CSCE 431 Team Bulbasaur

Team Roles:

Sprint	Scrum Master	Product Owner
1	Nick	Vivek
2	Jordan	Cooper
3	Cooper	Jordan
4	Dhruv	Kevin
5	Kevin	Dhruv

Customer Meeting:
Jan. 9 2025, 9:00 AM CST on Zoom Client Meeting Notes:
We must include much more features for the teacher's view. Teachers should be able to check statistics from the teacher view such as the count for the number of students that have attempted problems per topic, as well as this represented as a percentage out of all students. They should also have the count and percentage for the correctly submitted answers per topic. Teachers should have a list of users with around 2 summary statistics such as how many students the student has answered and the percentage of correct answers. When you click on a user, more complicated statistics can come up such as attempted topics and percentage correct per topic. Teachers should be able to add more questions for all users (everyone has the same problems) and should have the ability to add new users as teachers. Teachers must be able to remove users who may be abusing the system, and they must be able to remove all users at the end of a semester. Finally, for users who have not selected an instructor or do not want their teacher to see their report, they will show up as anonymous to the instructor.

As for students, we must create settings that allow them to select their instructor and give permission for them to see their scores. Other general notes include that the client is looking for functionality, not prettiness, nothing specific is expected for sprint 1 and a fully functional backend is not required, and each sprint report must be shared to the client. As for notes related to problems, problems must be split by units, there should be no cap on the number of attempts a student can have, there must only be a single answer (not a correct range of answers), and there must not be more answer feedback than an answer being higher or lower.

Default regular meeting not set yet.

Summary:

We will be creating a Practice Problem Generator for ENGR 216. This application will allow students to log in with their @tamu Google accounts and choose a practice problem category related to ENGR 216. After a category has been chosen the students will receive a randomly generated problem on a selected topic. The student will then submit their attempt and receive feedback on correctness and explanation. Students using the application will be able to generate as many problems as they would like, as well as review their history in the form of a "report card." If identified, their teacher will be able to view this report card.

User Stories:

Student
Feature: Log-In as a student **(in lofi-mockup)** As a student So that I can use the app I want to Log-In with Google Oauth
Feature: Unlimited Problem Generator **(in lofi-mockup)** As a student So that I can keep practicing I want to generate a new problem
Feature: Answer check/feedback **(in lofi-mockup)** As a student, So that I can improve my answer, I want to see feedback on my submitted solution
Feature: Invalid Answer Submission Prevention As a student, So that I can have higher quality attempts, I want to be prevented from submitting accidental/invalid answers
Feature: Problem History **(in lofi-mockup)** As a student user, So that I can see problems I have done in the past, I want to access a view that includes each previously submitted problem title and preview along with their timestamp
Feature: Problem-type Filter in Problem History As a student, So that I can see past problems of the same type, I want to sort by problem type
Feature: Problem-time filter in problem history As a student,

So that I can see past problems of the same time range,
I want to sort by problem time

Feature: Problem-score filter in problem history
As a student,
So that I can see past problems of the same score,
I want to sort by problem score

Feature: Problem-type Navigation
As a student user,
So that I can choose a type of problem,
I want to easily choose the problem type from the home page

Feature: View List of Students as a Teacher **(in lofi-mockup)**
Given I am a teacher user,
So that I can see all my students,
I want to access a list of all student users

Feature: Identify Teacher as a Student
As a student
So that my teacher can view my report card
I want to identify my teacher

Feature: Opt-in to teacher viewing report card **(in lofi-mockup)**
As a student
So that I can have my selected teacher review my scores
I want to opt-in to them having score access

Feature: Return home from page **(in lofi-mockup)**
As a student
So that I can return to home view
I want to access the home view at any point

Feature: Log-In as a teacher **(in lofi-mockup)**
As a teacher
So that I can view report cards
I want to Log-In with Google OAuth

Feature: Remove Student
As a Teacher
So that I can remove a student
I want to select a student from a list and remove them as a user

Feature: Teacher-view Filter **(in lofi-mockup)**
As a Teacher

So that I can view specific data topics
I want a filter view to alter the table view

Feature: Attempt count per topic **(in lofi-mockup)**
As a Teacher
So that I can view how many students attempted the topic
I want a count of the number of students who have answered problems per topic in the form of a list

Feature: Percent correct **(in lofi-mockup)**
As a Teacher
So that I can see what percent of students that got the problems correct per topic
I want to see what percent of students got the problem topic correct

Feature: Section Filter **(in lofi-mockup)**
As a Teacher
So that I can filter students and their data by section
I want to be able to filter table view by section

Feature: Problems Attempted
As a teacher
So that I can view how many problems a student attempted
I want to see the count of problems a student has attempted as a summary statistic count in the list of users

Feature: Split Problems by Units
As a Student
So that I can attempt problems filtered by unit
I want to select which unit my problems will be given from

Feature: Settings Page for Student **(in lofi-mockup)**
As a Student
So that I can change settings for the application
I want to visit a settings page from the student home page

Feature: Anonymous Student
As a Teacher
So that I can see a student's performance who is not linked to a professor
I want to see students as anonymous users if they have not selected their professor.

Notecard version of user stories:

Feature: Answer feedback
As a student,
So that I can improve my answer,
I want to see feedback on my submitted solution

Feature: Invalid Answer Submission Prevention
As a student,
So that I can have higher quality attempts,
I want to be prevented from submitting accidental/invalid answers

Feature: Problem-time filter in problem history
As a student,
So that I can see past problems of the same time range,
I want to sort by problem time

Feature: Problem-type Navigation
As a student user,
So that I can choose a type of problem,
I want to easily choose the problem type from the home page

Feature: Problem history
As a student user,
So that I can see problems I have done in the past,
I want to access a view that includes each previously submitted problem title and preview along with their timestamp

Feature: Problem-type filter in problem history
As a student,
So that I can see past problems of the same type,
I want to sort by problem type

Feature: Problem-score filter in problem history
As a student,
So that I can see past problems of the same score,
I want to sort by problem score

Feature: Problem-type Navigation
As a student user,
So that I can choose a type of problem,
I want to easily choose the problem type from the home page

Feature: View Report Card as a Teacher
Given I am a teacher user,
So that I can see how my students are doing,
I want to be able to access a view that displays individual students' scores as well as the class average

Feature: Identify Teacher as a Student
As a student
So that my teacher can view my report card
I want to identify my teacher

Feature: Opt-in to teacher viewing report card
As a student
So that I can have my selected teacher review my scores
I want to opt-in to them having score access

Feature: Return home from page
As a student
So that I can return to home view
I want to be able to access the home view at any point

Feature: Log-In as a teacher
As a teacher
So that I can view report cards
I want to Log-In with Google OAuth

Feature: Remove Student
As a Teacher
So that I can remove a student
I want to select a student from a list and remove them as a user

Feature: Attempt count per topic
As a Teacher
So that I can view how many students attempted the topic
I want a count of the number of students who have answered problems per topic in the form of a list

Feature: Percent correct
As a Teacher
So that I can see what percent of students got the problems correct per topic
I want to view of a percentage representing the number of correctly submitted answers per topic in the form of a list

Feature: Problems Attempted
As a teacher
So that I can view how much an individual student has done a type of problem
I want a count of problems done per type of problem for each student in a list.
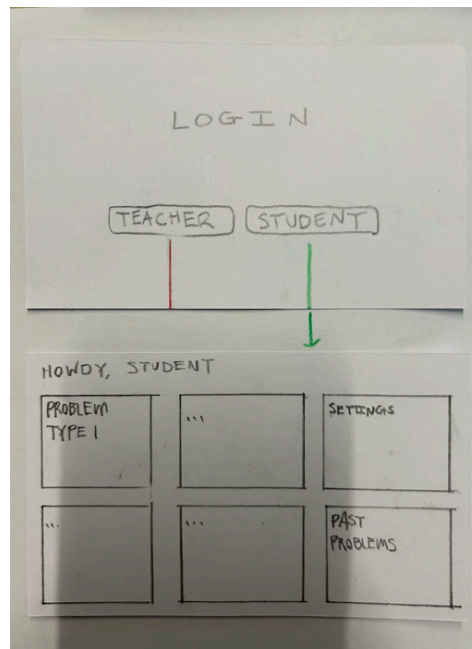
Feature: Problems Attempted
As a teacher
So that I can view how much an individual student has done a type of problem
I want a count of problems done per type of problem for each student in a list.

Feature: Split Problems by Units
As a Student
So that I can see problems sorted by unit
I want to be able to select to take problems based on unit

Feature: Anonymous Student
As a Teacher
So that I can see a student's performance who is not linked to a professor
I want to be able to see students as anonymous users if they have not selected their professor.
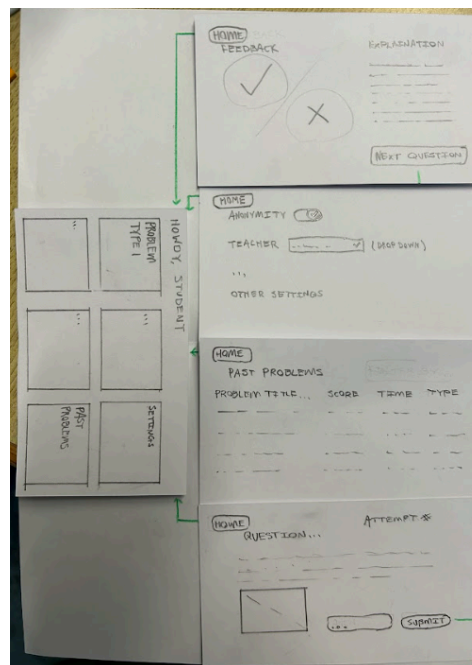
Feature: Identify Teacher
As a Student
So that my teacher can see my performance
I want to be able to Identify my professor so they can view my performance

Feature	Lo-Fi Mock-Up View
Overview	
Log-In as a teacher	

Log-In as a student	
Return home from page	
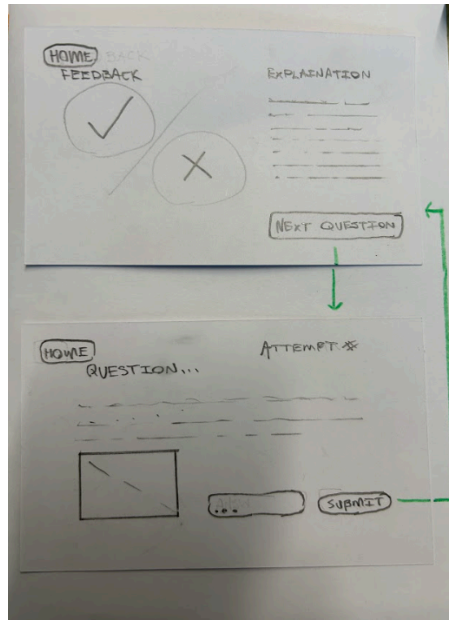
Unlimited Problem Generator	
Settings Page for Student	

Problem History	
Teacher-view Filter	
Opt-in to teacher viewing report card	
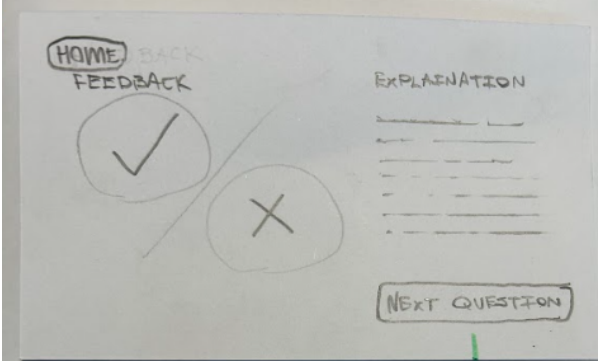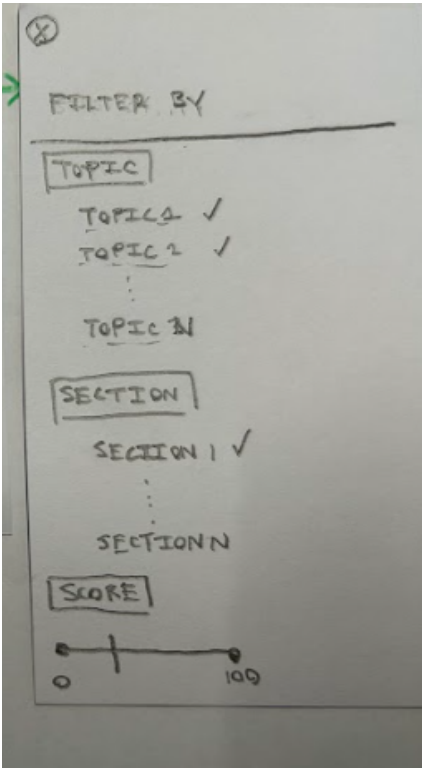
Answer check/feedback	
Attempt count per topic, Percent correct, Section Filter	

Links:
- Github Repo -https://github.com/tamu-edu-students/practice-problem-generator-engr216
- Github Project Board - https://github.com/orgs/tamu-edu-students/projects/87
- Slack Channel - https://join.slack.com/t/teambulbasaur431/shared_invite/zt-2xqwi5eld-TGti6LUVSiQfk7aAkST5Ew