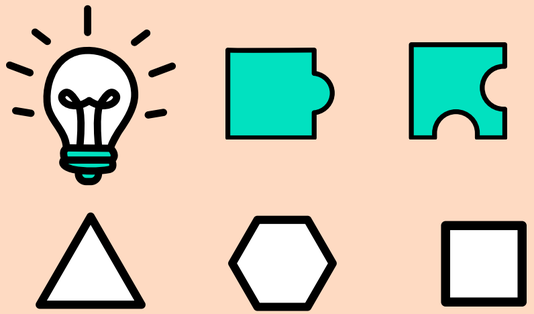
Feed:

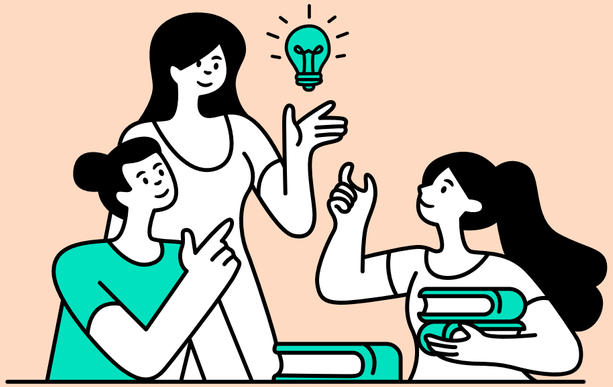


Git Repository

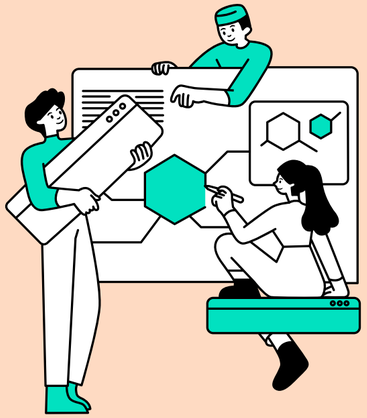
https://github.com/redhat-beyond/HighTeach







The road to success has never been easier...



Thank You!

Do you have any question?