SWE 573 2022 SPRING

MILESTONE 1 REPORT

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05/04/202

PROJECT DEFINATION

"Hello world" is website where people can learn, develop themselves and contribute each other collaboratively. Users can create courses, ask questions, and even create an event to support social interaction between members. Moreover, users can find a course that they are interested in, learn more, interact with other students who takes same course. User activity is measured by system and "badge" is used to award users who contributes more. The platform is free, and any user can join easily. Main purpose of the platform is while people share their knowledge with others, they can prove their talent and create a profile based on their experience. Users are encouraged to share their experience, interact with other users who have common interest and complete case-studies instead of old-fashioned learning methods.

REQUIREMENTS

Authorization
1. User shall register the website.
2. User shall login the website.
3. User shall log out the website.
4. An admin user shall be determined.
5. When user is authorized, the user shall view myspace page.
6. If user is not authorized, the user shall not post question, comments, courses, and activities.

User Profile
7. User shall edit name, profile picture and about me section.
8. The system shall display follower quantity, answer quantity, lecture quantity of user on profile page.
9. The system shall reward user by displaying an icon near the user's profile when over than 100 students attempted to his/her course.
10. The system shall reward user by displaying an icon near the user's profile when has over than 100 answers in a week.
11. User shall follow other users.
12. The system shall count comment quantity for each user.
13. The system shall count question quantity for each user.

Home Page
14. User shall view recent courses on home page.
15. User shall view the most used labels on home page.
16. User shall search courses by keywords on home page.

Myspace Page
17. User shall view his/her latest created courses on myspace page.
18. If user did not fill whole spaces on course create section, the system shall raise alert.
19. When user fill whole spaces on course create section and hit create button, the system shall create new course in database.
20. When user created new course, the system shall display it on "myspace page."
21. User shall add team members to course.
22. Added members to a course shall update course content.

Course Page
23. When user is defined as team member for a course, the user shall edit content of the course.
24. User shall create lectures in course page.

25. User shall create quizzes in course page.
26. When user created quiz, the user shall add up to 15 questions.
27. When user created quiz, the user shall add 4 options for each question.
28. While user is creating a quiz, the use shall determine the correct option for each question.
29. When user took a quiz, user shall select 1 option for each question.
30. When user submitted a quiz, the system shall share score of the user.
31. User shall create case-studies in course page.
32. When user created case-study, user shall add description to case study.
33. When a case study has been created, other users shall submit a file and enter a brief description about their submission.
34. The system shall allow up to 20 MB for case study submission.
35. When a user submitted a file to case study section, the user who is owner of case study shall view submission and content.
36. User shall assign a score to case study.
37. User shall upload video and image to lecture page.
38. Users shall rate a course.
39. Users shall post comment under lecture content.
40. When user completed a step inside course content, the system shall display the step as completed.
41. When user displayed her/his own course, the system shall display "create lecture/quiz/case-studies" option.

Learn Page
42. User shall attempt a course.
43. When user attempted a course, the system shall display course on the user's learn page.
44. User shall drop a course from "learn page".
45. The system shall display average score, quantity of attempted users and quantity of added lectures in course information block.
46. The system shall display progress of each course of the user.
47. When user clicked an attempted course, the system shall route to course page.
48. When user completed course, course is displayed in "Learn Page" under finished course section.
49. User shall review his/her progress of course that the user attempted.

Activity Page
50. User shall post an activity.
51. When a user posted activity, the system shall display the activity on "activity page" to all users.
52. User shall search activity by keywords on activity page.

Question Page
53. User shall post question.
54. When user posted question, the system shall display it on question page.
55. User shall answer question.
56. User shall like a question, comments under lectures and answers to questions.
57. User shall dislike a question, comments under lectures and answers to questions.
58. User shall search for a question on "question page".
59. User shall spam another user If use notice inappropriate behaviour in comment, answers, questions, lectures.

Room Page
60. User shall create a room in "room page".
61. While user is creating a room in "room page", user shall invite other users in his/her room.
62. When a room is created, attended users shall send message.

SCENARIOS

User as Lecturer:

Mary visited website and signed up. She wanted to update her myspace page. Firstly, she created a new course with "Learn Django". When she hit the create button, new course is displayed on her myspace. She clicked the new created course and website routed her to the course page where she can modify course content. She created new lecture by entering title and content. New lecture is assigned as content of the course. Later, she wanted to add a quiz. She added questions and 4 options for each question. While she is creating the quiz, she selected correct answer for each question. Finally, she hit the create button. The new quiz is assigned as content of the course. Lastly, she wanted to publish a case-study. She entered brief explanation about case-study and published it. When she published it, new case-study is assigned to course page immediately.

User as Student:

John wants to learn Django collaboratively. He heard "Hello world" website from his friends and he signed up to website. After he logged in website, recently published courses, and mostly used labels have been displayed on his home page. He was interested in "Learn Django" course. He clicked the course and website routed him to course page. He read the overview of course and examined the course content such as lecture names, quizzes, and case-studies. He decided to take course, so, he clicked attempt button. He decided to start course later and he logged out. Couple days later, he logged in again and clicked "Learn Page". He noticed that "Learn Django" course is already available there because he clicked attempt button before.

User as Student:

John started to "Learn Django" course. He entered first lecture and started to read content. He mostly understood basics of Django, however, he is confused due to a question. He entered a comment which explains his confusion under lecture. While he is making a comment, he noticed that many students are also confused and asked similar or different questions below. He thought he is not the only one who does not understand. Therefore, he started to answer few questions if he knows the answer. Later, he attempted the quiz. There was 10 questions and each question had 4 answers. When he finished this attempt, he saw his score. He felt happy because he had 9 correct! He thought that those questions are helpful to learn but he needs more practice. Finally he noticed that there is case study. He clicked the case study and read the content. When he finished his study, he submitted the files and put brief explanation about his work.
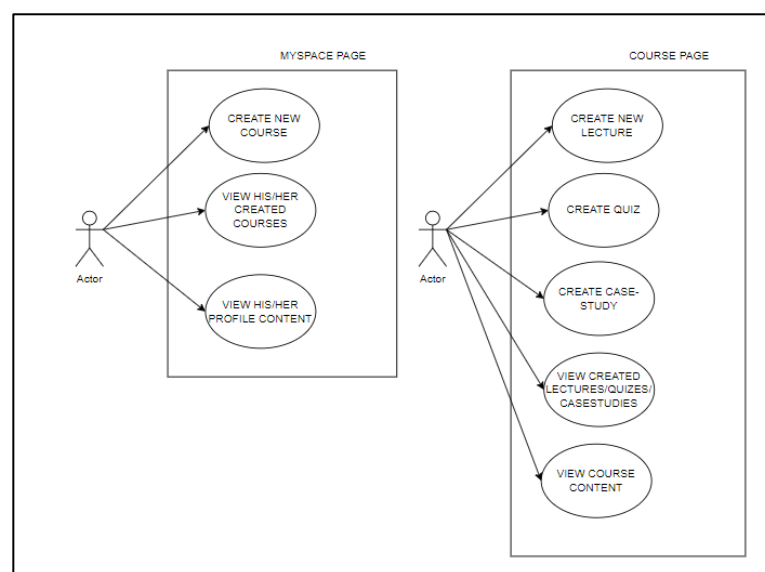
UML DIAGRAMS

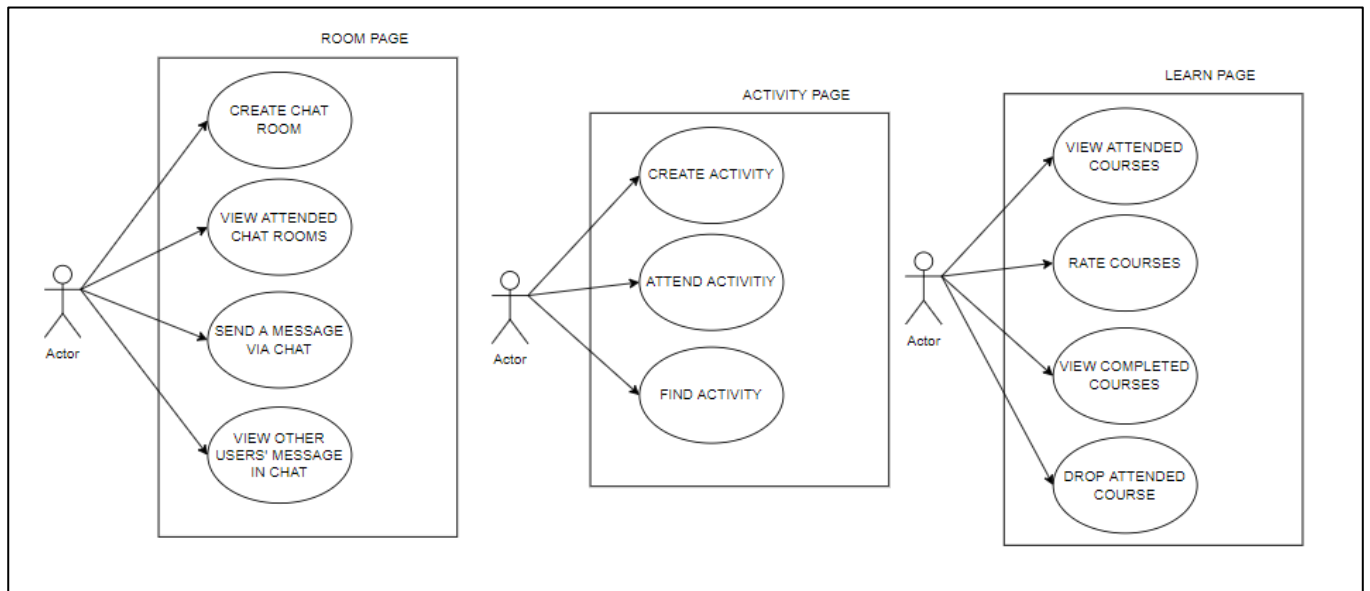
Figure 1 - Use Case for Myspace & Course Page

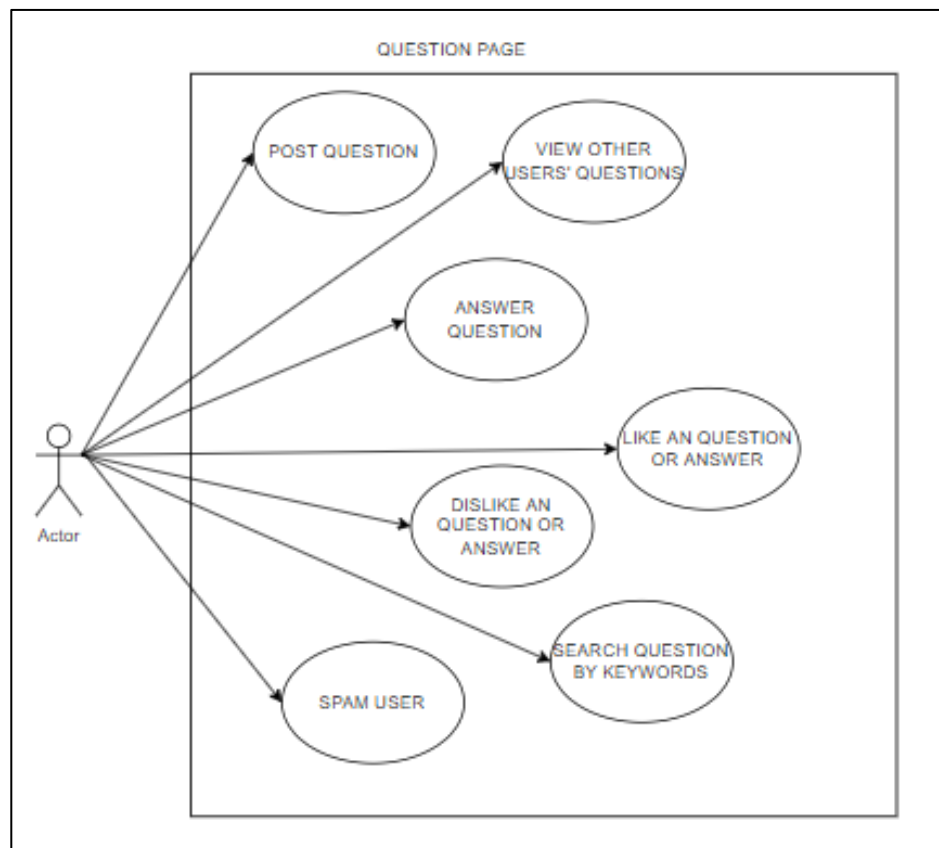*Figure 2 - User Case for Room, Activity, Learn Page*

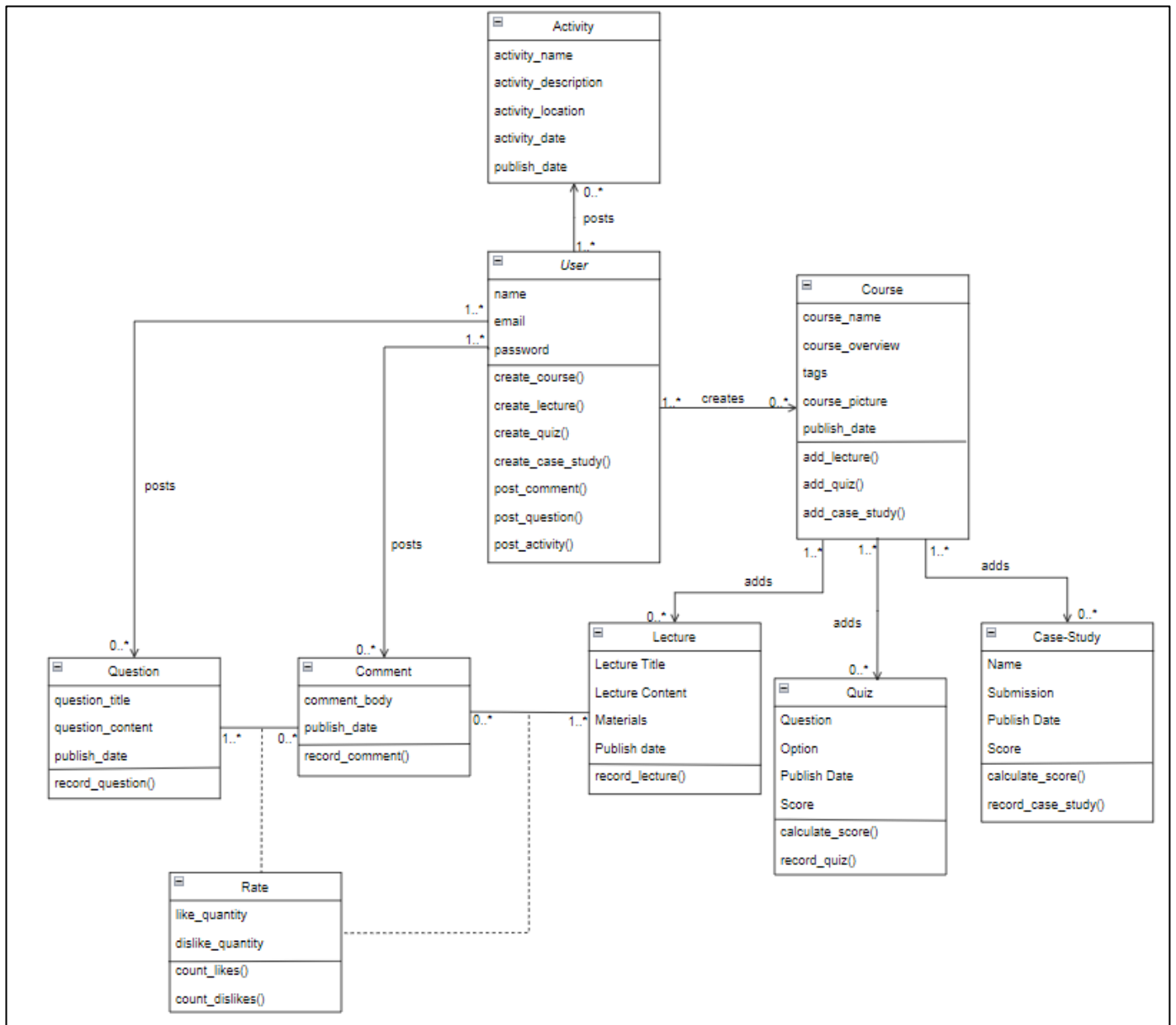*Figure 3- User Case Question Page*

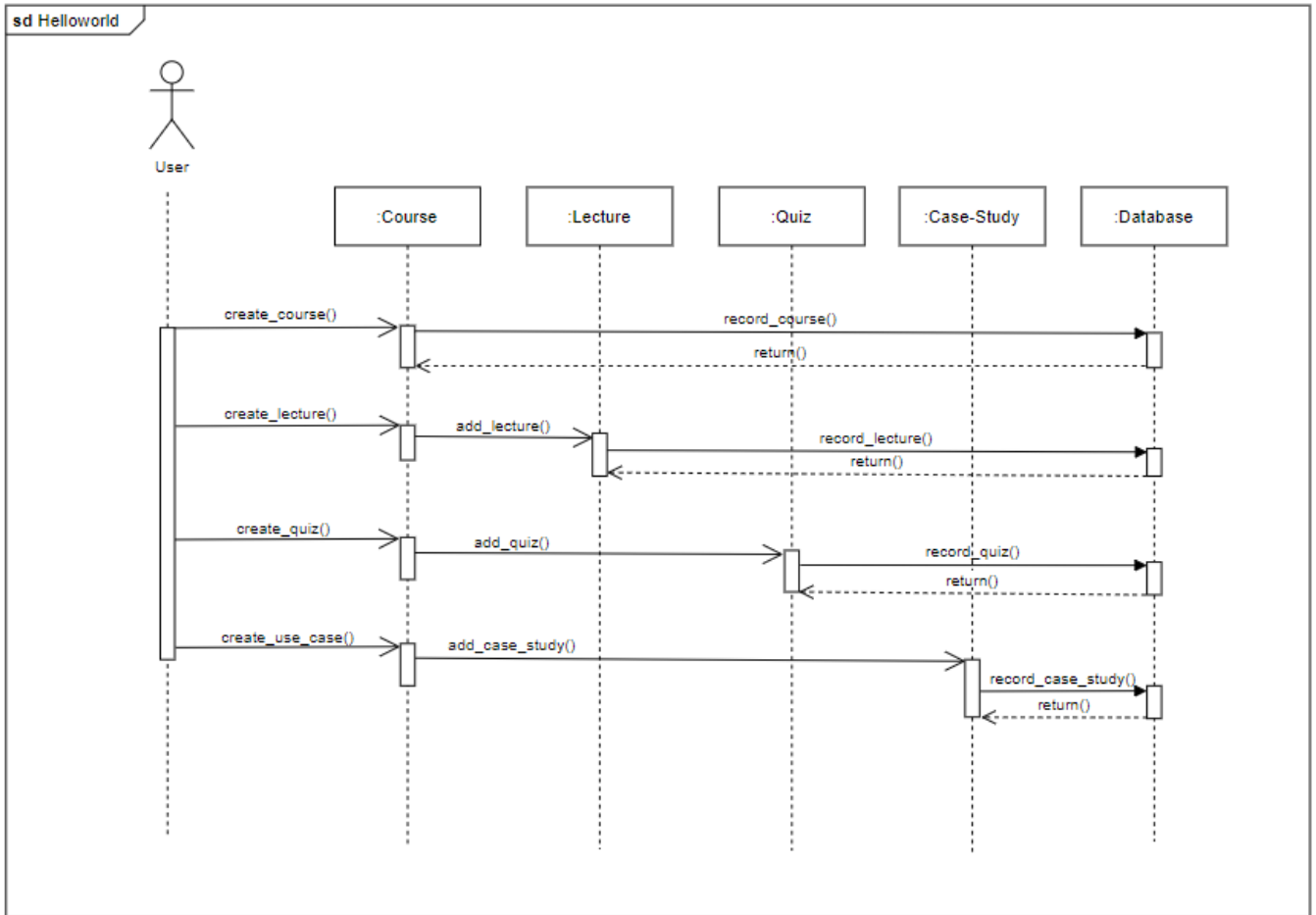*Figure 4 - Class Diagram for Database*

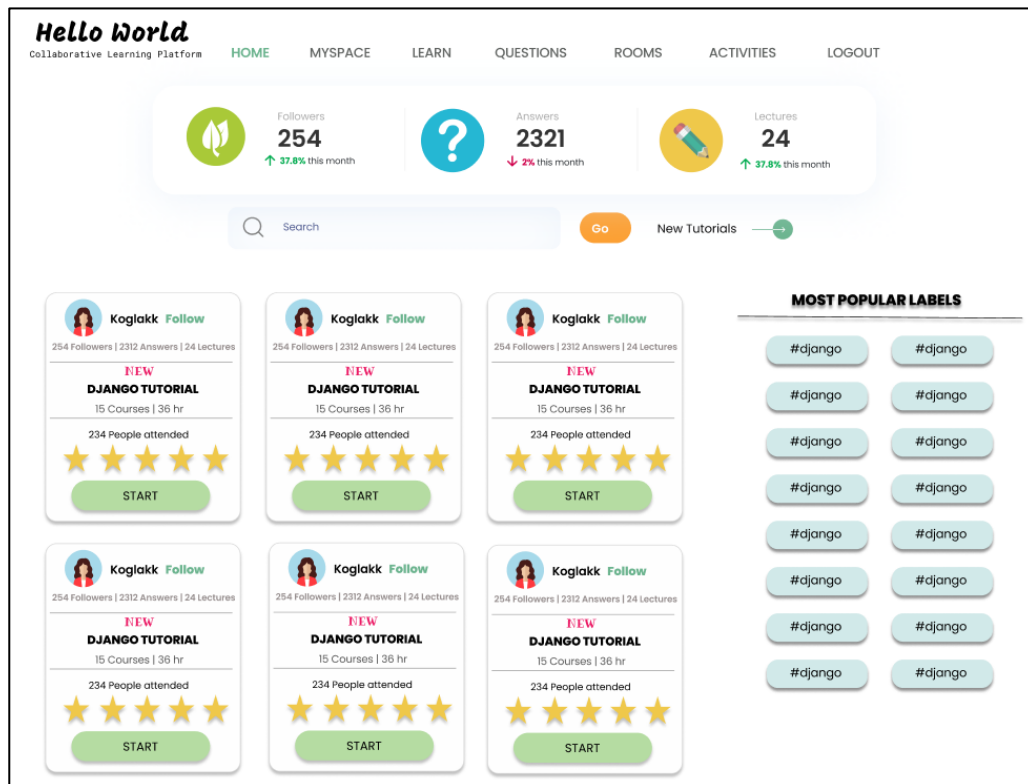*Figure 5- Sequence Diagram for Courses*

MOCK UP SCREENS

Figure 6 - Mock Up for Home Page

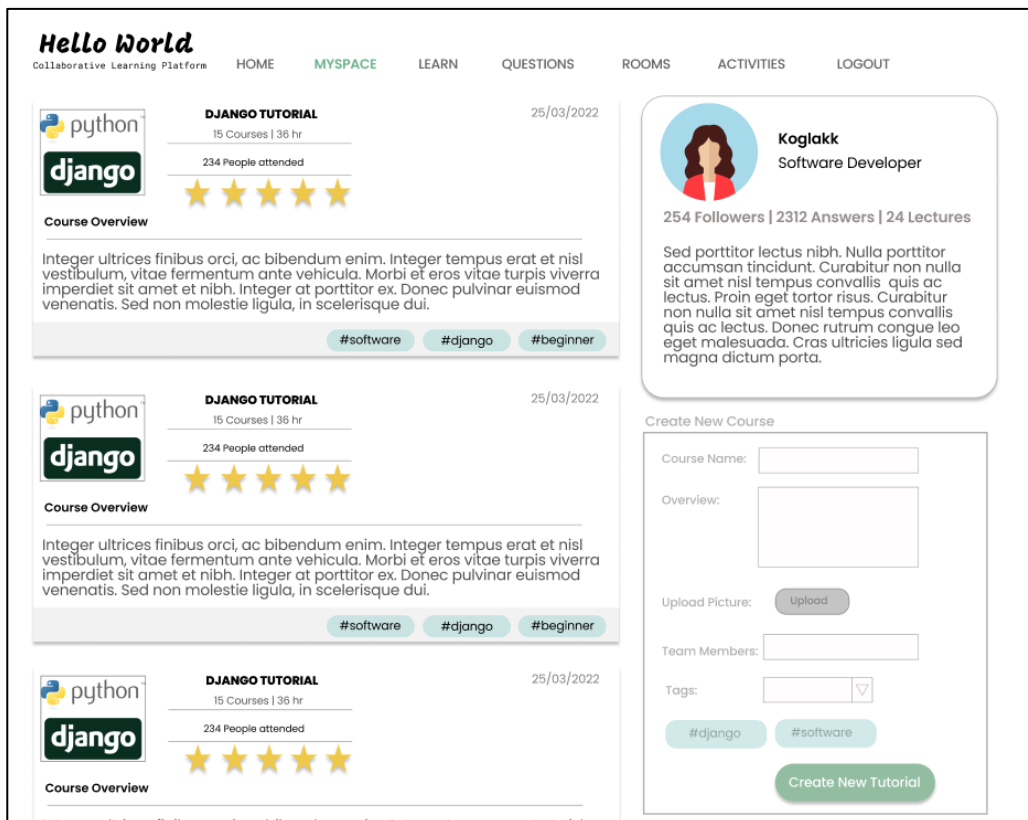*Figure 7 - Mock Up for Myspace Page*

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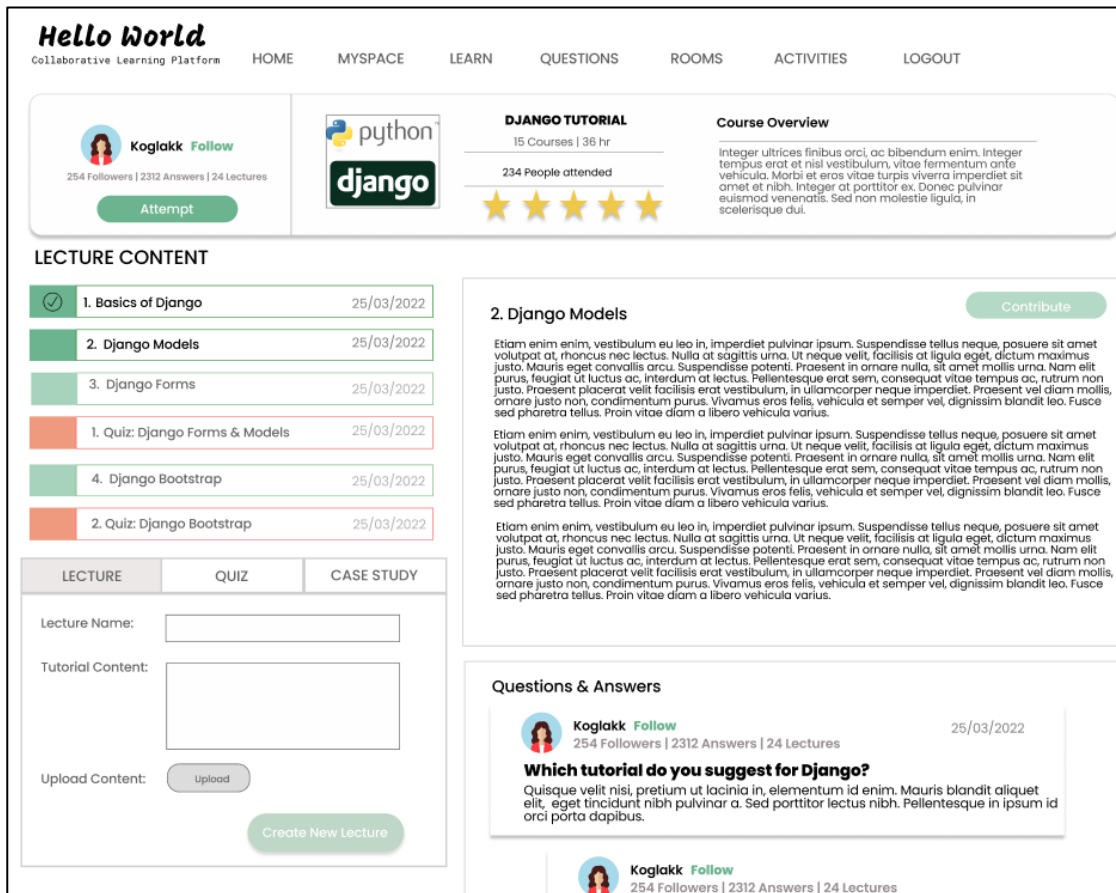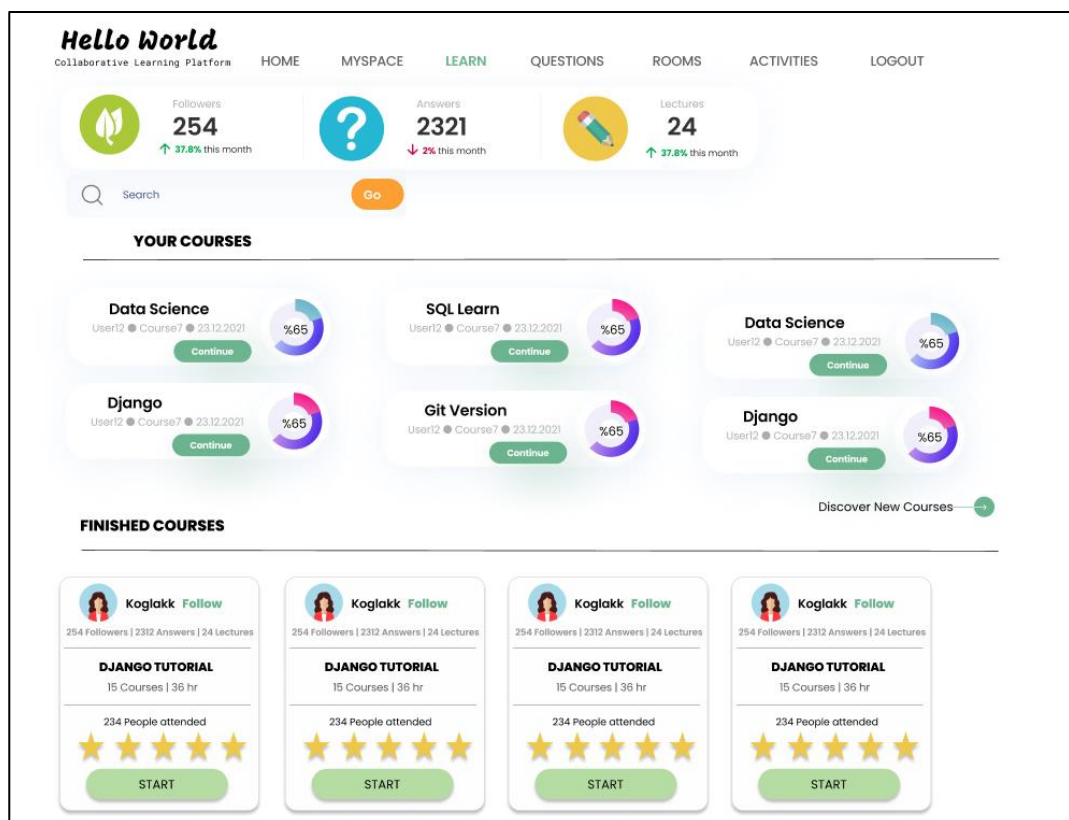
Figure 8 - Mock Up for Course Page
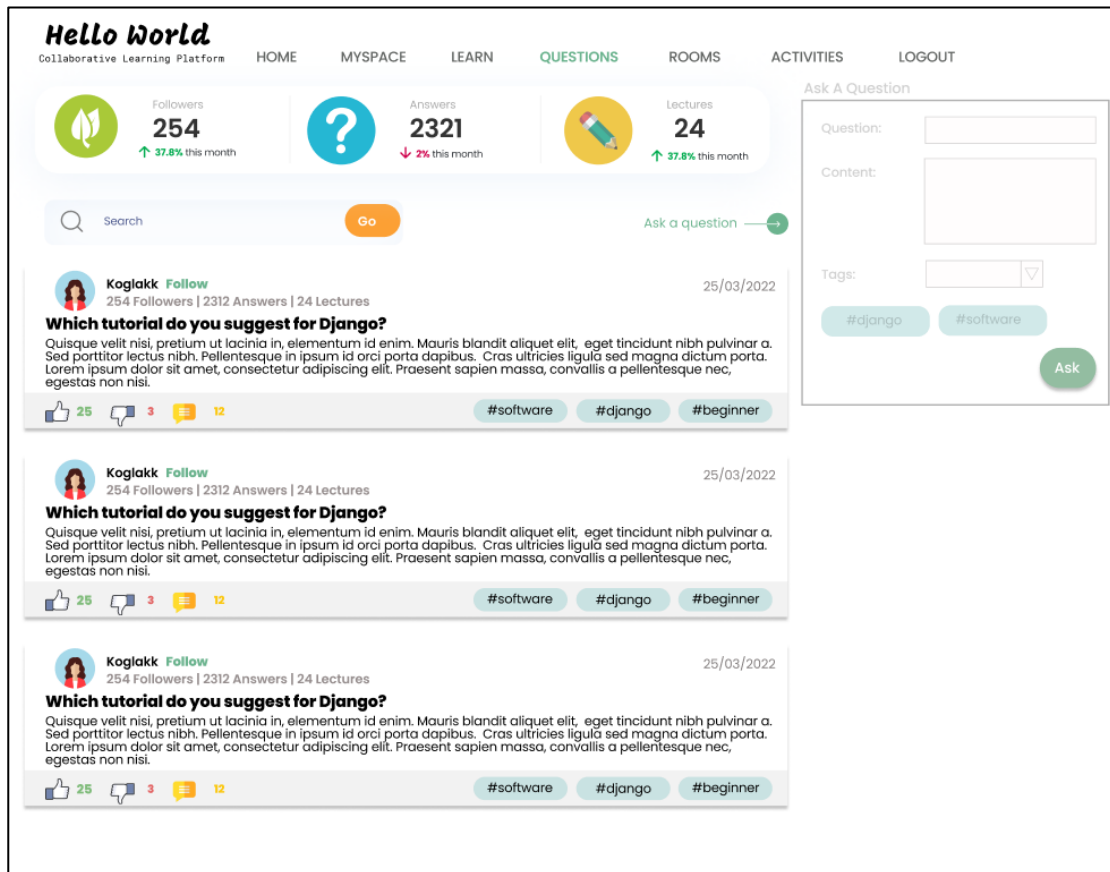

Figure 9- Mock Up for Learn Page

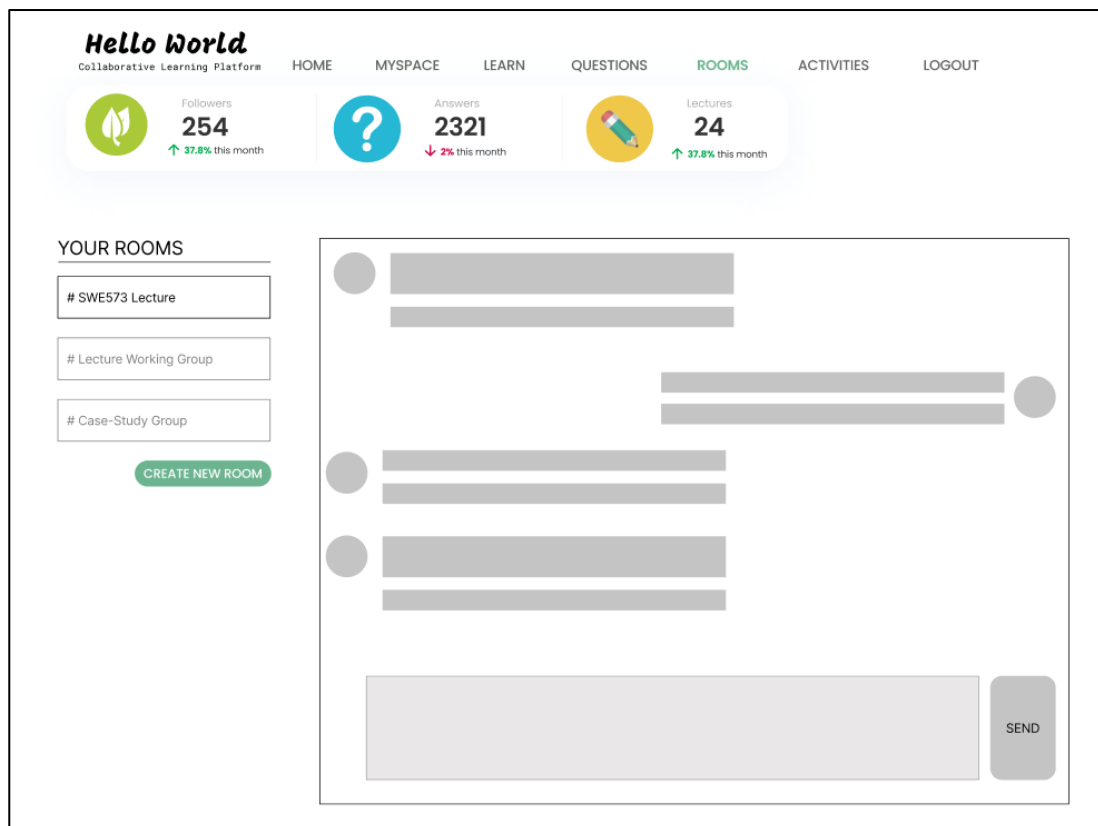*Figure 10 - Mock Up for Question Page*

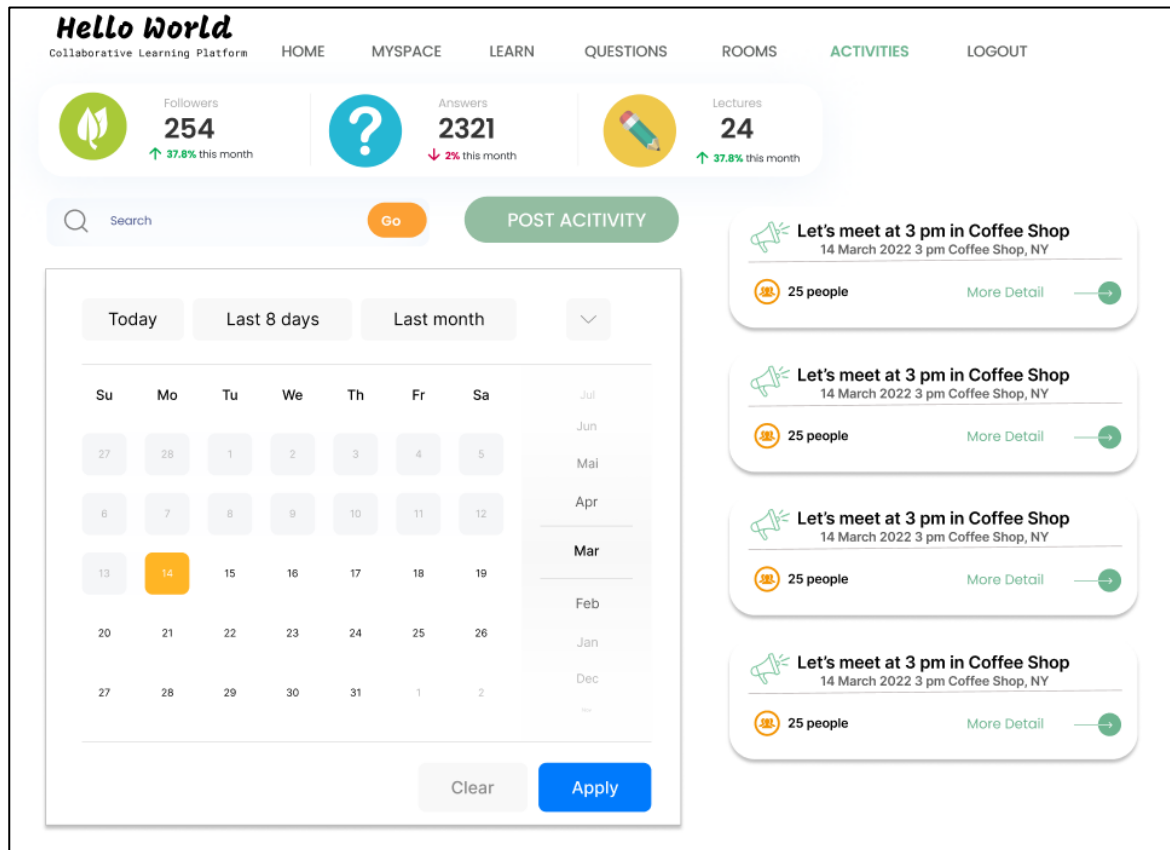
Figure 11 - Mock Up for Rooms Page

Figure 12 - Mock up For Activities Page

WEEKLY DELIVERABLES

Prioritizing has been done based on customer's need and restrictions based on time, effort, and budget. Issues are going to be added at github weekly according to weekly deliverables which are listed below.

WEEK 1 – Target: 12/04/2022

- Migrate database to Postgresql
  - **Prioritization: High**
  - **Status: Closed**
  - **Issue Link: https://github.com/koglak/SWE573/issues/10**
- Implement Authorization of website
  - **Prioritization: High**
  - **Status: Closed**
  - **Issue Link: https://github.com/koglak/SWE573/issues/11**
- Implement Question Page
  - **Prioritization: High**
  - **Status: Open**
  - **Issue Link: https://github.com/koglak/SWE573/issues/12**
  - **Issue Link: https://github.com/koglak/SWE573/issues/13**
- Implement Myspace Page
  - **Prioritization: High**
  - **Status: Open**
  - **Issue Link: https://github.com/koglak/SWE573/issues/14**

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- Document your works & learnings

WEEK 2 – Target: 19/04/2022

- Implement Course Page Functions –Lecture
  - o **Prioritization: High**
- Implement Course Page Functions – Quiz
  - o **Prioritization: High**
- Implement Course Page Functions – Case-study
  - o **Prioritization: Medium**
- Document your works & learnings

WEEK 3 – Target: 26/04/2022

- Implement Lecture Page
  - o **Prioritization: High**
- Implement Home Page
  - o **Prioritization: Medium**
- Implement Profile Page
  - o **Prioritization: Medium**
- Document your works & learnings

WEEK 4 – Target: 03/05/2022

- Examine your progress - Reconsider timing plan / deliverables
  - o **Prioritization: High**
- Implement Rooms Page
  - o **Prioritization: Medium**
- Implement Activity Page
  - o **Prioritization: Low**
- Document your works & learnings

WEEK 5 – Target:10/05/2022

- Learn Unit Testing
  - o **Prioritization: High**
- Test application
  - o **Prioritization: High**
- Learn Deployment- Docker
  - o **Prioritization: High**
- Practice deployment
  - o **Prioritization: Medium**
- Document your works & learnings

WEEK 6-7 – Target: 24/05/2022

- Deploy website
  - o **Prioritization: High**

- Fine tuning for github repository
  - **Prioritization: Medium**
- Fine tuning for UI
  - **Prioritization: Low**

GITHUB LINKS

- **Requirements:** https://github.com/koglak/SWE573/wiki/Project-Requirements
- **User Scenario:** https://github.com/koglak/SWE573/wiki/User-Scenario
- **Diagrams:** https://github.com/koglak/SWE573/wiki/Diagrams
- **Mock-up Screens:** https://github.com/koglak/SWE573/wiki/Mock-Up-Screens