

Links

Github: https://github.com/nishant-basu-tamu3/student_knowledge_system

Pivotal Tracker: <https://www.pivotaltracker.com/n/projects/2721032>

Deployed Application: <https://hive-sks-c9da748e2491.herokuapp.com/>

Dates

The Sprint lasted from November 4th to November 15th.

Team Members

Total Points Completed: 13

Scrum Master: Ellika Mishra, completed 3

Product Owner: Raunak Kharbanda, completed 3

Dev: Nishant Basu, completed 3

Dev: Prakhar Suryawansh, completed 5

Dev: Susheel, completed 2

Dev: Mukil , completed 2

Dev: Aum Palande, completed 2

Sprint Goal

Our Sprint goal was to add the streak functionality, statistics for quiz data and fix any server issues occurring on the website. We also helped our client run the system locally.

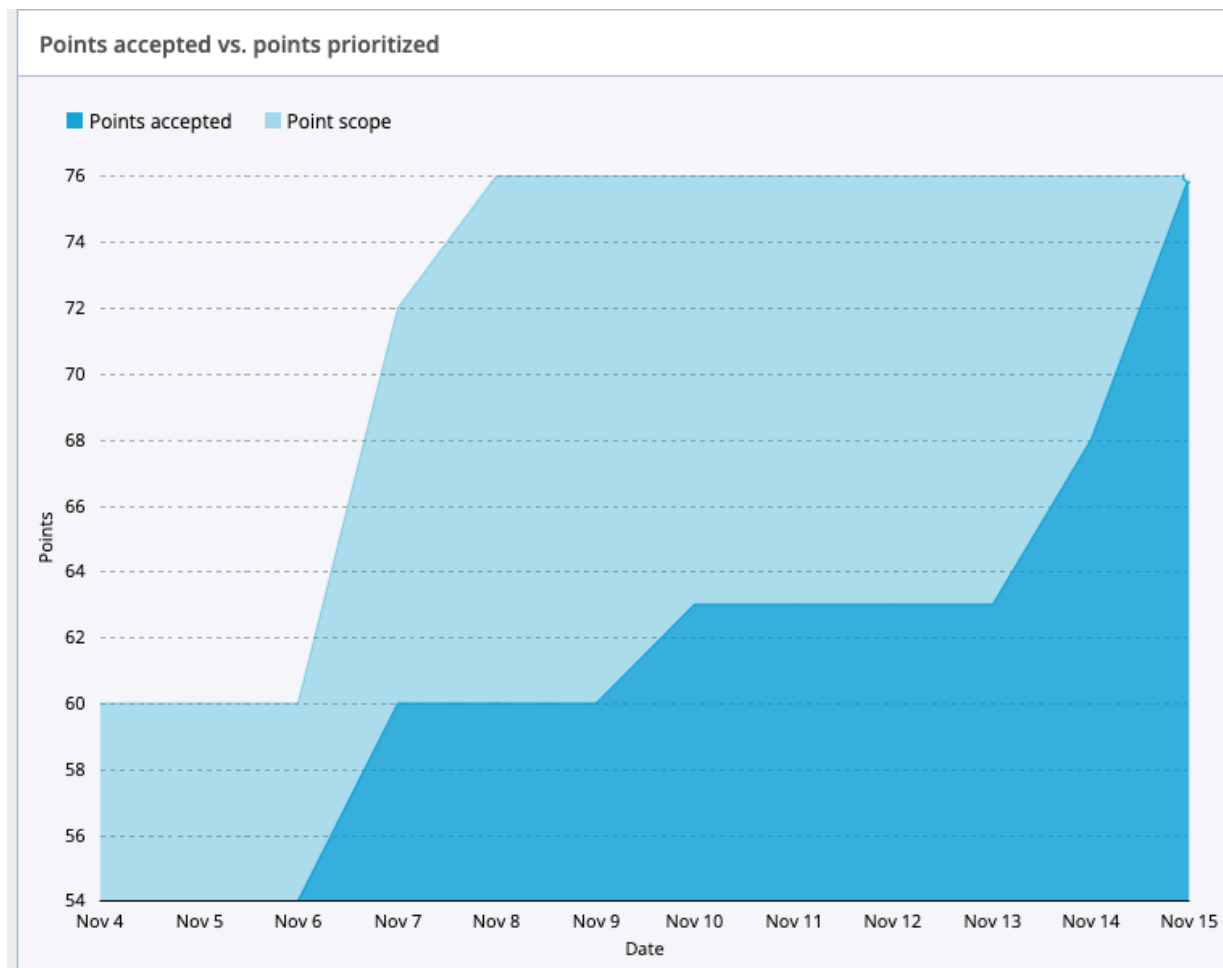
Sprint Achievements

We completed the new functionality for the quiz statistics plus streak and fixed the server issues. Fixing the tag issues was also another point for the sprint. We also fixed the nite not visible issue on the website. We faced an issue with the edge case when the professor accidentally inserted a space to the course end name and the system was not able to fetch the quiz data for the course. Additionally, we helped our client setup the project on a local machine. We continued to work on both rubocop and code coverage, reducing the rubocop offenses to below 100 and increasing the coverage to 90%. Overall, we achieved 13 out of the 13 story points planned. We have implemented the statistics functionality, streak functionality and fixed the remaining bugs. We are working towards making the project more presentable and easy to use for future teams.

Sprint Backlog

- Quiz server error on refresh occasionally
- Code coverage > 90%

Burn Down:



★ =	Quiz specific sections (AU, SU)	<input type="checkbox"/>
★ _	Fix note issue (RA)	<input type="checkbox"/>
★ =	Server error on quiz refresh (RA, PS)	<input type="checkbox"/>
★ =	Statistics for quiz (streak) (MU)	<input type="checkbox"/>
★ ≡	Drop down of current tag, or create new one (PS)	<input type="checkbox"/>
★ ≡	Statistics for quiz (total questions) (EL, NI)	<input type="checkbox"/>

Design Diagram

Old students page (without note pop-up feature):

Students

Course(s)/Semester(s):

Tags:

Filter Students List

Yearbook View

Student Name:

Student email:




Student UIN:

Search by Name

Search by email

Search by UIN

Search Student

Image	Name	Email	Course(s)/Semester(s):	Tags	View Student Profile:
	Ankitha Prasad, .	ankithap@email.tamu.edu	CSCE000 - Fall 2024	None	Show this student Delete this student
	Banna, Md Hasan Al	mdhasanalbanna@email.tamu.edu	CSCE000 - Fall 2024	None	Show this student Delete this student
	Bhat, Shravan	shrabhat@email.tamu.edu	CSCE000 - Fall 2024	None	Show this student Delete this student

New students page (with editable note pop-up feature):

Students

Course(s)/Semester(s):

Tags:

Filter Students List

Yearbook View

Student Name:

Student email:




Student UIN:

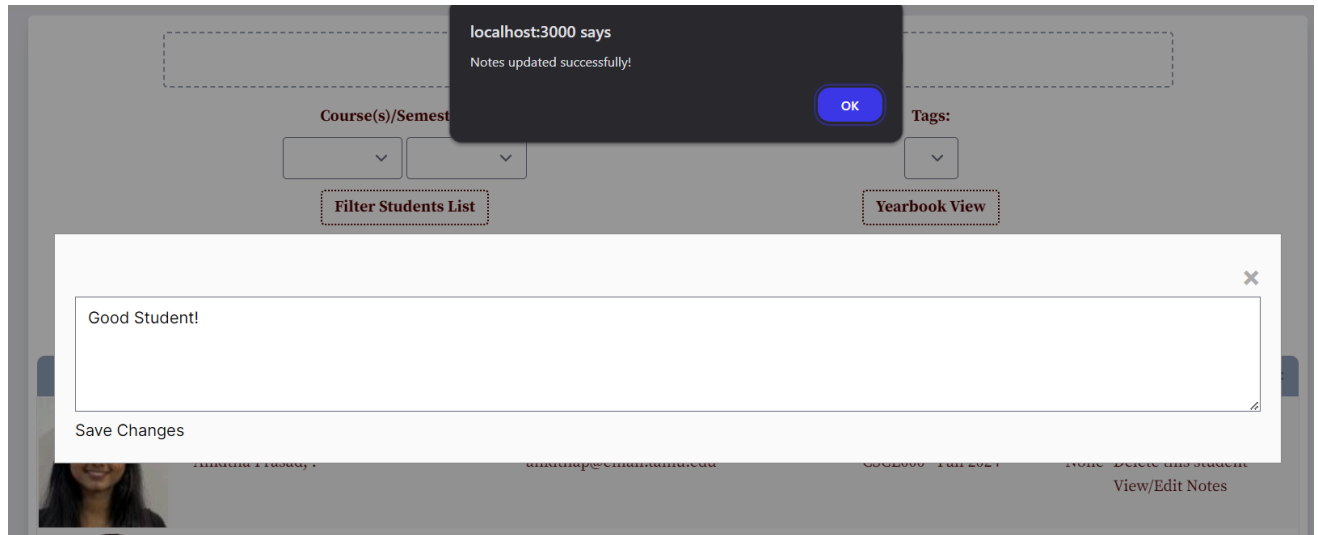
Search by Name

Search by email

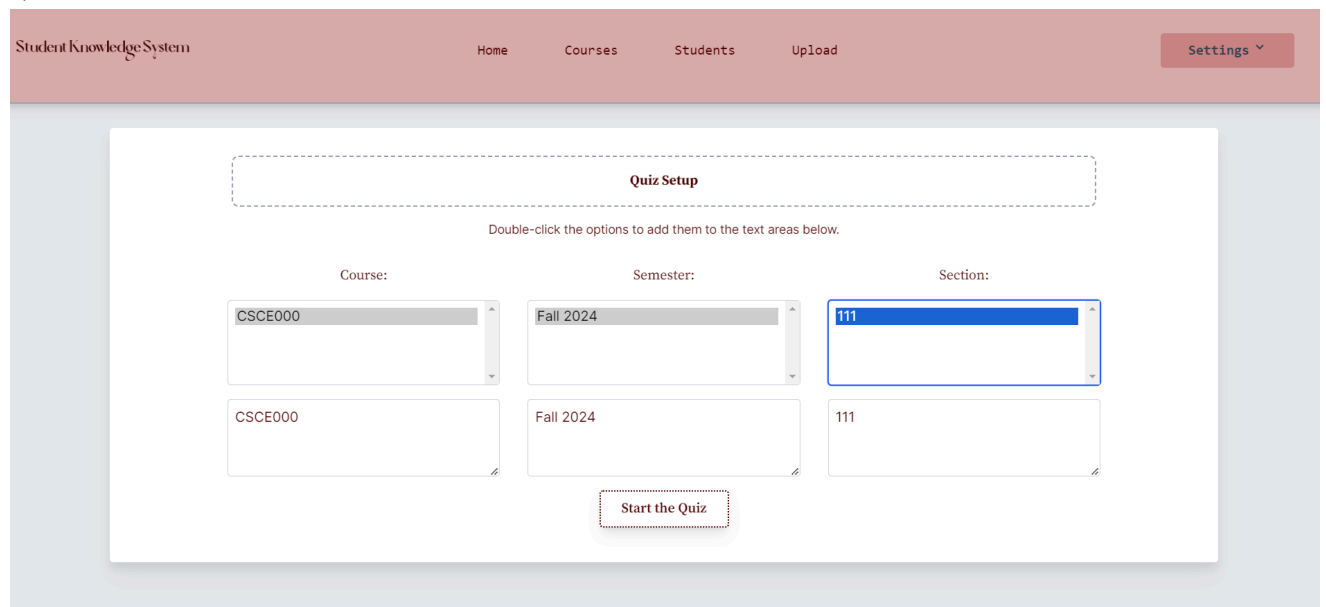
Search by UIN

Search Student


Image	Name	Email	Course(s)/Semester(s):	Tags	View Student Profile:
	Ankitha Prasad, .	ankithap@email.tamu.edu	CSCE000 - Fall 2024	None	Show this student Delete this student View/Edit Notes
	Banna, Md Hasan Al	mdhasanalbanna@email.tamu.edu	CSCE000 - Fall 2024	None	Show this student Delete this student View/Edit Notes
	Bhat, Shravan	shrabhat@email.tamu.edu	CSCE000 - Fall 2024	None	Show this student Delete this student View/Edit Notes



Quiz Feature:



Who is this student?



☐ Likhith Majjigapu

☐ Raunak Kharbanda

☐ Kushal Nitin Lahoti

☐ Yash Sameer Phatak

☐ Phani Jyothi Kurada

☐ Riddhi Prakash Ghate

☐ Parth Tusham

☐ Pavithra Gopalakrishnan

Submit

Student Knowledge System

HomeCoursesStudentsUpLoad

Settings

Correct Answer!

Try Another

Student Knowledge System


HomeCoursesStudentsUpload

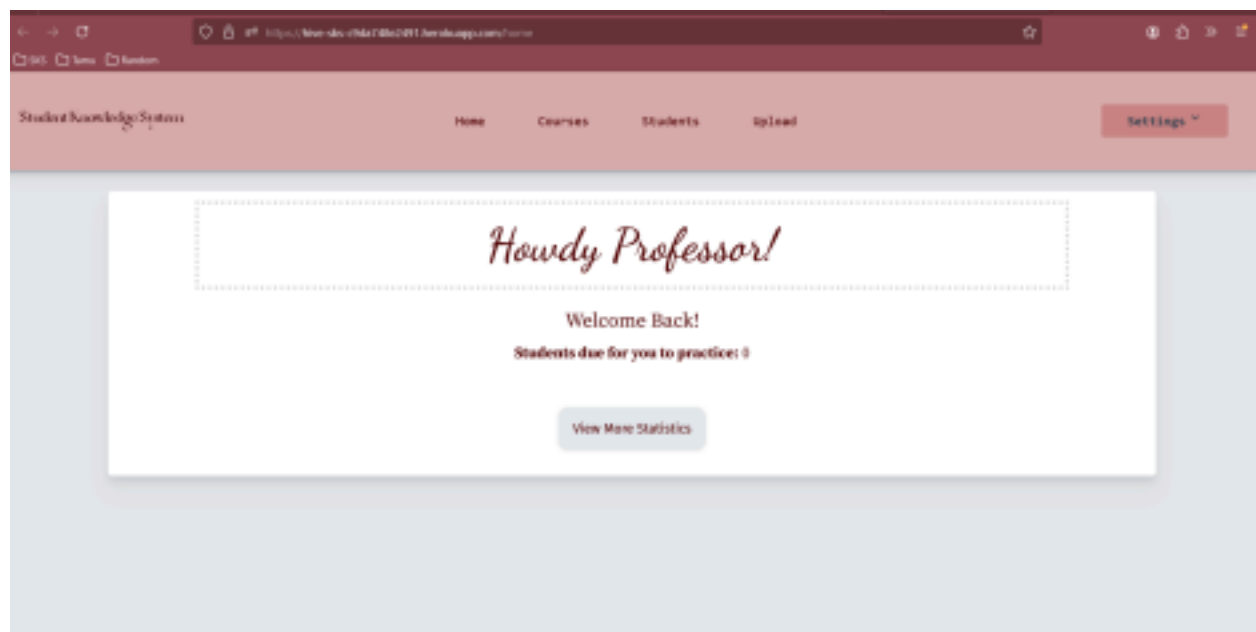
Settings

Incorrect Answer.

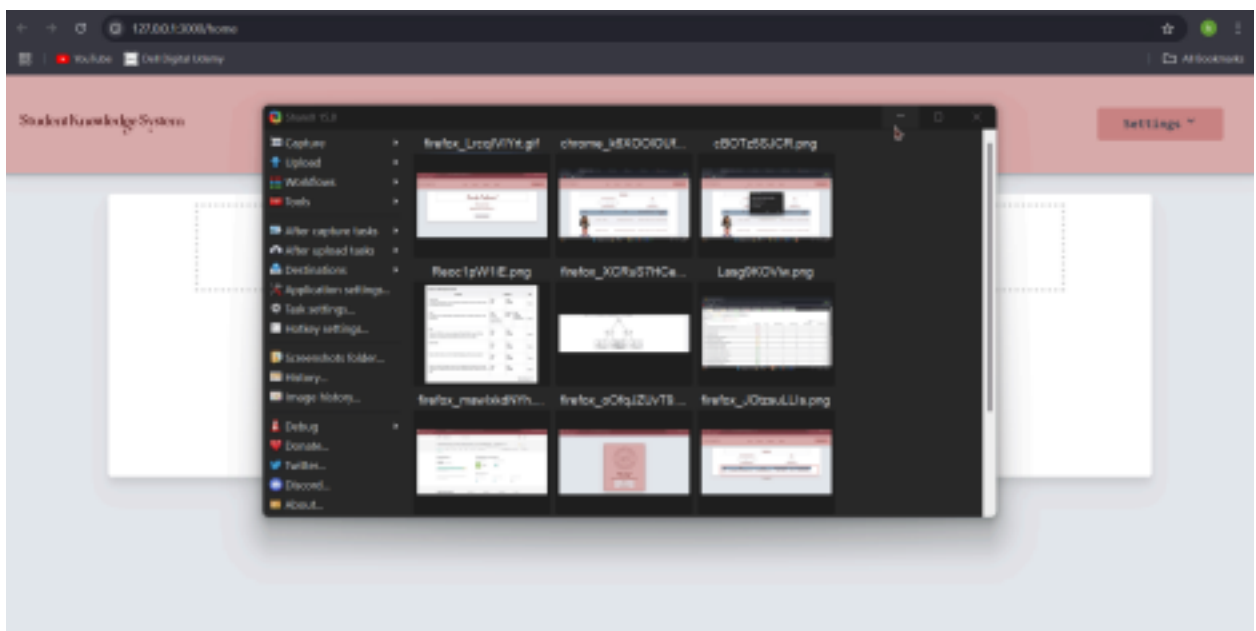
The correct student was Sahithi Duppati.

Try Another





New:



Tag Drop Down:

Old:

Editing Student

Firstname

Prakhar

Lastname

Suryavansh

Email

ps41@email.tamu.edu

Major

CPSC

Classification

G7

Uin

000000000

Image

Choose File No file chosen

Notes

Update Student

New:

Editing Student

Firstname

Prakhar

Lastname

Suryavansh

Email

ps41@email.tamu.edu

Major

CPSC

Classification

G7

Uin

000000000

Create or Select Tag

Select Tag

Image

Choose File No file chosen

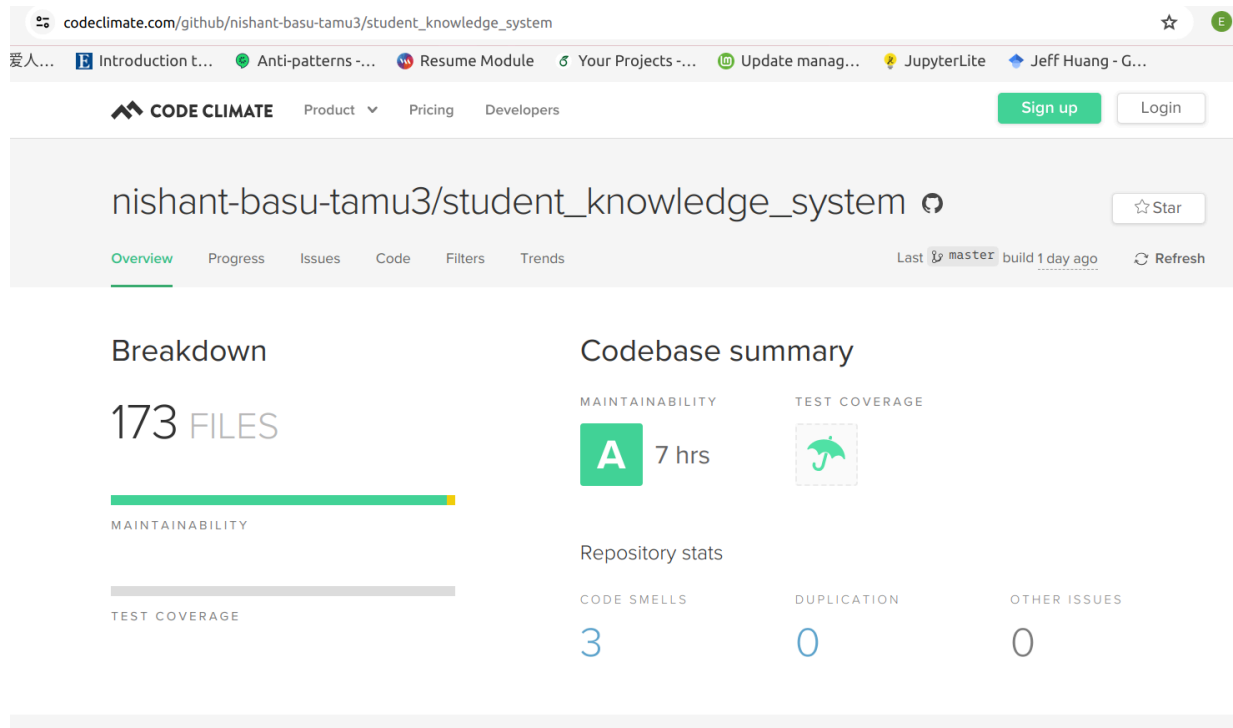
Notes

Update Student

Documentation of change :

Docs HIVE SKS
Code Evaluation

Code Climate : https://codeclimate.com/github/nishant-basu-tamu3/student_knowledge_system



Simple Cov : 88.24 %

All Files (88.24%) Controllers (89.25%) Channels (100.0%) Models (79.38%) Mailers (100.0%) Helpers (100.0%) Jobs (100.0%) Libraries (100.0%)								Generated about 14 hours ago	
All Files (88.24% covered at 278.24 hits/line)								Search: <input type="text"/>	
32 files in total. 655 relevant lines, 678 lines covered and 77 lines missed. (88.24%)									
File	% covered	Lines	Relevant Lines	Lines covered	Lines missed	Avg. Hits / Line			
app/controllers/users/omniauth_callbacks_controller.rb	0.00 %	54	4	0	4	0.00			
app/models/student.rb	66.67 %	43	18	12	6	20.83			
app/models/quiz_session.rb	75.00 %	53	32	24	8	1.84			
app/models/course.rb	82.86 %	58	35	29	6	6.06			
app/controllers/student_courses_controller.rb	83.33 %	42	24	20	4	1.21			
app/controllers/students_controller.rb	86.64 %	398	232	201	31	33.49			
app/controllers/home_controller.rb	89.66 %	48	29	26	3	34.14			
app/controllers/courses_controller.rb	89.74 %	203	117	105	12	14.71			
app/controllers/upload_controller.rb	96.00 %	155	75	72	3	2183.00			
app/channels/application_cable/channel.rb	100.00 %	6	2	2	0	1.00			
app/channels/application_cable/connection.rb	100.00 %	6	2	2	0	1.00			
app/controllers/application_controller.rb	100.00 %	33	14	14	0	322.00			
app/controllers/courses/history_controller.rb	100.00 %	16	6	6	0	2.17			
app/controllers/sessions_controller.rb	100.00 %	30	13	13	0	3.08			
app/controllers/static_controller.rb	100.00 %	10	4	4	0	2.00			
app/controllers/users_controller.rb	100.00 %	26	12	12	0	13.50			

RSpec examples: 84 - 26 new examples.

Cucumber scenarios: 28 - Same number as before sprint.

Customer Meeting

We met with Dr. Lightfoot on November 20, from 4:30pm to 5:30pm. He was satisfied with the streak and statistics features in the project and overall progress we have made throughout the semester.

BDD/TDD:

1. Create a quiz streak feature to showcase the highest number of correct answers by client so far.

2. Rubocop offenses less than 100

The code remains intact in this part just the way it was written is changed hence it does not change the existing functionality, hence no TDD or BDD can be done on this type of story.

3. Adding statistics to the quiz data to show the number of students visited etc.

4. Drop down of current tag and create new tag feature added.

5. Fix server error on quiz refresh.

6. Fix note issue not visible online.

7. Improvements of test

Some tests were failing therefore improvements done.

- a. BDD: ./app/features/quiz.feature

```
Scenario: Answering the quiz incorrectly
  Given students are enrolled in their respective courses
  When I sign in as "team_cluck_admin@gmail.com"
  And I click on "Practice now!"
  When I select "CSCE 411" from "courses[]"
  And I select "501" from "sections[]"
  And I select "Spring 2023" from "semesters[]"
  And I click "Start the Quiz"
  When I select an incorrect answer
  And I submit my answer
  Then I should see that my answer is incorrect
  And the student's practice interval should be halved if it was greater than 15
  And the student's last practice time should be updated

Scenario: Answering the quiz correctly
  Given students are enrolled in their respective courses
  When I sign in as "team_cluck_admin@gmail.com"
  And I click on "Practice now!"
  When I select "CSCE 411" from "courses[]"
  And I select "501" from "sections[]"
  And I select "Spring 2023" from "semesters[]"
  And I click "Start the Quiz"
  When I select the correct answer
  And I submit my answer
  Then I should see that my answer is correct
  And the student's practice interval should be doubled
  And the student's last practice time should be updated
```

- b. TDD: ./app/spec/controllers/quiz_controller_spec.rb

```

context 'when answer is correct' do
  it 'doubles the current practice interval' do
    expect do
      post :check_answer, params: {
        correct_student_id: @student1.id,
        answer: @student1.id,
        courses_text: @course.course_name,
        sections_text: @course.section,
        semesters_text: @course.semester
      }
    end.to change { @student1.reload.curr_practice_interval.to_i }.by(10)

    expect(assigns(:correctAnswer)).to be nil
    quiz_session = QuizSession.find_by(user: @user)
    expect(quiz_session.streak).to eq(1) # replace with expected streak value
    expect(quiz_session.total_questions).to eq(1)
  end
end

context 'when answer is incorrect' do
  it 'halves the current practice interval if it is greater than 15' do
    @student1.update(curr_practice_interval: '30')

    expect do
      post :check_answer, params: {
        correct_student_id: @student1.id,
        answer: @student2.id,
        courses: @course.course_name,
        sections: @course.section,
        semesters: @course.semester
      }
    end.to change { @student1.reload.curr_practice_interval.to_i }.by(-15)

    expect(assigns(:correctAnswer)).to be nil
  end
end

```

8. Courses.features

a. BDD: ./app/features/courses.feature:

```

features > ≡ courses.feature

28  Scenario: If course doesnt exist show "Given Course not found." ( HTML Response)
29    Given students are enrolled in their respective courses
30    When I sign in as "team_cluck_admin@gmail.com"
31    And I visit a course page with an invalid course ID in HTML format
32    Then I should be redirected to the courses page with a "Given course not found." not.
33
34  Scenario: If course doesnt exist show JSON Response - E 204
35    Given students are enrolled in their respective courses
36    When I sign in as "team_cluck_admin@gmail.com"
37    And I visit a course page with an invalid course ID in JSON format
38    Then I should receive a "204 No Content" JSON response
39

```

9. Tag drop down

BDD: ./app/features/student.feature:

```

45
46 Scenario: Search by tag
47   When I sign in as "team_cluck_admin@gmail.com"
48   Given I am on the upload page
49   When I upload a csv file
50   When I upload a htm file
51   And I input form information
52   When I click save
53   Then I should see the upload was successful
54   And I go to the students page
55   And I select "Fall 2024" under semester
56   Then I submit the filter form
57   Then I should see "Prakhar"
58   When I click show this student
59   And I click "Edit this student"
60   When I fill in student "new_tag" with "test"
61   And I click "Update Student"
62   Then I should see "test"
63   When I go to the students page
64   And I select "test" under tag
65   Then I submit the filter form
66   Then I should see "Prakhar"

```

10. Code coverage > 90%

To add more coverage, we added test cases for existing controllers to cover uncovered lines and added a test file for the course model.

User Story Completion Table

Name	Total Points By Individual	Total Points By team
Aum	18	76
Ellika	9	76
Mukil	20	76
Nishant	28	76
Prakhar	15	76
Raunak	14	76
Susheel	18	76