

CMPE 352-Milestone 1 Report

Group 3

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- Executive Summary
 - Project description
 - Project Status
 - Forward Plans
- List and Status of Deliverables
- Evaluation of the Status of Deliverables
- Evaluation of Project Repository
- Evaluation of Requirements
- Evaluation of Scenarios and Mockups
- Evaluation of UML Diagrams
- Evaluation of Project Plan
- Evaluation of RAM
- Evaluation of Communication Plan
- Evaluation of Tools Used
 - Github
 - Lucid.app
 - Draw.io
 - PlantUML
 - VS Code Markdown PDF
 - Slack
 - WhatsApp
 - Zoom
 - Google Docs
 - ProjectLibre
- Summary of Work Done
- Communication Plan
- Software Requirements Specification
 - Glossary
 - Functional Requirements
 - User Requirements
 - System Requirements
 - Non-Functional Requirements
- Scenarios and Mockups
 - Scenario 1: Event Creation
 - The User, Persona
 - User Goals
 - Preconditions
 - Scenario, Actions
 - Acceptance Criteria
 - Web Mockup
 - Mobile Mockup
 - Scenario 2: Creating Discussion
 - The User - Persona
 - User Goals
 - Preconditions
 - Scenario Actions

- Acceptance Criteria
 - Mobile Mockup
 - Web Mockup
 - Scenario 3: Note Taking
 - The User, Persona
 - User Goals
 - Preconditions
 - Scenario Actions
 - Acceptance Criteria
 - Web Mockup
 - Mobile Mockup
- Software Design Documents
 - Use Case Diagrams
 - Class Diagrams
 - Sequence Diagrams

Executive Summary

Project description

This project is an online learning platform which can offer such environments independent of the location of the teachers and learners. There are two types of users in our platform, one is an admin user and the other type of user can be a lecturer and a learner depending on the course. Lecturer implies anyone who knows something well and can teach it and learner is anyone who is interested in learning. This departs from the classical educational course room context. In this platform, users can enroll in a learning experience where they will utilize resources and solve problems. They can monitor their progress of the enrolled course. They can create notes related to what they are learning and share notes with others. They can also connect notes, annotate and tag them. The users can also create a course and decide its contents. We call owners of courses "lecturers". Lecturers can organize in-person meetings by specifying locations, dates, duration, and other relevant information using the platform. Lecturers can also create polls to help the learners to contribute some decisions taken during the lecture. Polls can be in three options: anonymous mode, multiple answers, and quiz mode. Lecturer can also have reputations based on the feedback gathered by the learners as they learn. This platform provides users to create their own a profile that describes their interest and their knowledge. Users be able to follow other users and be able to see the activities/achievements of those they follow in this platform. This platform offers semantic searching, browsing, and recommendations to offer a rich learning environment. The system of this platform makes recommendations based on the learning experience. This platform supports Android, and Web so that it is available on both mobile and the web. We also take into consideration ethical concerns while designing our platform. Therefore, we follow the rules of KVKK and GDPR and the standards of W3C as a software project.

Project Status

At the beginning of course, we were not experienced about the design issues. At first, we all discussed about tasks and made joint decisions. Afterwards, we started dividing each task into sub-tasks and tried to give responsibility to every member of the team. Each friday we have regular meetings. We talk about the assignments at the hand, the status of our project, what we will do next week, and how to distribute the given tasks. We assign each task to someone and decide about a deadline for each task. Everyone comes forward for every task and does the tasks before the deadline. First, we created a communication plan because we need to be in contact all the time. In order to do that, we created groups on Whatsapp and Slack in the first team meeting. Then, we focused on our project and decided about the requirements. We created mock-ups and scenarios. We met with the customer and rearranged requirements considering the customer's wishes. Then, we focused on mainly on design and created use case diagram, class diagram, sequence diagram.

Forward Plans

We have created a guideline to help us implement the project until now. We will decide about our project plan to know the time a task will be finished. We will start the implementation of the app. We need to decide which team members will develop frontend, backend and mobil application. We are going to discuss about the tools and frameworks, which might be useful for us. We need to find out which programming languages, services and APIs to use and conduct research and learning on those tools. We know that through the life

time of project we will run across some obstacles. So, we will continue to arrange meetings frequently about those situations to ensure that everything is clear.

List and Status of Deliverables

Deliverable Name	Delivery Status	Due Date	Delivery Date
D1- Project Repository	Delivered	08/03/2022	07/03/2022
D2- Requirements	Delivered	30/03/2022	29/03/2022
D3- Software Design Documents in UML	Delivered	06/04/2022	04/04/2022
D4- Project Plan & RAM	Delivered	15/04/2022	14/04/2022
D5- Milestone Report	Delivered	15/04/2022	15/04/2022

Evaluation of the Status of Deliverables

Initial draft for requirements were created at the very start of the project, based on the project description to capture the general idea of the project. After the first customer meeting, a new version was created based on the feedback given by the customer. Throughout the project, we continued editing requirements based on feedback, also there were two major changes in the requirements. The first major change was made while creating the mockups and scenarios, where we needed to consider the user requirements thoroughly. The second major change was made while we were designing the use case, sequence and class diagrams, where we needed to specify how our project would work and interact with the users. After all these changes and improvements, the requirements are finally completed as a deliverable. Requirements are very vital to our project since it will be used to define the desired features, with its boundaries, that our project will have to provide; along with the features that users will be using. During the creation of the very first draft; each group member was assigned to create the initial version of a subsection of requirements, then, all of initial sections were modified and changed by the group members numerous times and these changes were also reviewed by the group members in the group meetings.

Evaluation of Project Repository

- **Welcome Page - README.md:** This is what the people see when they first visit the repo. So, it is important. There, we have created an introductory page to show who the team members are, with their profile photos. We were a bit late to do that, but we have completed and created a good looking welcome page.
- **Wiki Page:** This is where all of our documentation resides. We have developed this page with the following headers as we kept on doing researches, adding documents etc. As a result, we have created a simple and minimalistic wiki page.
- **Requirements** We simply listed all our requirements here. Similar to wiki page, this one is also relatively simple and minimalistic. For ease of readability, we also created dropdown-like buttons using HTML.

- **Questions about Requirements** We have gathered the questions to be asked to customer. After the meeting, we have concluded the answers under the corresponding questions. This helped us keep the misconceptions/problems organized.
- **User Scenarios and Mockups** Under this topic, 3 links have been created, each with their corresponding use cases and their mockups. Overall, it led to easy access to the scenarios, also keeping them organized and uniform.
- **Diagrams** We gathered all our diagrams under this header.
 - **Use Case** Under this, we have put our use-case diagrams.
 - **Class** Under this, we have put our class diagrams.
 - **Sequence** Under this, we have put our sequence diagrams individually.
- **Team Members** We have all created a personal page under this. This makes the repo a bit more special, showing diversity of the team. A good touch indeed.
- **Communication** We have created our communication plan and documented under here. It helped us uniform and showcase them with ease.
- **Meeting Notes** For each week, note taker documented their notes here. Again, simplicity and availability is the first criteria.
- **Research** In this repo, apparently, we all could have 'contributed' by editing some small details. However, we chose to gather necessary info in Slack channel, assigning a teammate to summarize under this topic. This cost us much.
- **Templates** For any type of template, used this to keep track of and easily find the templates. This was helpful especially for creating some documentation conventions.
- **Personal Effort** We have stored our weekly efforts under here weekly. Helped us solidly showcase our hardwork.
- **Issue Tracking** For each atomic tasks, we usually created the issues and assigned themselves. For batch processes, we created an issue for tracking the batch effort, where everyone needed to bind their work together/needed to work together. This again helped us remove some chaos from the issues, keeping them necessarily intact.
- **Customizations:** For more distinct and understandable issues, we have created multiple tags covering different necessary meanings. We have created an issue template so that the issues would look uniform, leading to less distraction on different issues. Although, having done that in the earlier stages would be better.
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Evaluation of Requirements

Initial draft for requirements were created at the very start of the project, based on the project description to capture the general idea of the project. After the first customer meeting, a new version was created based on the feedback given by the customer. Throughout the project, we continued editing requirements based on feedback, also there were two major changes in the requirements. The first major change was made while creating the mockups and scenarios, where we needed to consider the user requirements thoroughly. The second major change was made while we were designing the use case, sequence and class diagrams, where we needed to specify how our project would work and interact with the users. After all these changes and improvements, the requirements are finally completed as a deliverable. Requirements

are very vital to our project since it will be used to define the desired features ,with its boundaries, that our project will have to provide; along with the features that users will be using. During the creation of the very first draft; each group member was assigned to create the initial version of a subsection of requirements, then, all of the initial sections were modified and changed by the group members numerous times and these changes were also reviewed by the group members in the group meetings.

Evaluation of Scenarios and Mockups

To demonstrate the platform's usability and globality, user scenarios should be real-life examples that everyone can appreciate. They should depict diverse types of individuals with varying desires. Event creation, creating discussion, and note taking are the three user scenarios we created. From the requirements, we were able to clearly identify the personal backgrounds of distinct users, what they desire, the preconditions, goals, and acceptance criteria for these situations. We were able to come up with new design and feature ideas for our platform by thinking about the activities step by step for the situations. This helped us come up with new design and feature ideas for our platform that would help users utilize the platform more efficiently. So, during the preparation mockups and scenarios, we modified the requirements.

Evaluation of UML Diagrams

We started creating our UML diagrams without deciding on a template because we thought that it would be easier if we reviewed all the work together at the meetings instead of spending so much time on creating a template for something that could differentiate way too often since different use cases or different sequence diagrams require a totally distinct approach. For use case and class diagrams we used lucidchart, however in sequence diagrams some of us found it easier to create sequence diagrams using plantUML whereas the rest remained to create theirs with lucidchart. We did not need to alter the use case diagrams too much but for class and sequence diagrams, we needed to modify them several times. We asked plenty of questions to the TA during our customer meetings and we finalized our design accordingly.

- Use Case Diagrams: We split the use cases to every group member so that all of us would contribute to the creation of the diagram. We did not need to alter the use case bubbles all that much, but we did modify the arrows between them a lot since the initial creating had plenty of mistakes.
- Class Diagrams: Like use case diagrams, we also split the class and sequence diagrams between us. Our initial creation looked somewhat successful but as we started creating our sequence diagrams, we found out that some of the needed functions were missing. We modified the class diagrams accordingly and we also did not include any getter-setter functions in our class diagrams since that we asked whether if we should add them or not and the answer we got was that we better not add them since they are not necessary to show.
- Sequence Diagrams: We decided that everyone should create the sequence diagram of the use case they made. In the customer meeting, we received feedbacks to our drafts and it was mainly about the fact that our initial creations are a little complicated and that we need to simplify our sequence diagrams. We did the necessary simplifications and finalized our sequence diagrams.

Evaluation of Project Plan

The baseline of the **project plan** mainly depends on the RAM, responsibility assignment matrix. We decided to prepare the RAM(#134) before the project plan so that we can extract the tasks done during the whole project process. After that the tasks has been decided at the RAM table, we constructed the **project plan** upon those tasks using projectLibre(#projectplanissue). Essentially, looking through github issues related to RAM tasks, project plan has been prepared by inserting the assignee, start time and end time data of the issues into a projectLibre document. For the future tasks, team got together to plan, estimate what kind of work will be done along the road upon accomplishing our project and what would be the schedule of it. **Project plan** was finished with adding the future tasks on top of the projectLibre document.

Evaluation of RAM

In the Responsibility Assignment Matrix, one can clearly see who did what task and who helped them, reviewed the work and so on. The tasks in the RAM are the tasks we have done for the current version of deliverables. We did not include any tasks that are completed but removed from the deliverables for one reason or another. There are labels for describing how a teammate contributed for the tasks. They are : Lead (L), Secondary (S), Contributor (C), Reviewer (R), and finally None (N). Leading a task means that a team member either does the job (with or without other team members), or he/she tracks how it's done and/or when it is done. Secondary label means a team member helped the lead of the task, and he/she made same effort with the lead. Contributor of a task means some parts were done by the contributor however it was less compared to the lead, or it can mean a task is shared between all the team members and everyone has almost the same workload. Reviewers are the team members checking the outcome of the task after it is done. None label is used when a team member was not involved in a task at all. In our resulting RAM, we have a lead for all the tasks we have done so far, except the research tasks. For requirements, class diagrams, use case diagrams and sequence diagrams, we reviewed them in the group meetings, because of that, we all have review label under our names in those task categories. Filling in the matrix showed us how we worked until now in a more structured way.

Evaluation of Communication Plan

All in all, I think our team used the chosen tools for communication effectively. Whenever a problem would be brought up to the attention of the team, they would immediately act to solve the problem. We used Zoom for our weekly meetings. Zoom is a great platform; however, the 40-minute restriction made it harder to use. One of the first things we did as a group was to set up a Slack workspace. We use slack to communicate while working on some tasks. We created appropriate channels to keep conversations about different topics apart. We use Whatsapp for urgent communication and just chatting. We additionally use Github issues to communicate about a specific issue.

Evaluation of Tools Used

Github

Github is the main platform we used in our project. Basically, we did everything and put everything on Github. We documented our requirements, questions, communication plan, meeting notes, personal efforts, user scenarios and mockups, and UML diagrams on Github. In the meetings, after discussing the meeting

agenda and deciding who will do what we wanted everyone to open a related issue for that task. We have used the issue system to track our progress. It increased our collaboration since we could comment on issues. We have used the markdown feature of GitHub exclusively in our issues and wiki pages. We used it to create checkboxes for subtasks of an issue, links to connect relevant pages, tables to show things in an ordered fashion, headers to create titles for the parts, bulleted or numbered lists to create lists, and bold, italic, emphasis features to emphasize some words. We haven't used the code part of Github yet since we didn't do any implementation but the version control system part helped us to track the differences between edits of a page. We also used the sidebar of GitHub to keep our wiki page organized. We used [README](#) to create a nice page to introduce ourselves and the project.

[Lucid.app](#)

We used the lucid app to draw our diagrams. It allows us to work together on the same document. For example in the class diagrams everybody created the given class in the same document then we ordered them together in a zoom meeting. For the use case diagram, we build it part by part in the same graph and reviewed it in a meeting. It shows who is doing changes currently in the document but it doesn't show the information from the past. It can be tiring to try to find the owner of a change. Other than that it provides a solid, collaborative environment with many beautiful options of shapes. It is easy to use, moving objects and connecting them with arrows is pretty easy.

[Draw.io](#)

We used draw.io to create our mockups. First, we wanted two of our friends to create a base for web and mobile mockups. They created two beautiful templates and shared them with us. After that, every group created one mockup for web and one mockup for mobile. It is easy to use and has many options. Exporting as a png option is very useful. You can export without a background and as a single file. We used this feature in some of our mockups.

[PlantUML](#)

Some of us used plantUML to create sequence diagrams. It takes care of the drawing part itself and it is closer to coding. It creates arrows, "alt" or "for" boxes in a structured fashion. It creates the actors, participants, and database automatically. It is also symmetric about these one on the top and one on the bottom. It can also be used to create other types of diagrams but it is easier to do them with lucid app

[VS Code Markdown PDF](#)

This is a tool that we have used during the preparation of this document. Since we all got used to the markdown feature of Github we decided that we can write this document in Github under relevant issues and then connect it in a single PDF file. This tool can embed links, create tables, show emphasizes, and even create plantUML diagrams inside the pdf. It is very useful and can be used inside vs code. It can export in pdf, html, png, and jpeg formats.

[Slack](#)

We used slack as a platform to communicate with our friends and teachers about the project. We asked questions and checked the answers. We created a separate workspace for our group only. We used it to communicate between the group members, share helpful links, and bring together questions. Inside this workspace, we created groups when we needed them. For example, we created three groups for the user

scenarios and mockups. Creating different text channels helped us increase our productivity since we could easily follow multiple topics at a time.

WhatsApp

We used WhatsApp to communicate instantly and discuss small things. Since we all are used to checking WhatsApp frequently it helped us communicate. WhatsApp is generally hard to track so we didn't use it for very important subjects that need to be checked by all team members. Generally, when we needed help or were not sure about a subject we used WhatsApp. We also used it for general chit-chat from time to time.

Zoom

We used zoom for weekly meetings and other additional meetings. The problem with the zoom is that since there is a time limit to the free version of the zoom our meetings got interrupted. But we used this issue to our advantage and counted zoom sessions to track the time and gave breaks after two or three zoom sessions. We shared our screens when we needed them and used the chat feature to share some links.

Google Docs

We used Google Docs when we needed to collaborate on something written. We used it to create our RAM. One of our friends created a template and another one filled the work part. Then everyone selected their own role in a work so the job is done more easily. It is free to use and like the online version of MS office so everyone is used to using it. Since it stores documents in Google Drive it is hard to lose a document.

ProjectLibre

We used project libre to prepare our project plan. It is open-source, free software. It is a desktop application and it is stated that there will be a cloud version. Apparently, the cloud version is being waited for a long time. Since it is only available as a desktop application we could not efficiently work on it. It was not practical to share the screen on zoom and try to fill a table together. It is not stable on different operating systems. Some features work in windows, others in ubuntu, and others on macOS. It has no support for M1 so it works very slow on new MacBooks. It crashes from time to time so we had to start over four times. The user interface is not good. We didn't like this program at all. It didn't make our job easier than it is. It would have been easier to do the whole plan on Paint. This program should not be recommended to any user or any group in the future. We are very disappointed about this.

Summary of Work Done

Member	Work
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Member	Work
Kadir Ersoy	- Created a personal Wiki page .
	- Done research on different GitHub repositories, documented a favourite one .
	- Studied Git.
	- Tracked personal wiki pages. #2
	- Reviewed requirements glossary. #15
	- Reviewed previous groups' requirements pages.
	- Wrote the requirements for Event Organization. #25
	- Documented Meeting notes 3 . #28
	- Gathered questions about the Requirements. #26
	- Wrote User Scenario 1 . #37 #53
	- Documented Customer meeting 1 . #58
	- Documented Meeting Notes 6 . #65
	- Designed Use Case Diagram for Register . #79
	- Designed Use Case Diagram for Create Profile . #89
	- Designed Class Diagram for User class. #100
	- Designed Class Diagram for UserService class. #104
	- Designed Sequence Diagram for Register/Sign-up . #107
	- Updated Acceptance Criteria part of Scenario 1 . #103
	- Handled Class Diagram relations. #126
	- Designed Use Case Diagram Follow/Block User . #127
Nurlan Dadashov	- Documented Evaluation of Project Plan. #138
	- Contributed to RAM, Project Plan and to the future plan of the project.
	- Attended to all meetings.
	- Created a personal Wiki page .
	- Done research on different GitHub repositories, documented a favourite one .
	- Studied Git.
	- Reviewed requirements glossary. #15
	- Wrote Non-functional Requirements. #12
	- Reviewed the requirements written by other team members.
	- Created a web mockup for User Scenario 3 . #38
	- Documented Meeting Notes 5 . #57
	- Revising Privacy requirements. #64
	- Designed Use Case Diagram for Events . #68
	- Designed Class Diagram for Event class. #69
	- Designed Sequence Diagram for Event Creation . #109
	- Revised Event requirements.
	- Documented Evaluation of Communication Plan. #138
	- Contributed to RAM, Project Plan, and to the future plan of the project.
	- Attended all team meetings.

Member	Work
Mertcan Özkan	<ul style="list-style-type: none"> - Created personal wiki page - Created and customized labels for issues #7 - Done research on different git repos and choose a favourite one. - Studied Git. - Created the system requirements profile page. #24 - Edited system requirements-profile page ,with all of its subsections , multiple times based on feedback. #51 #31 #130 - Created user scenario 1 with kadir. #37 - Reviewed user scenario 1 mockups. - Crated use case edit view profile page. #80 - Reviewed create profile use case written by Kadir , then merged it with use case edit view use case. - Created class diagram personal information. #92 - Created sequence diagram - edit profile page #120. - Written evaluation of requirements for milestone 1 report. #137 - Tracked editing the acceptance criteria of scenerios after requirement changes. #103 - Tracked class diagram writing conventions. #123 - Participated in all group and customer meetings. - Created my part of individual work in milestone 1 report. - Helped in creating the project plan and talked about future plans. - Created weekly effort page for all weeks.
Mehmet Gökberk Arslan	<ul style="list-style-type: none"> - Created a personal wiki page. #2 - Did repository research, chose a favourite one and added it to the corresponding wiki page. #5 - Studied git and prepared a wiki page for it. #9 - Learned Markdown. - Wrote the requirements for recommendations. #16 - Created the mobile mockup for scenario#2 creating a discussion. #46 , #50 - Created the use case diagram for enrolling a course and contributed to the use case diagram for viewing course content. #87 , #71 - Created the class diagram for comment class. #85 - Created the sequence diagram for enrolling a course. #116 - Joined all the group and customer meetings. - Documented my personal effort every week. - Wrote the evaluation of UML diagrams in the milestone report. #142 - Filled in my part of the RAM. #134 - Contributed to the future project plan. - Created my part for individual work in milestone report.

Member	Work
Bengisu Takkin	<ul style="list-style-type: none"> - Created a personal Wiki page. - Done research on different GitHub repositories, documented a favourite one. - Studied Git. - Wrote user requirements. #18 - Reviewed the requirements written by other team members. - Documented Meeting Notes 2 #19 - Created a template for Main Page for Web #35 - Created a template for Course Page for Web #36 - Created Persona for Scenario 3. #45 - Revised User Requirements with @salimtirit. #60 - Documented Customer Meeting #2 Notes #61 - Made drastic changes in the User Requirements according to the team revisions with @salimtirit and @muhammetssen. #63 - Created a Use Case Diagram for Create Content. #75 - Created a Class Diagram for Email Service. #77 - Tracked the revisions of the Use Case Diagram Relations. #121 - Tracked Weekly Efforts #6 #128 - Created a Table for Deliverables with Their Statuses. #144 - Contributed to RAM, Project Plan, and to the future plan of the project. - Attended all team meetings.
Bilal Aytekin	<ul style="list-style-type: none"> * Created a personal Wiki page. * Created a personal effort page draft. #3 * Searched for original GitHub repos, reported the vscode-lean4. * Watched the "Git for Ages 4 and Up". * Completed the "Infrastructure Setup" task on Moodle. * Prepared the search engine requirements, revised according to the team and customer reviews. #13 * Reviewed the requirements written by other team members in team meetings. * Created the mobile mockup for Scenario #3. #41 * Detailed the privacy section of requirements. #54 * Designing the use case diagram for searching functionality. #81 * Designed the class diagram for the SearchService class. #82 * Designed a sequence diagram for searching. #105 * Filled the responsibility assignment matrix. * Collecting all the evaluations, diagrams and personal efforts reports and compiling them for the Milestone 1 Report to be submitted. #145 * Documented my personal efforts weekly. * Attended all the meetings, both team and customer.





Member	Work
Muhammet Şen	<ul style="list-style-type: none"> - Created a personal Wiki page. - Investigated different repositories to understand how to use wiki and issue systems in an efficient way. Moreover, documented my favorite one - Documented Meeting Notes #1 04.03.2022 - Reviewed and tracked #27 requirements. Added requirements prepared by other team members to wiki page as they get completed and reviewed. - Created Scenario 2 #48 - Tracked Weekly Efforts 4 #59 - Changed the design of the requirements page in order to increase readability. #76 - Designed the use case diagram for Managing Notes #78 - Designed the class diagram for Note #84 - Designed the class diagram for Enrollment #88 - Designed the class diagram for Feedback #113 - - Designed the class diagram for UserService #104 with @ersoykadir - Improved the intergration between Enrollment and Badge classes by collabrating with @hsuleerkul #97 - Documented Meeting Notes #5 04.04.2022 #98 - Created sequence diagrams for Managing Notes #119 - Tracked statuses of all sequence diagrams #131 - Prepared project plan #148
Hatice Şule Erkul	<ul style="list-style-type: none"> - Created a personal wiki page - Documented my favorite Github Repos here and here - Edited Wiki Home page and the sidebar. #1 - Wrote the Glossary of the Requirements. #15 - Documented the Answers of Questions about Requirements page. #30 - Created a template for Mobile Mockups. #32 - Wrote the Acceptance Criteria of Scenario 2 #44 - Edited the Glossary of the Requirements to add new terms and update the ambiguities. #56 - Prepared a use case diagram for View Course Content functionality #71 - Prepared a Class Diagram for Achievement class #72 (Later Removed) - Revised the Requirements, added Feedback functionality into it. #73 - Discussed about overlapping features of Achievement and Enrollment classes with @muhammetssen. #97 - Created the Class Diagram for Badge Class. #99 - Created the Class Diagram for Feedback Class. #114 - Prepared a Sequence Diagram for Modifying Custom Badges #101 - Prepared Sequence Diagrams for Viewing Course Content #129 - Updated the Acceptance Criteria of Scenario 2 #103 - Updated my Use Case Diagram's issue's description. #108 - Documented meeting notes of Meeting #9 #122 - Tracked the task list for Milestone 1 Report. #132 - Documented Task List for RAM and Tracked Completion Progress. #134 - Wrote an evaluation of RAM. #136

Member	Work
Burak Yilmaz	<ul style="list-style-type: none"> - Created a personal Wiki page. - Prepared communication channel #10. - Done research on different GitHub repositories, documented a favourite one. - Studied Git. - Track weekly efforts - 2 #20. - Documenting System-Communication Channel Requirements #21. - Documenting System-Annotation Requirements #22. - Generated and commented questions about the Requirements. #26. - Created User Scenario 3 #42, #52. - Configure and distribute Lucid app #62. - Designed Use Case Diagram for Create Poll #66. - Designed Class Diagram for Poll class #67. - Track weekly efforts - 5 #90. - Updated Acceptance Criteria part of Scenario 3 #103. - Designed Use Case diagram for Admin #106. - Tracking the addition of requirements to use case scenarios #108. - Created Sequence Diagram for Poll Actions #117. - Created Sequence Diagram for Admin actions #118. - Evaluated Project repository #143. - Contributed to RAM, Project Plan. - Attended to all the meetings.
Arif Akbaba	<ul style="list-style-type: none"> - Created a personal Wiki page. - Done research on different GitHub repositories, documented a favourite one. - Studied Git. - Research about Markdown - Created favorite GitHub repositories page - Tracked all team members favorite repositories research. #5 - Reviewed the requirements written by other team members. - Reviewed previous groups' requirements pages. - Wrote the requirements for Note Taking. #23 - Design Mobile Mockup Scenario 1. #40 - Adjusting Mobile Mockup Scenario 1. #49 - Designed Use Case Diagram for Create Course. #83 - Designed Class Diagram for Course class. #86 - Designed Sequence Diagram for Create Course. #112 - Documented Executive summary for M1. #140 - Filled the responsibility assignment matrix. - Contributed to RAM, Project Plan and to the future plan of the project. - Participated in all group and customer meetings. - Created weekly effort page for all weeks. - Wrote my part of individual work in milestone 1 report.

Member	Work
Salim Kemal Tirit	<ul style="list-style-type: none"> - Created a personal Wiki page. - Done research on different GitHub repositories, documented a favorite one. - Studied Git. - Watched the "Git for Ages 4 and Up". - Created Communicaion Plan Page. (issue #6) - Updated communication plan. #14 - Documenting User Requirements #17 - Reviewed the requirements written by other team members. - Created web mockup for user scenario # 1 #39 - Revised User Requirements with @Brunettow #60 - Changed the User part in the Requirements with @Brunettow #63 - Designed Use Case Diagram for Login / Sign in #91 - Designed Class Diagram for AuthorizationService class. (This class is deleted afterward.) #94 - Designed Class Diagram for Chapter class. #111 - Documented Meeting Notes 8. #115 - Designed Sequence Diagram for Login / Sign in #124 - Wrote an evaluation of the tools used #135 - Contributed to RAM and Project Plan. - Participated in all the meetings. - Created a weekly effort page for all weeks. - Wrote my part of individual work for the milestone 1 report.
Ahmet Kudu	<ul style="list-style-type: none"> - Created a personal Wiki page. - Done research on different GitHub repositories, documented a favourite one. - Studied Git. - Updated readme file - Reviewed previous groups' requirements pages.- Designed web mock-up for the scenario 2 - Designed for the issue template - Added admin modulation to the requirements #74 - Designed Use Case Diagram for Discussion Forum. #93 - Designed Class Diagram for Discussion Forum class. #95 - Designed Sequence Diagram for Discussion Forum. #102 - Added comments to glossary and improving requirements #110 - Written an Evaluation of Scenarios & Mockups #139 - Contributed to RAM, Project Plan and to the future plan of the project. - Attended to all meetings.

Communication Plan

Communication Channel	Purpose	Frequency	Participants
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Communication Channel		Purpose	Frequency	Participants
	Zoom	Main platform for online meetings. Wednesday meetings are for quick discussion and distribution of tasks. Friday meetings are to discuss the updates and to share ideas on them. There may be another distribution of tasks in Friday meetings.	Every Friday between 20.00-22.00 & Every Wednesday between 17.00-19.00	All Team Members
	Slack	Main platform for the communication between group members about the project. Used for important announcements and updates.	All-Time	All Team Members
	WhatsApp	For instant messages. Casual talking platform. Daily communication and chatting.	All-Time	All Team Members
	GitHub	For tracking progress and creating the project	All-Time	All Team Members

Software Requirements Specification

Glossary

- **Account Activation:** Confirmation of an account registration.
- **Achievements:** A record of completed sections and/or courses of a user.
- **Activities:** A record of operations done by a user (e.g. Taken notes, saved notes, following a user, enrolling in a course, etc.).
- **Admin User:** The type of user, who is responsible for the moderation of the system.
- **Annotation:** Content referring to some other resource.
- **Badge:** The thing users gain when they complete some chapters of courses, or achieve the basic system milestones.
- **Banning a user:** Taking away a user's access to the platform.
- **Bio:** "About me" section of a user.
- **Chapter:** A part of a course that consists of course contents, if a user completes a chapter, that has a badge they will receive a badge
- **Comment:** A text that typed down by users when they reply, mention or thread messages.
- **Communication channel:** A platform users can use to get in touch.
- **Course:** Structured educational content that is uploaded by lecturers.
- **Course Content:** A part of a course that consists of a part of the course material. It can be only text or supported with audiovisual media.
- **Discussion:** A forum-like post inside courses that is used to ask questions, exchange information.
- **Event:** Planned organisation in which the attendees are users of this platform.
- **Feedback:** A text consisting of thoughts of enrolled learners' of a course about that course.
- **Geolocation:** The actual location(latitude and longitude) of the user.
- **Interests:** A user's preferred topics, and courses.

- **Interface:** The graphical platform provided by this application to supply users with ease of use.
- **Knowledge:** A user's previous experience consisting of given courses if the user is a lecturer and completed courses if the user is learner.
- **Learner:** The type of user that is enrolled in a course.
- **Lecturer:** Users that can create courses, have admin privileges on the courses they created, such as; uploading content, creating events, creating polls.
- **Note Taking:** The act of recording information.
- **Meeting:** An assembly of users, created by users.
- **Poll:** A collection of opinions on a chosen matter, taken by learners, created and given by lecturers.
- **Popularity:** A degree of positive and negative opinions on a lecturer, a course, or other content in the application.
- **Prerequisite Course:** A course that is required to take another course.
- **Profile Page:** A page of a user giving information about that user.
- **Public Profile:** A profile page that every user of the application can view.
- **Private Profile:** A profile page that is only visible to that user's followers.
- **Rating:** A point from 1 to 5, of a course or a user that has created courses.
- **Recommendation:** The component of the application that can provide suggestions according to a user's past activities, interests, and followings.
- **Reputation:** Degree of a lecturer's past achievements, experience and influence on others.
- **Users:** People who are registered to the application and using it.
- **Semantic resources:** Resources that have correlation between their meaning.
- **Tag:** Identification labels of topics, and courses.
- **Topic:** A label that describes which category a course belongs to.

Functional Requirements

User Requirements

► 1.1 Account Features

- 1.1.1 Registration
 - 1.1.1.1. Users shall be able to register using a valid and unique email address, a username, and a password as defined in the security section.
 - 1.1.1.1.1. Users who are registered by providing their emails shall confirm their accounts via clicking the link sent in the confirmation email.
 - 1.1.1.2. Users shall be able to register using their Facebook, Twitter, Google account.
- 1.1.2 Log In
 - 1.1.2.1. Users shall be able to log into their account using their email and password combination.
 - 1.1.2.2. Users shall be able to log into their account using their Facebook, Twitter, Google account (if they have previously completed 1.1.1.2.).
 - 1.1.2.3. If a user enters their password wrong three times while logging in, they shall reset their password using their email.
 - 1.1.2.4. Users shall be able to reset their password via email verification by clicking Forget Password button.
 - 1.1.2.5. Users shall be able to change their password by using the profile settings page.
- 1.1.3 Log Out

- 1.1.3.1 Users shall be able to log out from their account.

► 1.2. Profile

- 1.2.1. Users shall have a profile exclusive for themselves.
- 1.2.2. Users shall be able to use the features of their profile page. (described in 2.1.2.)

► 1.3. User Actions

- 1.3.1. Users shall be able to block other users.(described in 3.3.6)
- 1.3.2. Users shall be able to follow other users.(described in 2.1.3)
- 1.3.3. Users shall be able to use the communication channel (described in 2.2.)
 - 1.3.3.1. Users shall be able to open a discussion post to ask questions.
 - 1.3.3.2. Users shall be able to make a comment to an existing question.
- 1.3.4. Users shall be able to use the note taking features (described in 2.3.)
- 1.3.5. Users shall be able to use the search engine (described in 2.5.)
- 1.3.6. Users shall be able to use the annotation features (described in 2.6.)
- 1.3.7. Users shall enroll to any course they want to.
- 1.3.8. Users shall be able to open a course in any subject, they don't need to prove any document regarding their experience on the topic. The user becomes the lecturer of the course s/he opened.
 - 1.3.8.1. Lecturers shall be able to create polls, allowed to be filled by the students enrolled in their course. The anonymity and/or the obligation of the poll shall be decided by the lecturer and declared to the students.
 - 1.3.8.2. Lecturers shall be able to organize and schedule events. The scope of the event depends on the lecturer's initiative. It can be public or private, face to face or online, free or needs a fee to enter.
 - 1.3.8.2.1. If the event is private, lecturer has to provide list of learners who can attend the event. These users shall be notified.
 - 1.3.8.3. The lecturer has the right to edit details (date/time, title, description, location, quota, list of attendees, fee) of the event.
 - 1.3.8.4. The lecturer has the right to cancel the event.
- 1.3.9. Users shall be able to delete their accounts.
- 1.3.10. Users shall be able to change their password by visiting the settings on the profile page.
- 1.3.11. Users shall be able to join the attendance list of the event that they would like to participate, for their enrolled classes.
- 1.3.12. Users shall be able to give feedback, consisting of a compulsory rating point between 1-5 and an optional text explaining their thoughts, to the classes they have enrolled.

► 1.4. Admin User

- 1.4.1. Admins shall be able to ban users for inconvenient behaviours.
- 1.4.2. Admins shall be able to delete inconvenient comments and articles.

System Requirements

► 2.1. Profile Page

- 2.1.1. System shall keep a profile page for every user registered that can also be edited by the user.
- 2.1.2. The profile page shall have the following sections:

- 2.1.2.1. Bio
 - 2.1.2.1.1. System shall keep a bio section in the profile page written by the user.
- 2.1.2.2. Achievements
 - 2.1.2.2.1. System shall keep an achievement section for each user.
 - 2.1.2.2.2. System shall keep a predefined list of badges that can be earned by user.
 - 2.1.2.2.3. Users will gain a badge when one the following occurs: learner completes a course, learner completes one section of the course, lecturer opens a new course, lecturer receives a review point that is greater than 4. (see 2.1.2.7.2.)
 - 2.1.2.2.4. The system shall allow a lecturer to add more badges to the badge list of the course they created.
 - 2.1.2.2.5. Achievement page shall be updated when a user gains a badge.
- 2.1.2.3. Interests
 - 2.1.2.3.1. System shall keep an interests' section in the profile page.
 - 2.1.2.3.2. System shall keep a predifened list for the possible interests a user may have.
 - 2.1.2.3.2.1. System shall promote users to choose from this list to define their interests' .
 - 2.1.2.3.2.2. Interests page shall be created based on the selection of user from this list.
- 2.1.2.4. Activities
 - 2.1.2.4.1. System shall keep an activities section for each user .
 - 2.1.2.4.2. Activities page shall be visible to the users that follow the owner of the profile page.
 - 2.1.2.4.3. System shall update the activities page when at least one of the following happens: learner joins a meeting, learner completes a course or a section of it, learner enrolls in a new course, learner drops a course, learner attends a quiz.
 - 2.1.2.4.4. System shall update the activities page when at least one of the following happens if user is also a lecturer in a course: lecturer arranges a meeting or joins one, lecturer opens a new course, lecturer closes a course, lecturer opens a quiz for one course.
- 2.1.2.5. Monitoring
 - 2.1.2.5.1. System shall keep track of the learner process in a course showing the following features: how many sections of a course completed so far, the remaining sections of the course, how many quizzes the learner have attended so far for each course.
 - 2.1.2.5.2. System shall keep a monitoring page section for every course that the learner takes.
 - 2.1.2.5.3. If learner drops a course, its monitoring record shall be erased.
 - 2.1.2.5.4. If user is also a lecturer, following statistics shall be kept by the system about each course that user gives: how many users have enrolled the course, how many users have completed the course, how many users have dropped the course, how many users have attended which quizzes of a course.
- 2.1.2.6. Knowledge
 - 2.1.2.6.1. System shall keep an knowledge section in the profile page.
 - 2.1.2.6.2. System shall keep a predifened list for the possssible knowledge a user may have.

- 2.1.2.6.2.1. System shall promote users to choose from this list to define their knowledge.
 - 2.1.2.6.2.2. Knowledge page shall be created based on the selection of user from this list.
- 2.1.2.7. Rating
 - 2.1.2.7.1. System shall keep a rating point between one to five for each user that is a lecturer.
 - 2.1.2.7.2.1. The rating point shall be the average of the ratings of the courses that user gives.
- 2.1.3. Following
 - 2.1.3.1. System shall keep record of the user profiles that are followed by the user.
 - 2.1.3.2. System shall allow a follower of a user to see the following features of a profile: achievements, monitoring, interests, knowledge, bio, activities.
- 2.1.4. Privacy
 - 2.1.4.1. Users shall be able to change privacy settings. User can have a public or private profile. (described in 3.3.6.)

► 2.2. Communication Channel

- 2.2.1. System shall provide an interface such that users can ask and answer questions.
- 2.2.2. System shall provide a discussion section for any type of user inside a course.
 - 2.2.2.1. System should support replying, mentioning and threaded messages to create a comment.
- 2.2.3. System should support sharing resources and files.

► 2.3. Note Taking

- 2.3.1. The system shall provide learners the ability to create a note.
- 2.3.2. The system shall provide learners the ability to save notes in their profile page.
- 2.3.3. The system shall show the saved notes of the learner in their profile page.
 - 2.3.3.1. The system should provide learners the option to sort notes according to date or popularity.
 - 2.3.3.2. The system should provide learners the option to show previous notes according to filtered systems.
 - 2.3.3.2.1. The note filtered system should enable learners to filter course name or lecturer.
- 2.3.4. The system shall provide learners the ability delete or rearrange note taking page.
- 2.3.5. The system shall provide registered learners the ability to connect notes, annotate and tag them.
- 2.3.6. The system shall provide learners the ability to share their notes with others.

► 2.4. Recommendations

- 2.4.1. The system shall provide a list of recommended courses to learners.
 - 2.4.1.1 The system shall provide learners the option to mark courses in the recommendations list as "not interested".

- 2.4.2. The system shall rank courses that are similar to recently completed courses of the learner, courses that have the learner's previously completed courses as prerequisites and courses that are related to the learner's area of interests higher in the recommendations list.
- 2.4.3. The system shall rank the courses of the lecturers with high reputation and courses of the learner's previous teachers higher in the recommendations list.

► 2.5. Search Engine

- 2.5.1. For any search, the result shall be broadscale in the sense that the results for any search should include those items that would be returned for another search with nearly synonymous keywords.
- 2.5.2. Courses shall be searched by entering keywords.
- 2.5.3. The search results for courses should adapt to the user, i.e. the default ranking of the results should reflect the user's behavior on the website.
 - 2.5.3.1. The courses that are similar to the user's previous courses should be ranked higher than other courses.
 - 2.5.3.2. The courses that are about a topic in which the user has shown interest should be ranked higher than other courses.
 - 2.5.3.3. The courses that are similar to those that are taken by the users that the user follow should be ranked higher than other courses.
- 2.5.4. Communication channel for discussions shall be searched by entering keywords. Those results shall be ranked according to date.
- 2.5.5. The notes belonging to and shared with the user shall be searchable.
- 2.5.6. It shall be possible to sort the results from newest to oldest or oldest to newest.
- 2.5.7. The system shall provide filtering on the results.
 - 2.5.7.1. The system shall provide filtering on the course results according to the availability of in-person meetings.
 - 2.5.7.2. The system shall provide filtering on the discussion channel search results according to topic.
 - 2.5.7.3. The system shall provide filtering on the results according to date.

► 2.6. Annotation

- 2.6.1. System shall support annotating with text, images and URI.
 - 2.6.1.1. System shall support external links in the case that users provide URI.
- 2.6.2. System shall support links that relate to semantic resources about the resource.
- 2.6.3. System shall provide a mechanism such that annotation can be applied to any context.

Non-Functional Requirements

► 3.1. Accessibility and Availability

- 3.1.1. The platform shall be accessed via both a native Android application and a web application.
 - 3.1.1.1 The web application of the platform shall support modern browsers (Chrome, Firefox, Safari, Opera, Edge).
 - 3.1.1.2 The web application of the platform should be responsive.
- 3.1.2. The platform language shall be English.
- 3.1.3 The platform should support [UTF-8](#) character encoding.

► 3.2. Security

- 3.2.1. Emails shall be valid and unique.
- 3.2.2. Passwords should be at least 6 characters long and contain at least one uppercase letter, one lowercase letter, one number, one special character.
- 3.2.3. The system shall encrypt passwords with [SHA-256](#) algorithm using a randomly generated salt. Passwords hashes and the respective salt shall be stored in the database.
- 3.2.4. Users shall not be able to perform actions that are not in the scope of their roles.
 - 3.2.4.1 Users shall not be able to access or modify the data of other users.
 - 3.2.4.2. API endpoints shall be protected with access tokens.
 - 3.2.4.2.1. New access tokens shall be generated in exchange for either user credentials or an unexpired refresh token.
- 3.2.5. Some actions, such as account activation, password change, should be allowed only via email confirmation.
- 3.2.6. The platform shall use [HTTPS Protocol](#).
- 3.2.7. All inputs provided by the user should be validated in order to mitigate attacks like [SQL injection](#).

► 3.3. Privacy

- 3.3.1. The platform shall comply with the rules specified by [KVKK](#) and [GDPR](#).
- 3.3.2. Users shall agree to the Terms of Service and Privacy Policy while registering.
- 3.3.3. Processing personal data outside the purpose of collection shall be prohibited.
- 3.3.4. A user's personal data shall be deleted as soon as it fulfills its purpose for collection.
- 3.3.5. If the personal data is to be used, the user shall be asked for consent clearly.
- 3.3.6. The system shall have two options for the visibility setting of a user profile:
 - 3.3.6.1. Public Profile: The system shall allow other users to see a user's profile if the user opts to choose the public profile option.
 - 3.3.6.2. Private Profile: System shall not allow other non-follower users to see a user's profile if the user opts to choose the private profile.
 - 3.3.6.3. Additionally, users blocked by another user shall be prevented to interact with the user who blocked them and both parties shall not view any page related to each other.

► 3.4. Performance and Reliability

- 3.4.1. The platform shall respond in at most 3 seconds.
- 3.4.2. The platform shall support at least 100 simultaneous user actions.
- 3.4.3. The platform shall support at least 10000 user accounts.
- 3.4.4. Database backup should be generated each week.
- 3.4.5. In case of failure, the platform should be back online in at most 2 hours.
- 3.4.6. The platform should have an uptime of at least 99%.

► 3.5. Standards

- 3.5.1. Annotations shall be compliant with the [W3C Web Annotation Data Model](#) and follow [W3C standards](#).
- 3.5.2. Implementation of geolocation shall obey the guidelines of [W3C GeoInfo](#).

Scenarios and Mockups

Scenario 1: Event Creation

The User, Persona



Yone is a 56 year old film critic, passionate about movies, loves talking and writing about them. After feeling the lack of having a friend to share his enthusiasm of films, he decides to share his wisdom and knowledge on films by opening a course and creating a community that would like to and be able to have discussions over movies which would allow people with similar passions to come together.

User Goals

- Aims to set up an event for his course.
- Wants to find student preferences using poll feature.

Preconditions

- Yone is already a lecturer of the platform, has an account, already logged in.
- He has an ongoing class which is at its third week.

Scenario, Actions

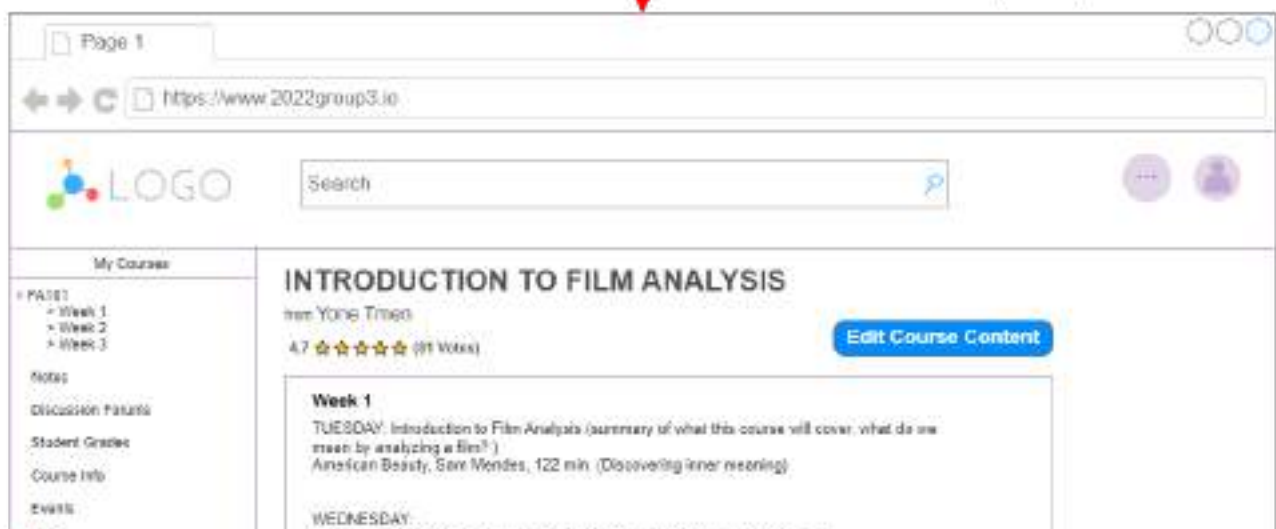
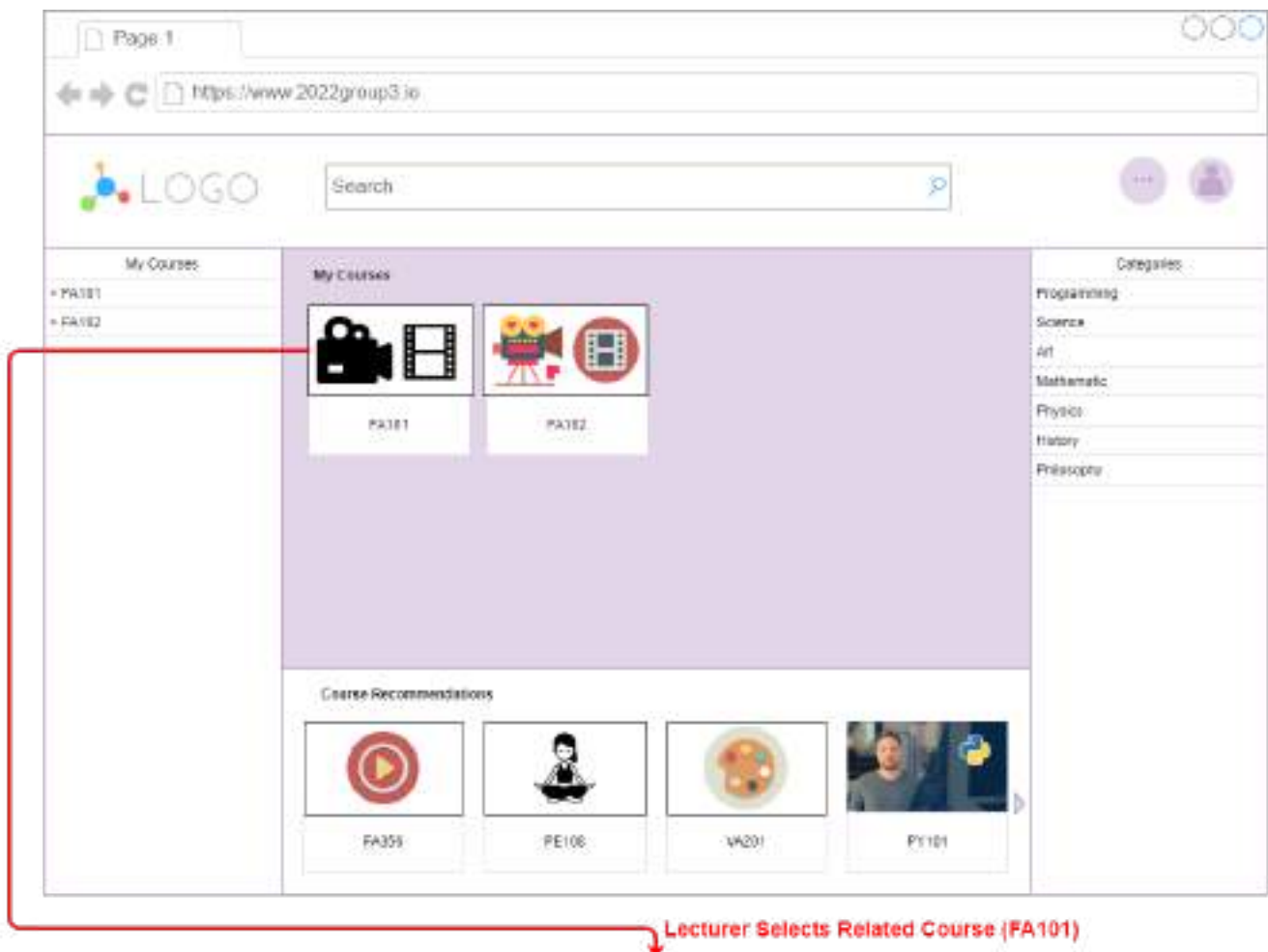
- After several introductory lessons for two weeks, Yone decides to organize an event, a gathering, to watch the first movie that students will write their first critique on. It will also serve as a first face to face meeting, allowing him to know students and them knowing each other.
- Yone sets up a poll to find out most preferable day and time to meet-up, aiming to maximize the attendance.
- After the results of the poll, he sets up the event on the website (according to these [criterias](#)), announcing it to every student.
- Event will be at a small cinema. Yone sets up one of the theaters reserved for this event, thus attendance will be allowed only to the enrolled students and it will have a small entrance fee. Attendance capacity is set to the number of current enrolled students.

Acceptance Criteria

- 1.3.8.1. Lecturers shall be able to create polls, allowed to be filled by the students enrolled in their course. The anonimity and/or the obligation of the poll shall be decided by the lecturer and declared to the students.

- 1.3.8.2. Lecturers shall be able to organize and schedule events. The scope of the event depends on the lecturer's initiative. It can be public or private, face to face or online, free or needs a fee to enter.
 - 1.3.8.2.1. If the event is private, lecturer has to provide list of learners who can attend the event. These users shall be notified.
- 1.3.8.3. The lecturer has the right to edit details (date/time, title, description, location, quota, list of attendees, fee) of the event.
- 1.3.8.4. The lecturer has the right to cancel the event.
- 1.3.11 Users shall be able to join the attendance list of the event that they would like to participate, for their enrolled classes.

Web Mockup



<p>FA181</p> <p>FA182</p>	<p>narrative and narration (7 days), Location, story, what to see and hear to see it.) Vertigo, Alfred Hitchcock, 1958, 128 min.</p> <p>Week 2</p> <p>TUESDAY: Cinematography (Camera, Movement, Placement, Lighting, Framing: How do these elements affect the way we understand the film and set the mood of the film?) Citizen Kane, Orson Welles, 1941, 119 min. Taxi Driver, Martin Scorsese (students must watch this before class)</p> <p>WEDNESDAY: Misc-on-scene (Reading the signs through space, art direction, acting, costume, hair and makeup. What's inside the frame?) In the Mood for Love, Wong Kar Wai, 2000, 98 min. Darjeeling Limited, Wes Anderson, 2007, 91 min. (students must watch this before class)</p>
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Lecturer Clicks To Polls Option

Page 1

https://www.2022group3.io

LOGO

Search

My Courses

- FA181
 - Week 1
 - Week 2
 - Week 3
- FA182

Notes

Discussion Forums

Student Grades

Course Info

Events

Polls

INTRODUCTION TO FILM ANALYSIS

from York Times

4.7 ★★★★★ (81 Votes)

Polls

- Open Polls

There are no open polls now!

- Closed Polls

Poll #1: Your Favorite Types Of Movies
Created 12 days ago

Poll #2: About The Format Of The Lessons
Created 10 days ago

Poll #3: Project 1 Submission Date
Created 1 days ago

[Create New Poll](#)

Lecturer Clicks To Create New Poll Button

Page 1

https://www.2022group3.io

LOGO

Search

My Courses

- FA181
 - Week 1
 - Week 2
 - Week 3
- FA182

Notes

Discussion Forums

Student Grades

Course Info

Events

Polls

INTRODUCTION TO FILM ANALYSIS

from York Times

4.7 ★★★★★ (81 Votes)

Polls

- Open Polls

No open poll found.

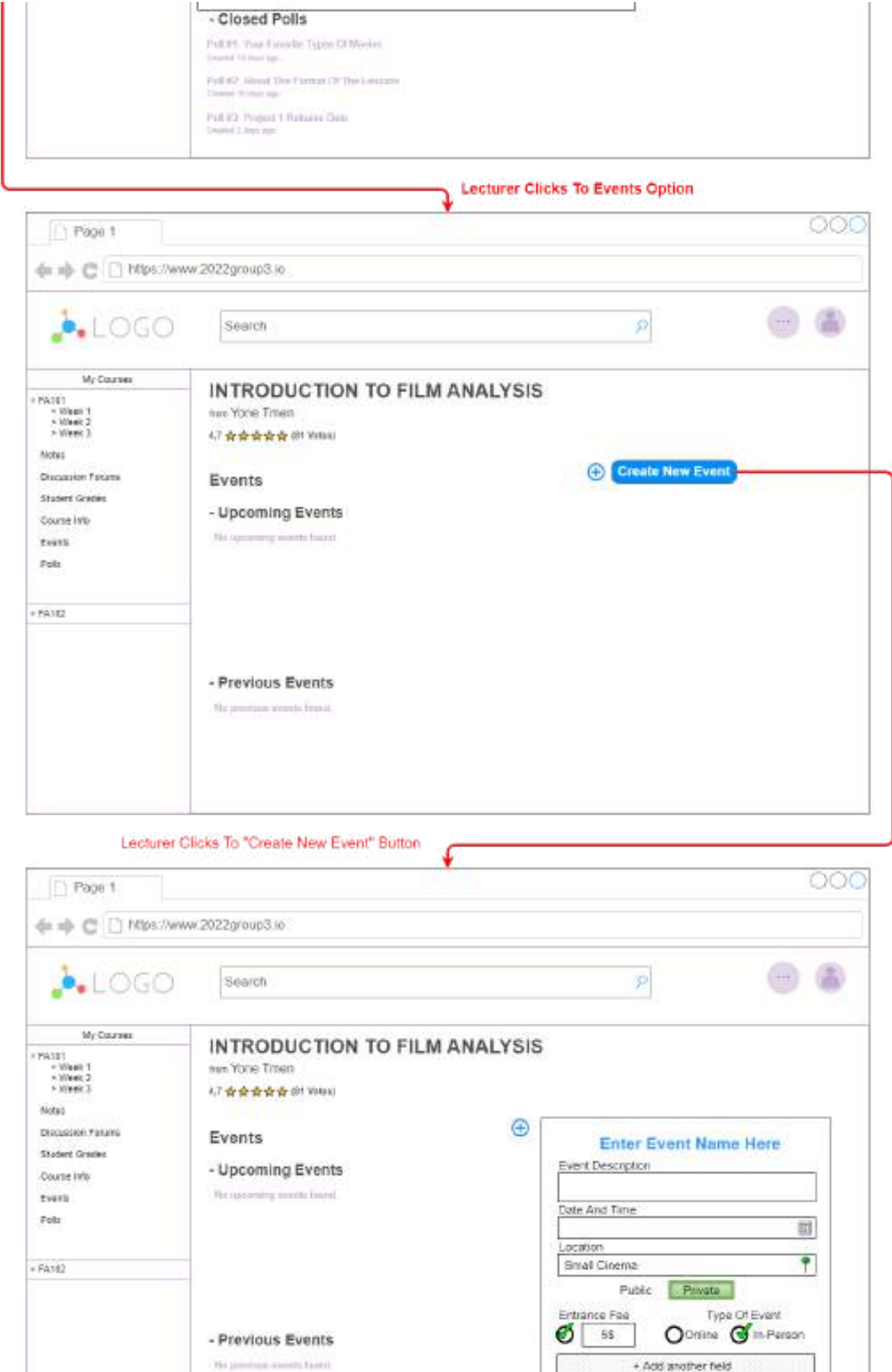
Enter Poll Name Here

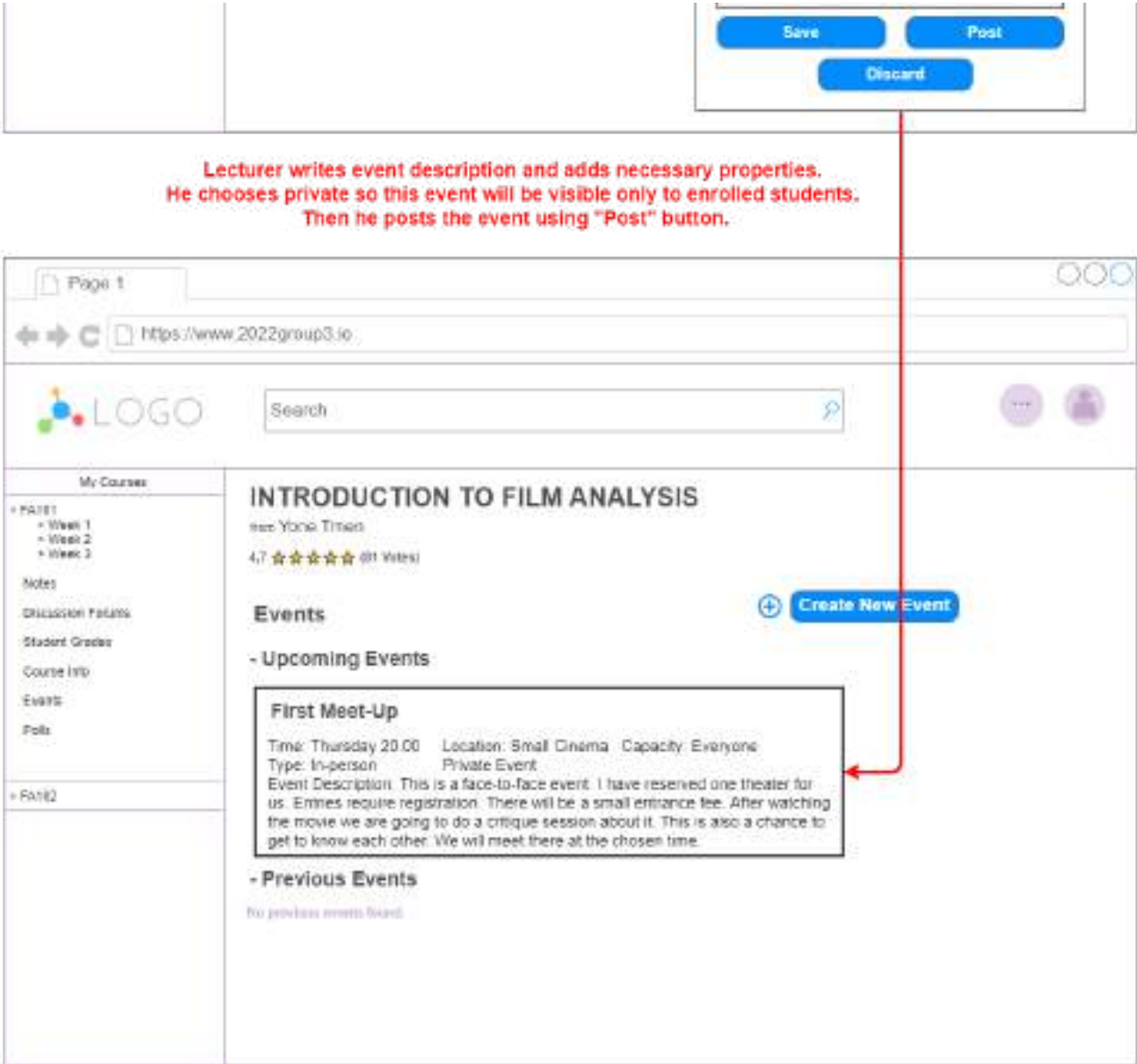
Poll Question:

Answers:

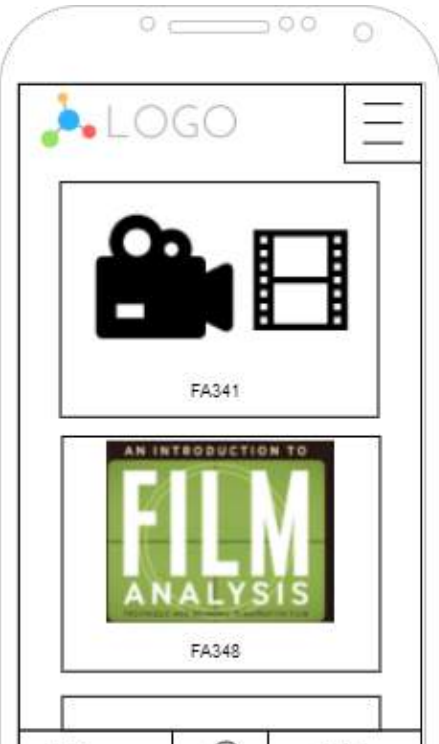
Lecturer Writes Poll Question And Choices.
He needs 5 options so clicks "Add another option" button 2 times.
Then posts the poll using "Post" button.



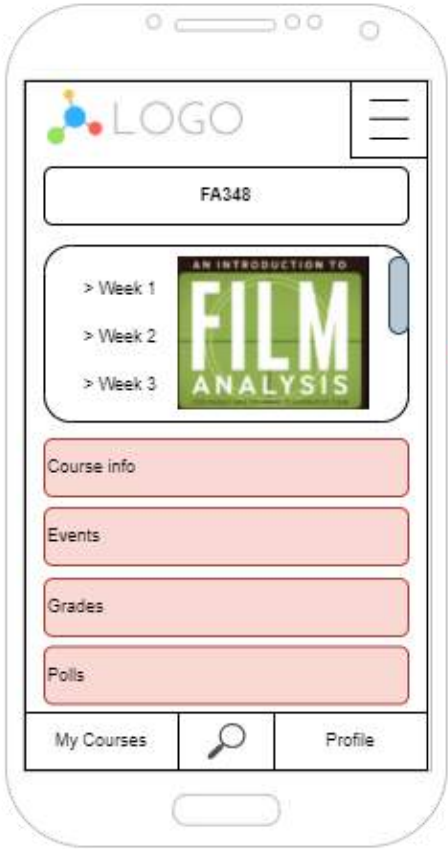
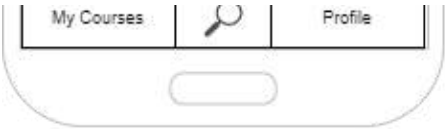




Mobile Mockup



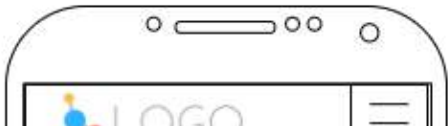
Lecturer select related course (FA341)

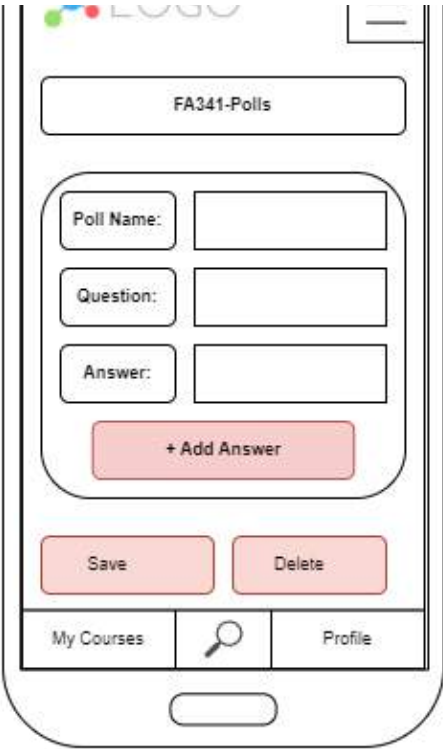


Lecturer clicks to polls option

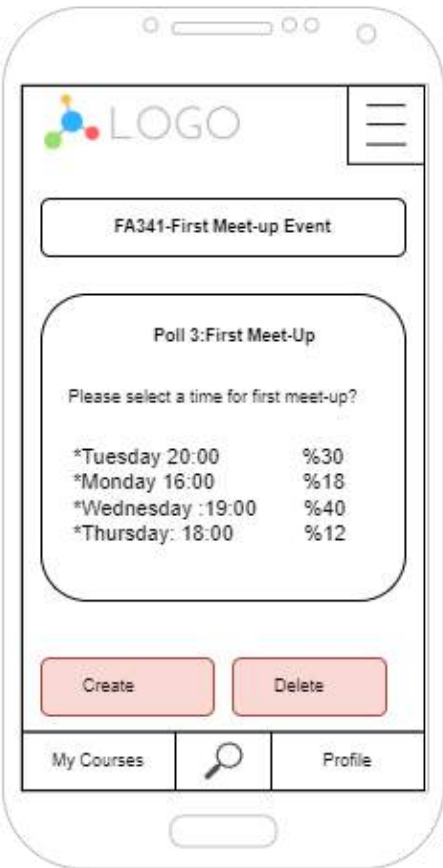


Lecturer clicks create button to create poll.





Lecturer writes poll question and answers and click save button.

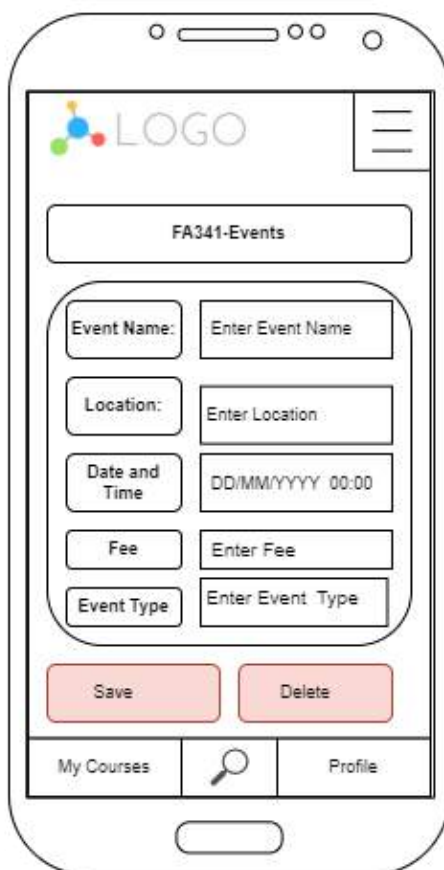


Lecturer can see the results as percantages as the student answer.

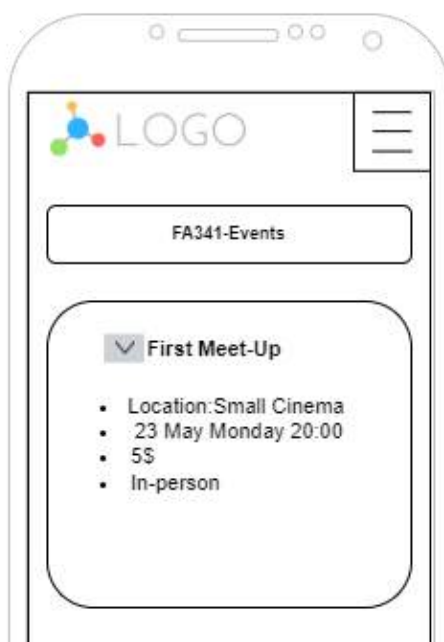




Lecturer can see all events in event page.



Lecturer writes event description, event name, location, date and time. Then, clicks save button.



Lecturer can see events detail by click on event name.



Lecturer can see all events in events page

Scenario 2: Creating Discussion

The User - Persona



Image is taken from [This Person Does Not Exist](#)

Jack is an electrical engineering student in University of Michigan. He is interested in web development and wants to get a job as a developer. He could not enroll to the courses in his own university so he decided to use an online learning program.

User Goals

- Aims to ask a question in the discussion form
- Wants to share the specific error he got by providing a screenshot

Preconditions

- Jack has an account on the platform and already logged in.
- He enrolled to CS104, introduction to web development course, one week ago.

Scenario Actions

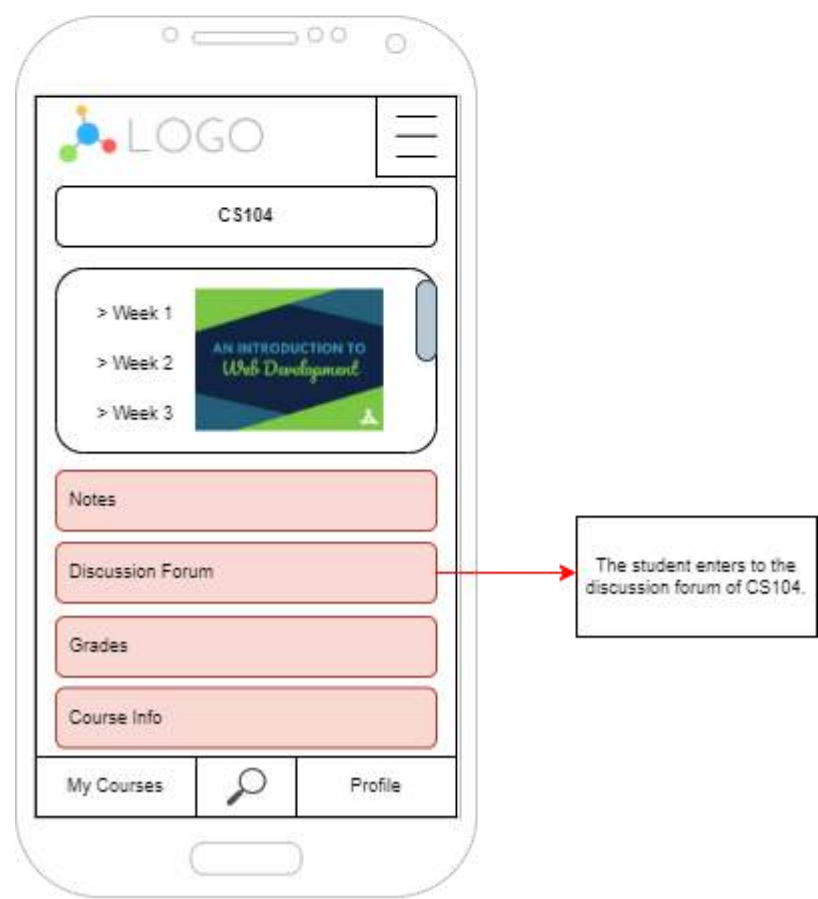
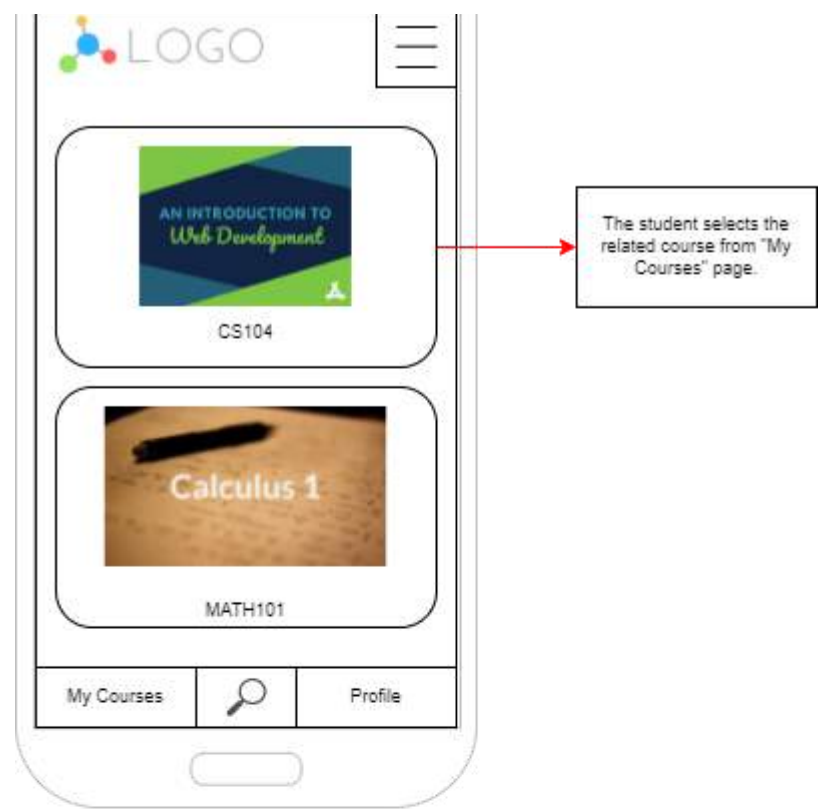
- After watching the first week's content, Jack tries to set up his own computer for web development. He downloaded the IDE specified in the lecture; however, he chose x64 instead of x86 architecture. IDE seems to be installed but Jack sees that it is not working as expected. He decides to ask this to lecturer and his classmates.
- He visits the discussions page of CS104. He looks through other questions before creating a duplicate question however there are no similar questions to trouble he is experiencing.
- He creates a new question by describing the status and adding a few screenshots.
- After some time, a classmate responds by asking questions about his computer and operating system. After some back and forth, classmate provides a link for Jack and wants him to download the installer he provided.
- Jack goes to the URL, downloads and installs the correct version of the IDE.
- After testing for a minute, he thanks to classmate and closes the discussion.

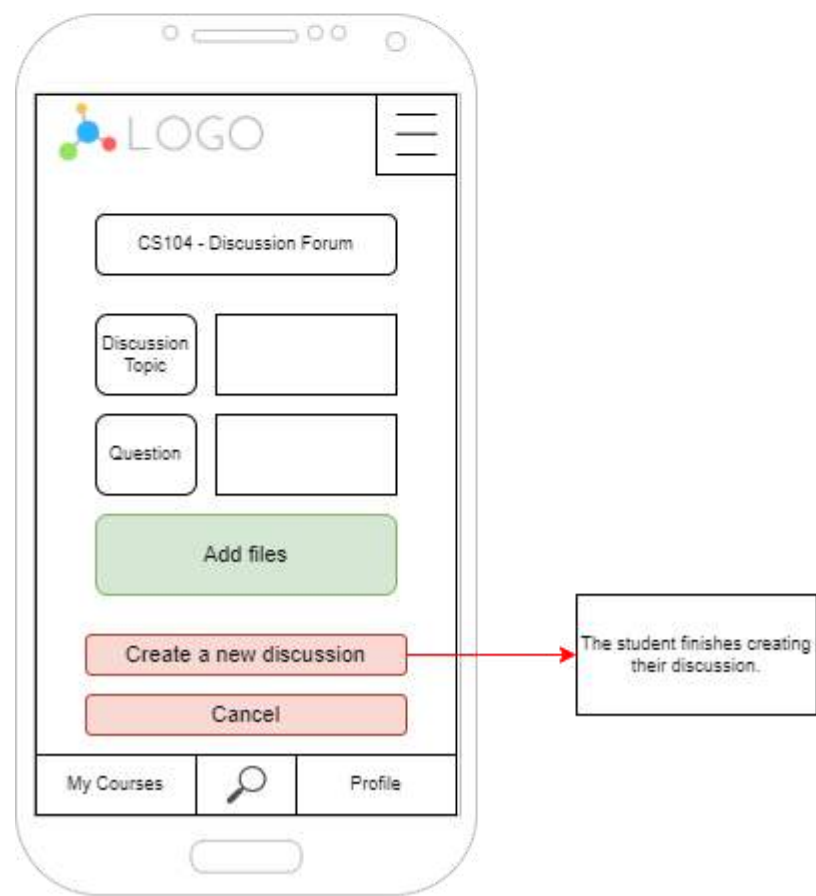
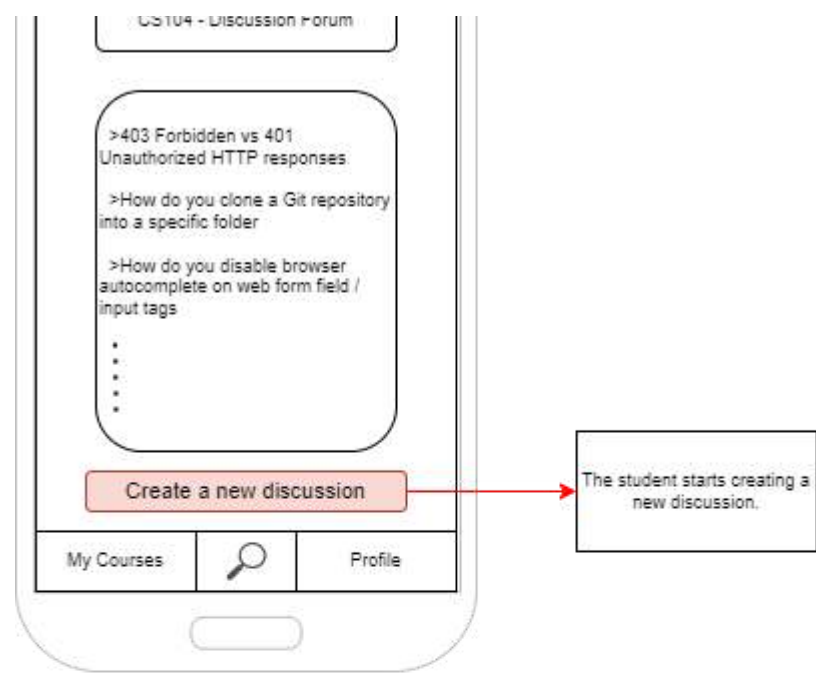
Acceptance Criteria

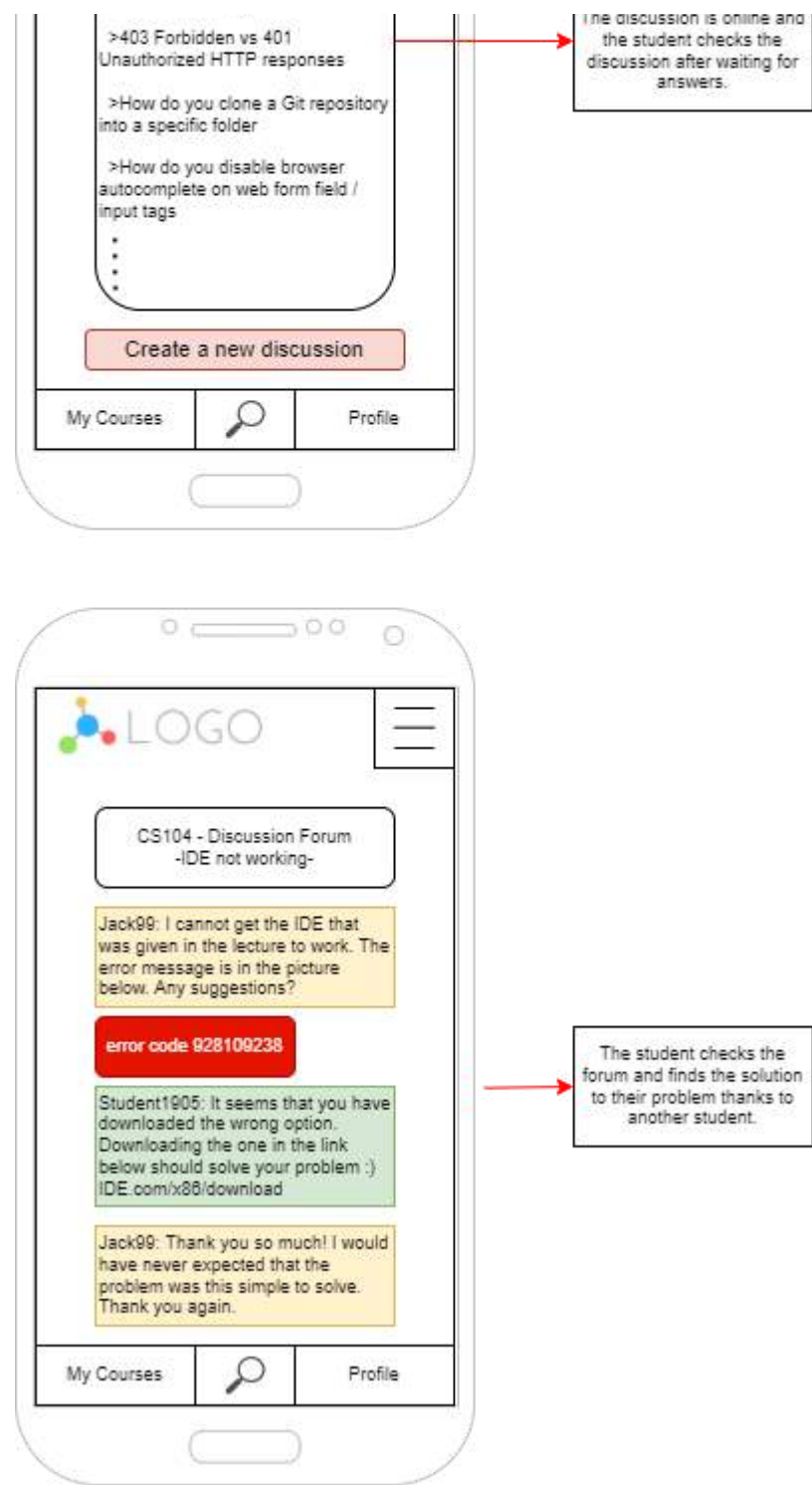
- 1.3.3. Users shall be able to use the communication channel (described in 2.2.)
 - 1.3.3.1. Users shall be able to open a discussion post to ask questions.
 - 1.3.3.2. Users shall be able to make a comment to an existing question.
- 1.3.6. Users shall be able to use the annotation features (described in 2.6.)
- 2.2.1. System shall provide an interface such that users can ask and answer questions.
- 2.2.2. System shall provide a discussion section for any type of user inside a course.
 - 2.2.2.1. System should support replying, mentioning and threaded messages to create a comment.
- 2.2.3. System should support sharing resources and files.
- 2.6.1. System shall support annotating with text, images and URI.
 - 2.6.1.1. System shall support external links in the case that users provide URI.
- 2.6.2. System shall support links that relate to semantic resources about the resource.
- 2.6.3 System shall provide a mechanism such that annotation can be applied to any context.

Mobile Mockup



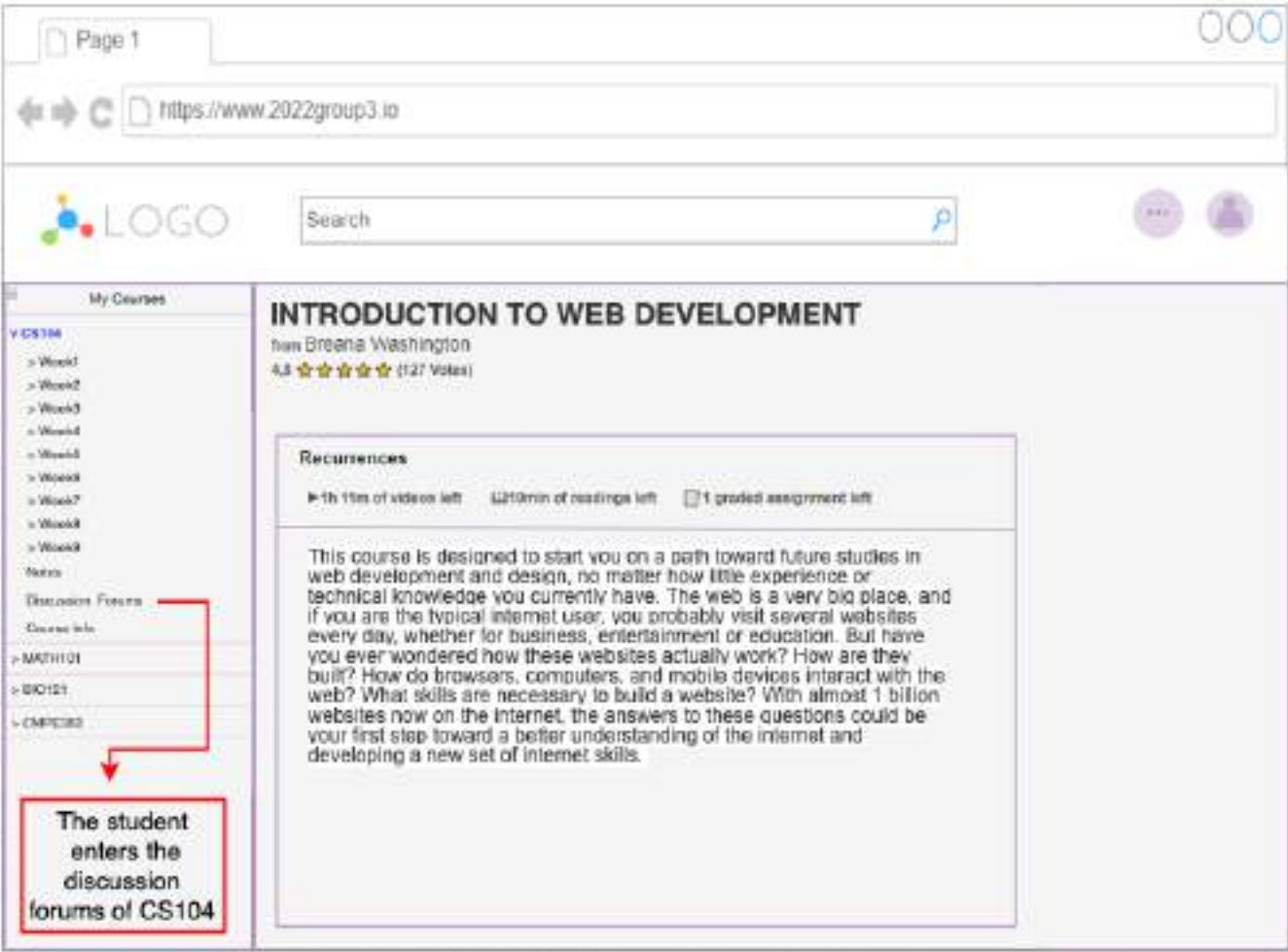
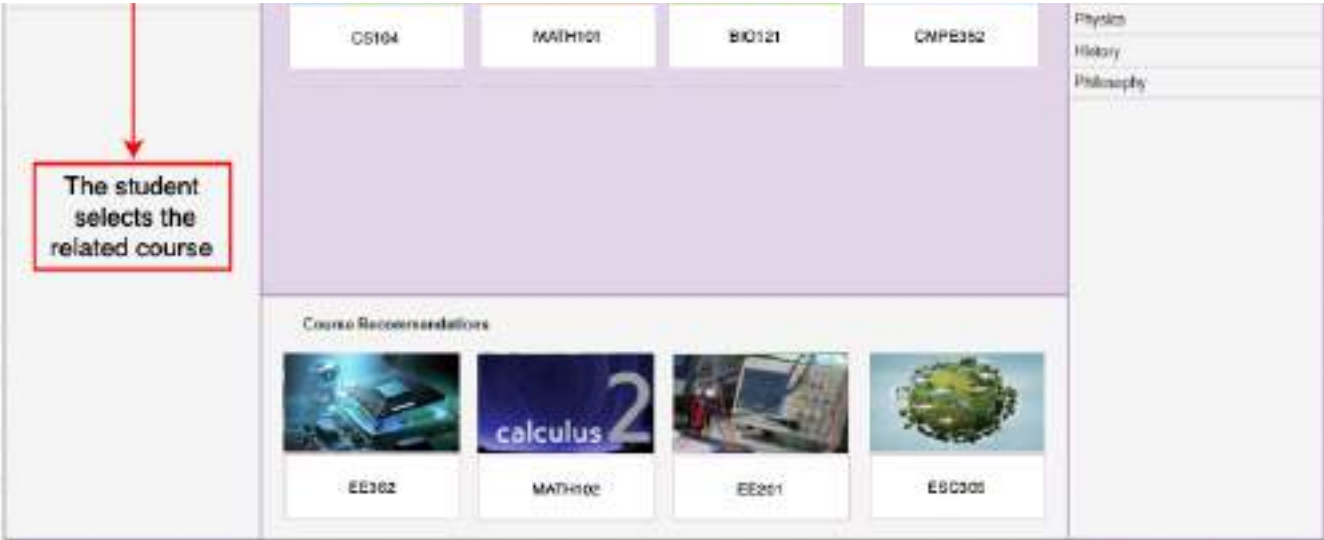


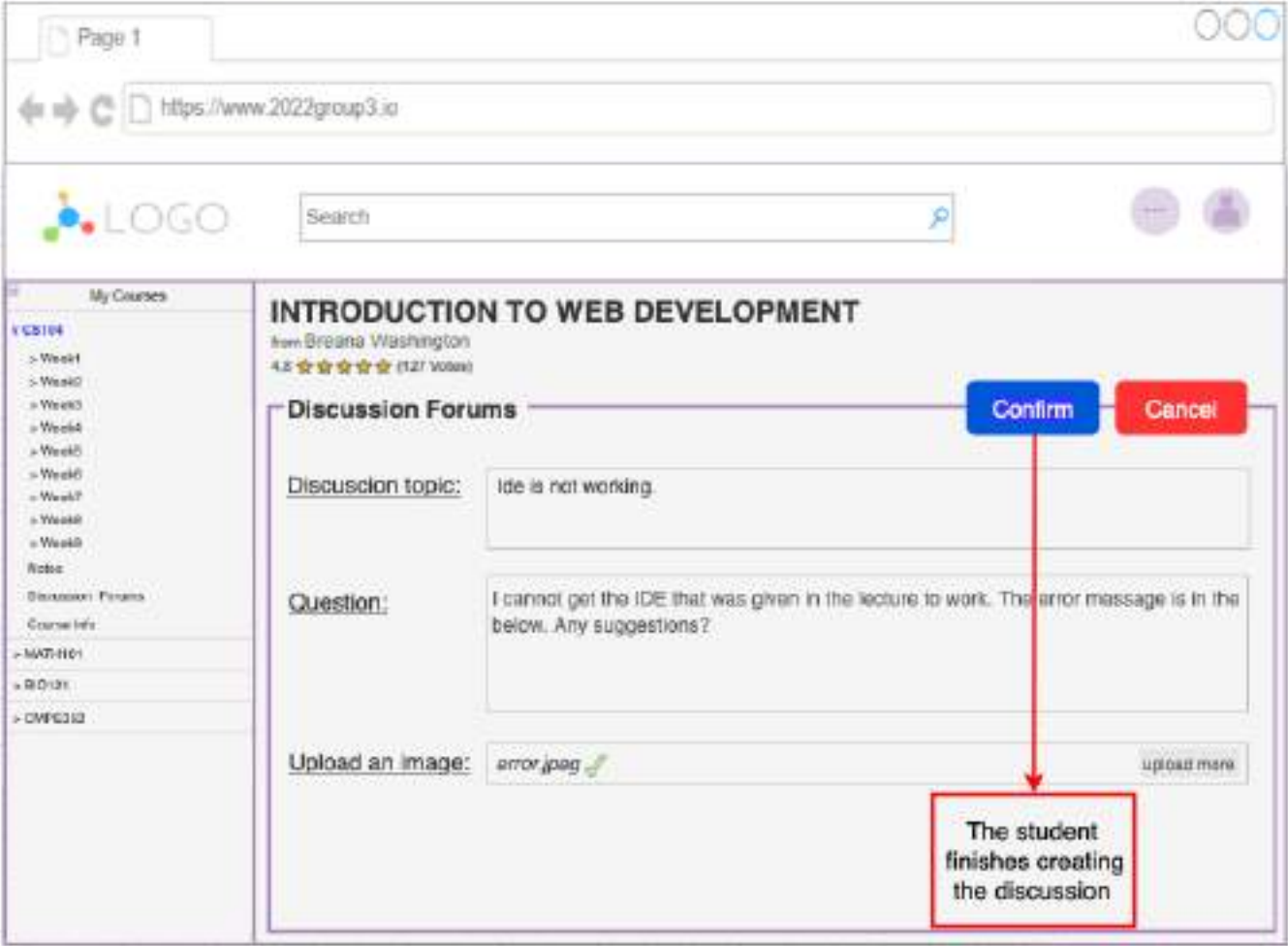




Web Mockup









Scenario 3: Note Taking



The User, Persona

- Kaneki Ken is a 19 years old student at Kamii University. He is a self-learner and likes to improve himself in different aspects. He found this platform and started to use it. So far, he's been a person who neatly takes notes to papers during his studies however it is hard for him to keep track of all of them. So he decided to also use this platform's note taking features.

User Goals

- Aims to create and save notes under subtopics of the chosen lecture.
- Aims to edit saved notes if the need occurs.
- Aims to delete saved notes if the notes are no longer needed/becomes irrelevant.

Preconditions

- Kaneki Ken is already a learner in the platform, already logged in.
- Kaneki Ken has access to the course content that they want to take notes of.

Scenario Actions

During the lectures, Kaneki Ken feels the need to take notes to summarize that particular section so that they wouldn't have to repeat the lecture all over again:

- Goes to the relevant course page from their courses page
- Chooses the topic that they want to add notes to.
- Click **Create Notes**
- Add relevant notes to that body.
- Click **Save**.

Then, if they want to see their notes about that course:

- Goes to the relevant course page from their courses page.
- Click **Notes** on the sidebar.
- Filter the notes depending on the need.

Then, edit or delete those notes by respectively clicking:

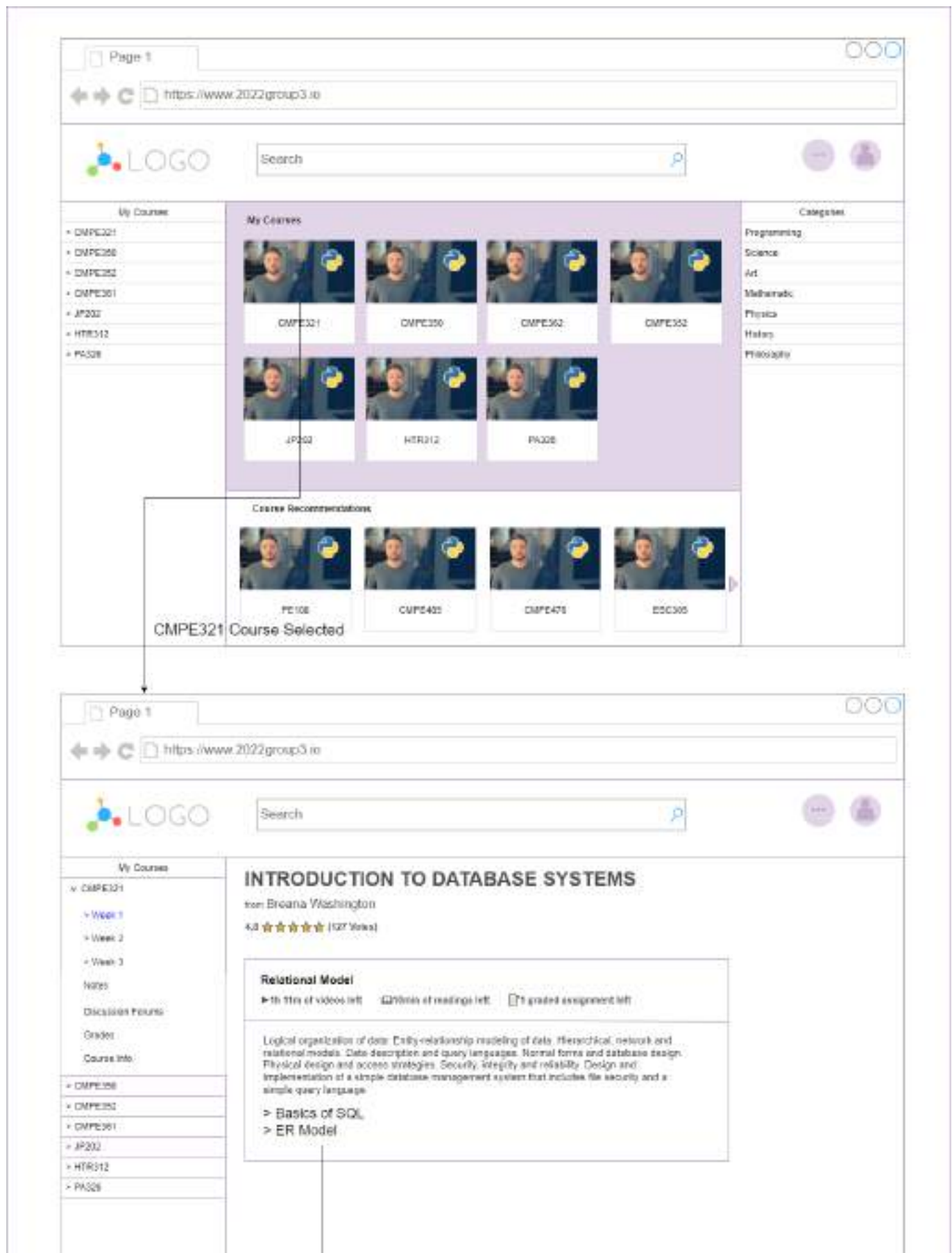
- Edit: Click **Edit** --> Edit note body --> Click **Save**
- Delete: Click **Delete**

Acceptance Criteria

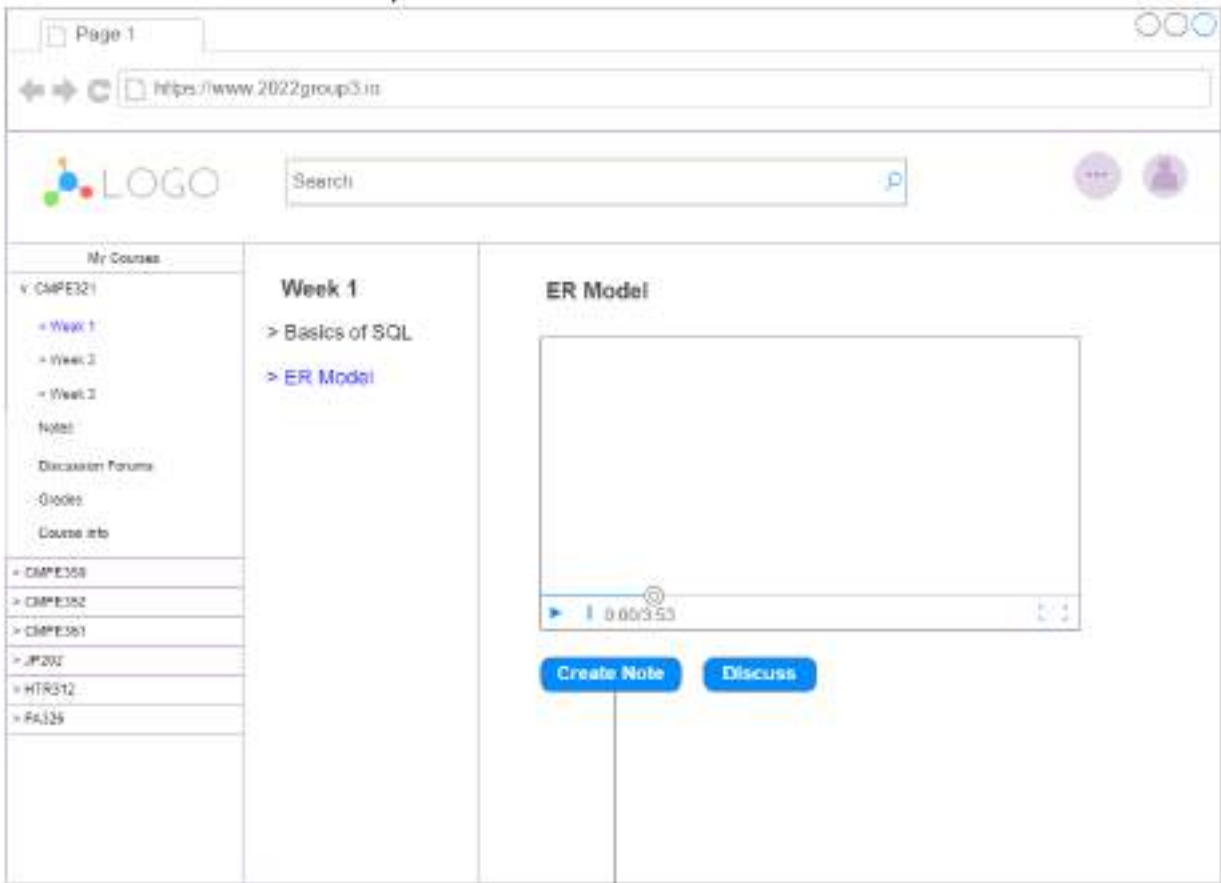
- 1.3.4. Users shall be able to use the note taking features (described in 2.3.)
- 2.3.1. The system shall provide learners the ability to create a note taking page.
- 2.3.2. The system shall provide learners the ability to save notes in their profile page.
- 2.3.3. The system shall show the saved notes of the learner in their profile page.
- 2.3.3.1. The system should provide learners the option to sort notes according to date or popularity.
- 2.3.3.2. The system should provide learners the option to show previous notes according to filtered systems.
- 2.3.3.2.1. The note filtered system should enable learners to filter course name or lecturer.
- 2.3.4. The system shall provide learners the ability delete or rearrange note taking page.

- 2.3.5. The system shall provide registered learners the ability to connect notes, annotate and tag them.
- 2.3.6. The system shall provide learners the ability to share their notes with others.

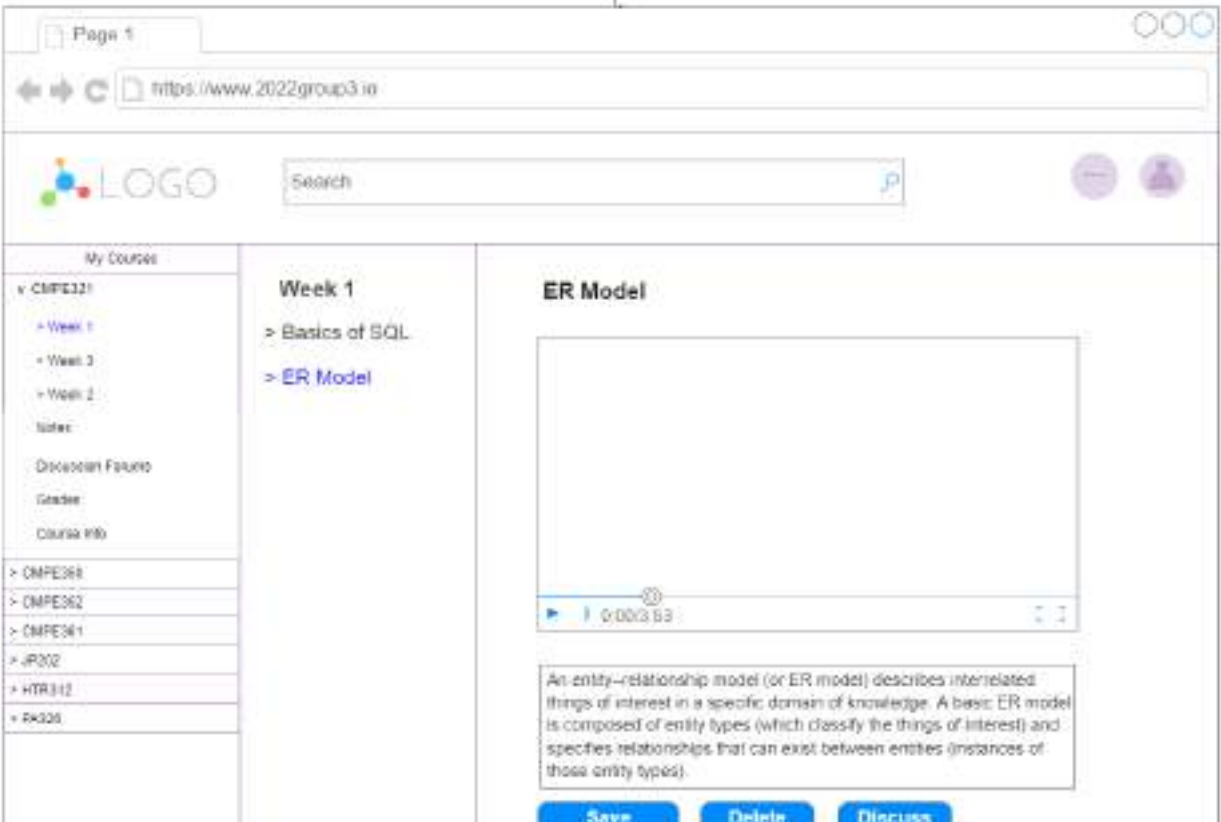
Web Mockup

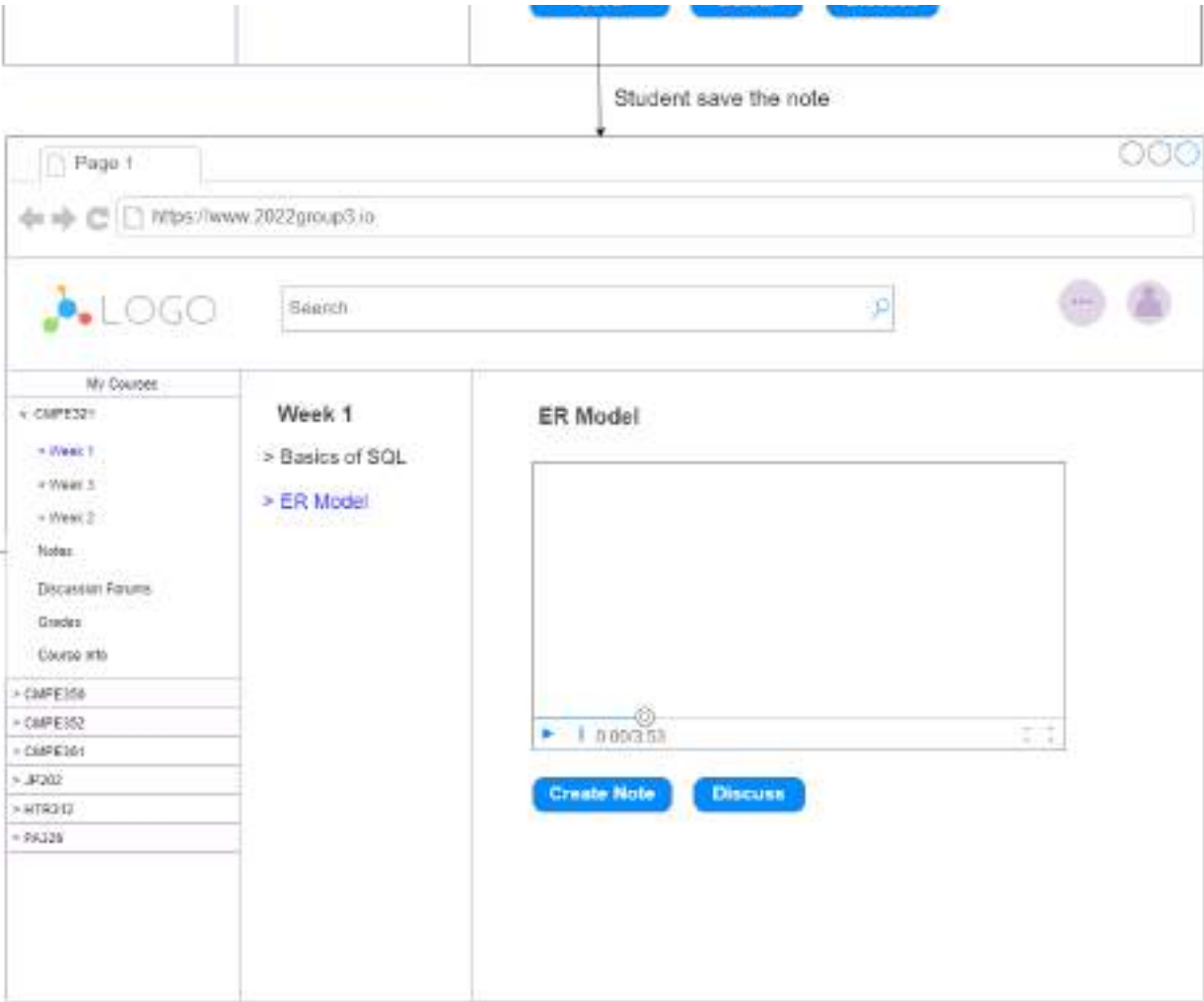


Student selects a subtopic

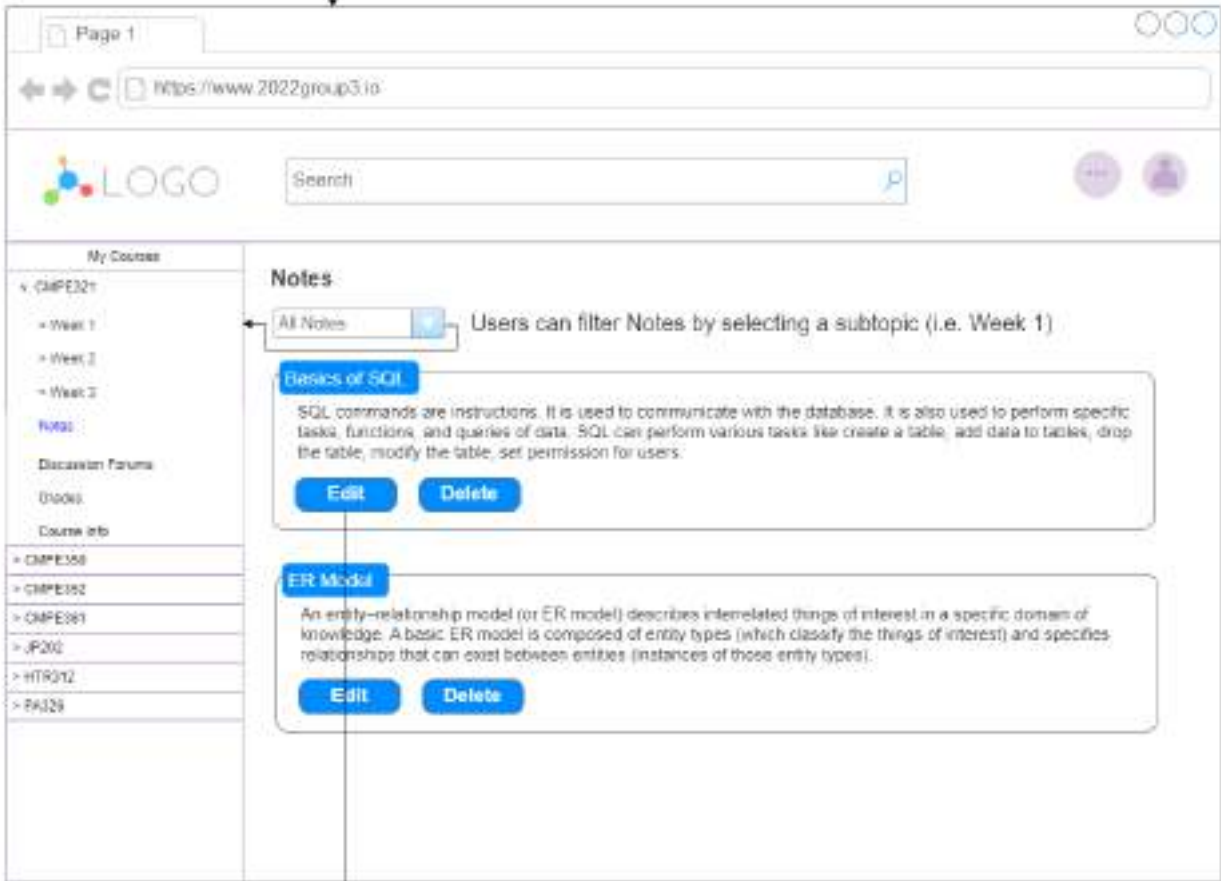


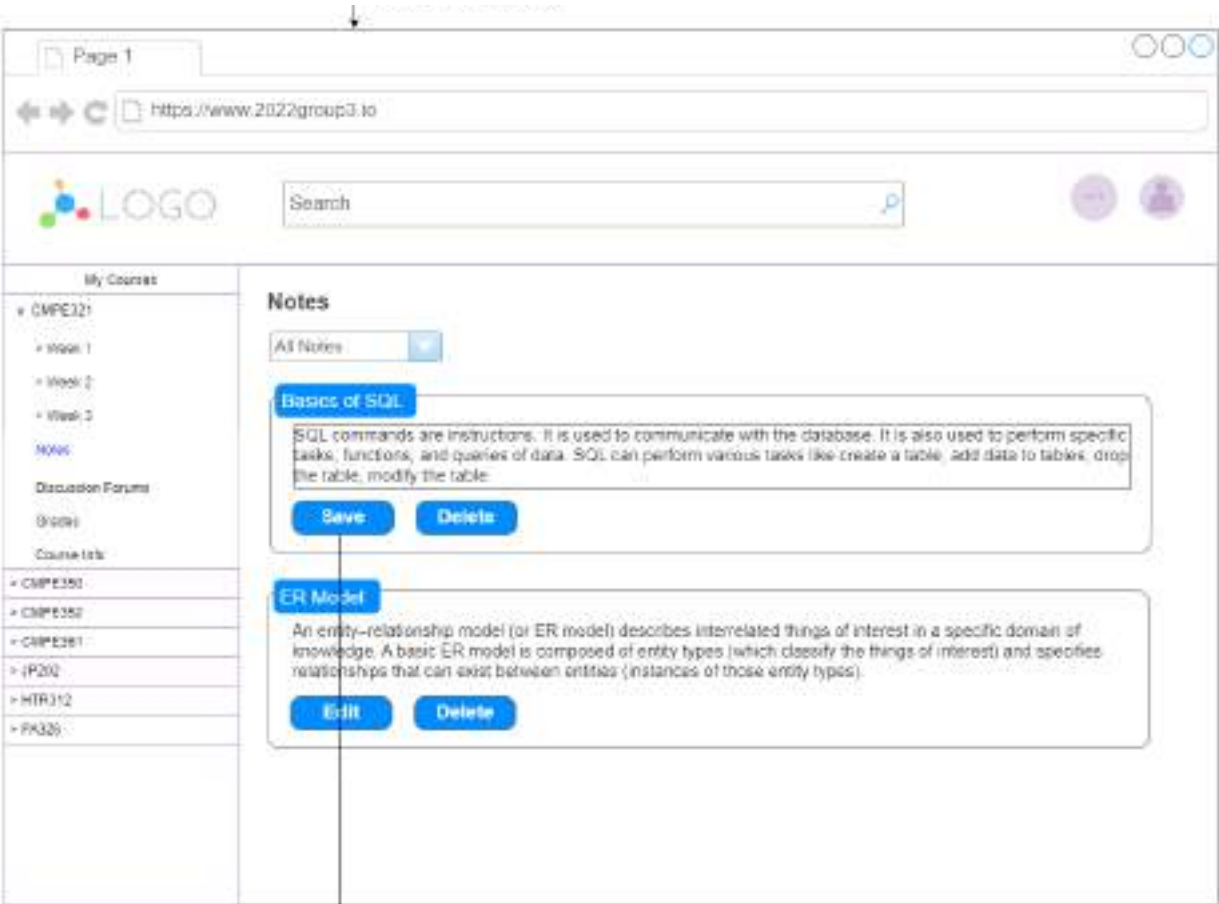
Student creates a note



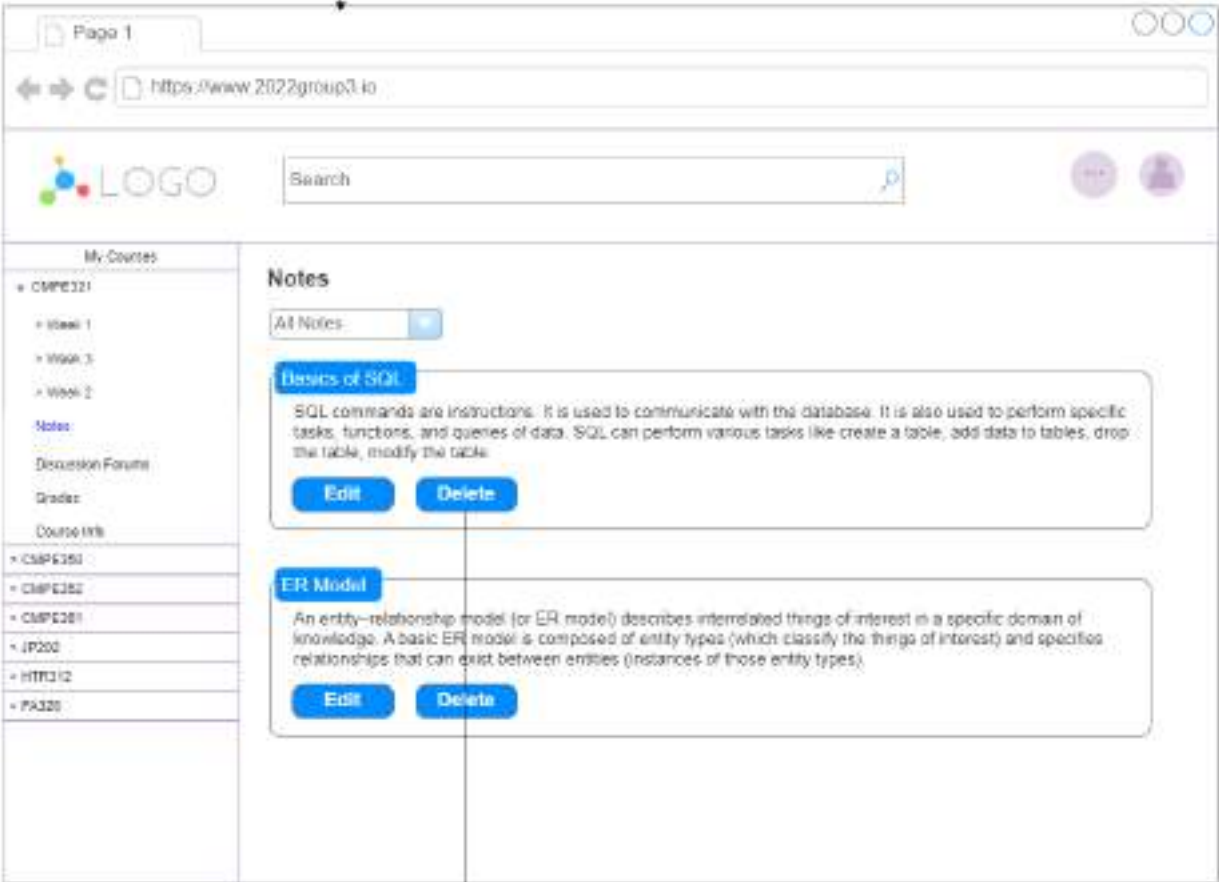


Student clicks Notes button on the side bar.



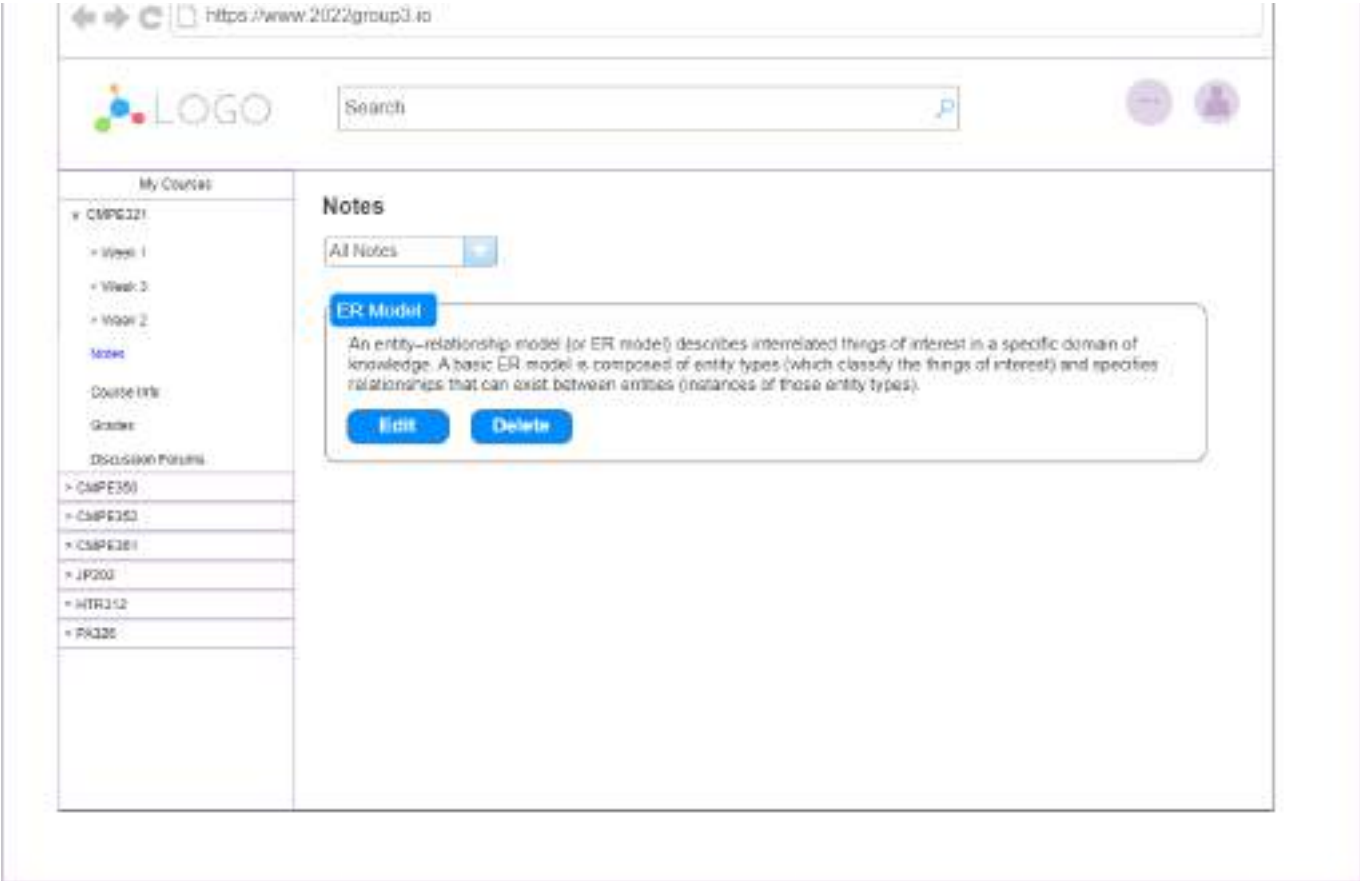


User saved the note he/she was editing

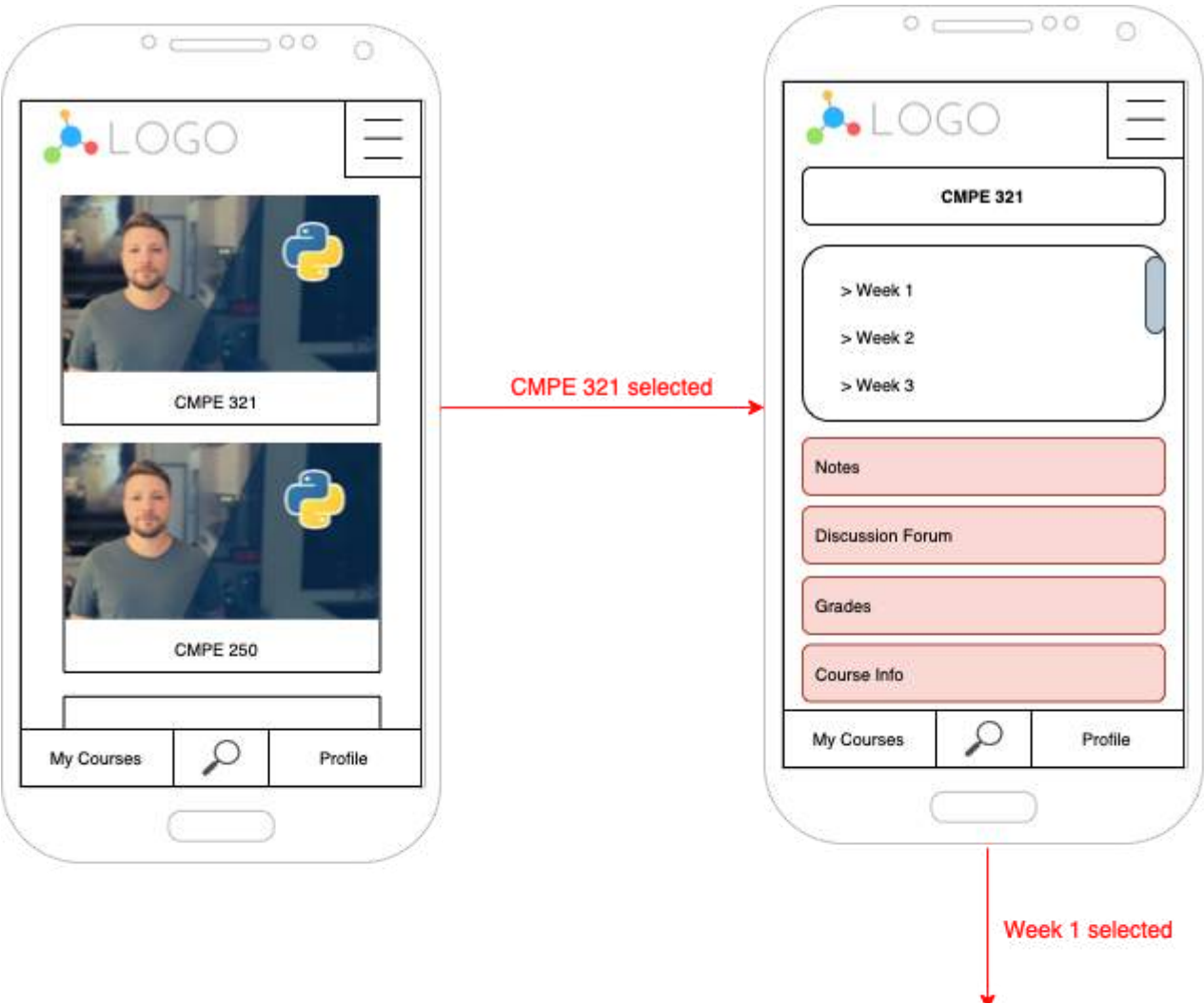


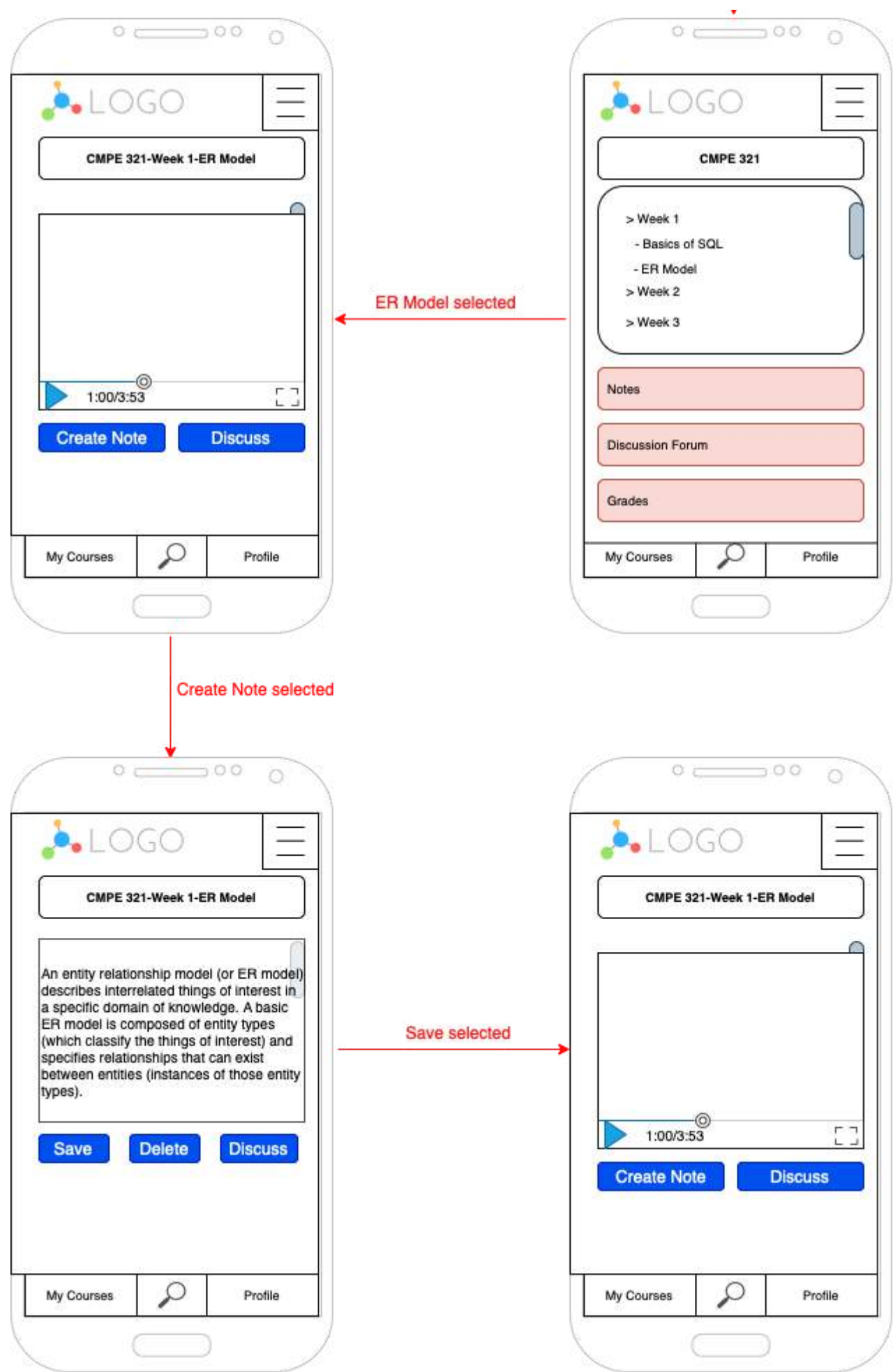
User deleted first note

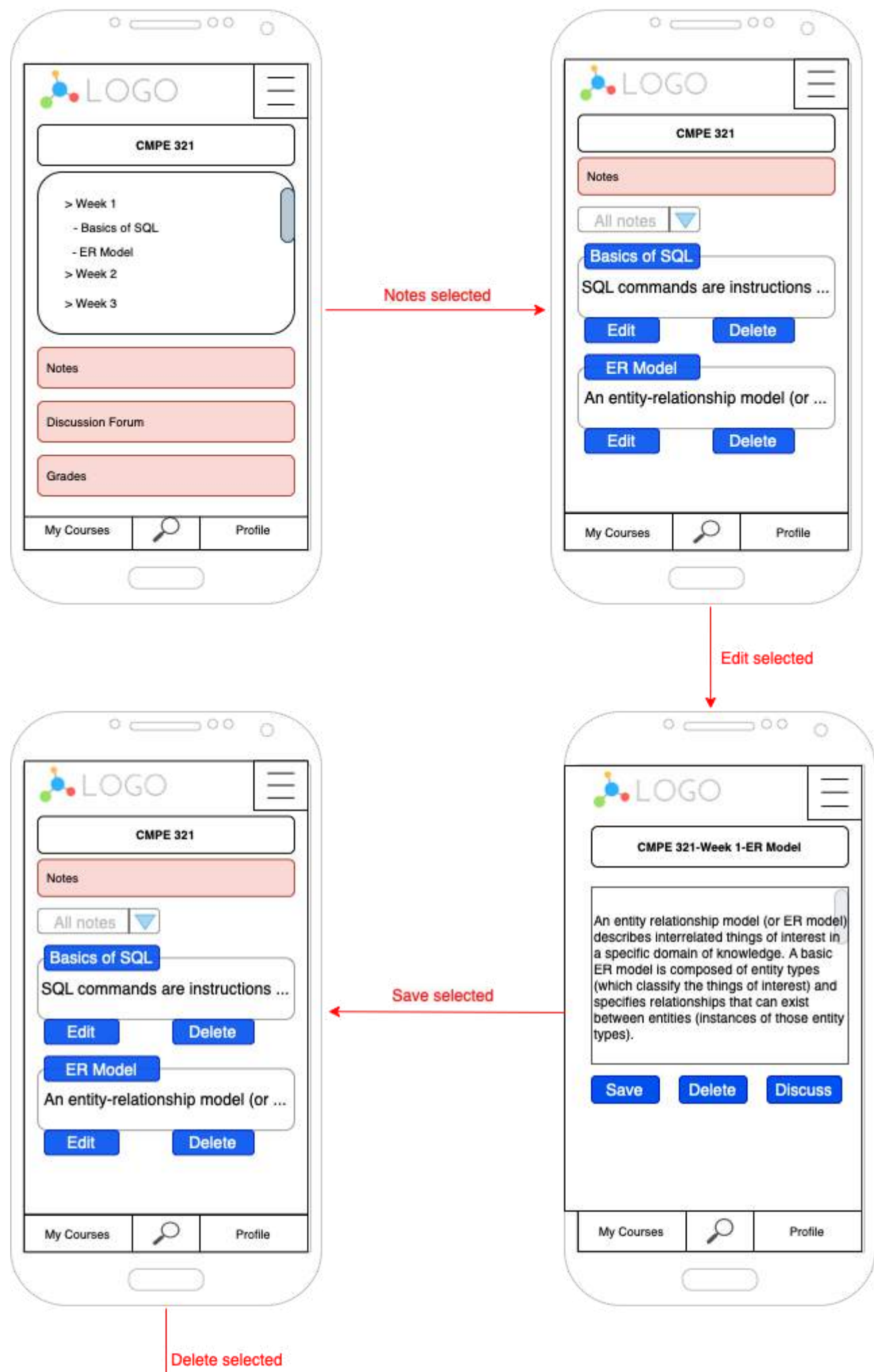


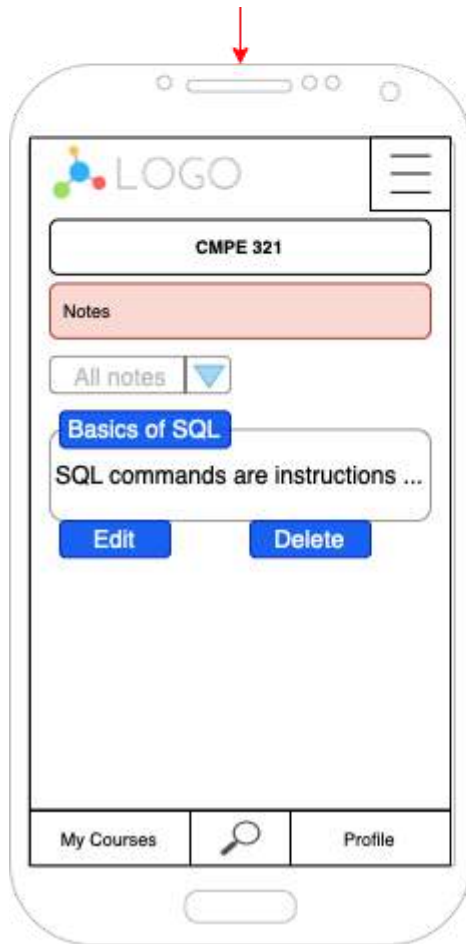


Mobile Mockup





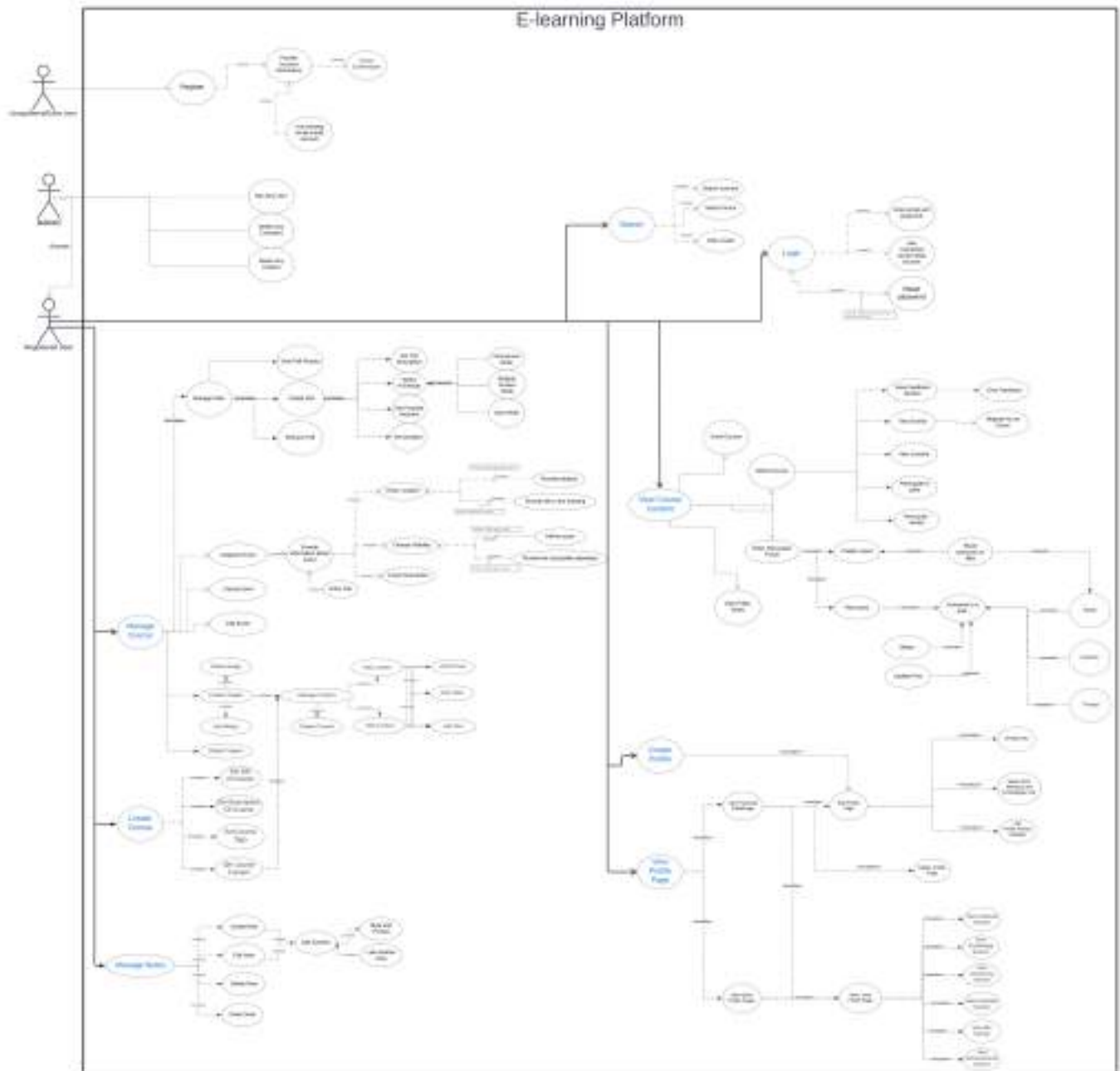




Software Design Documents

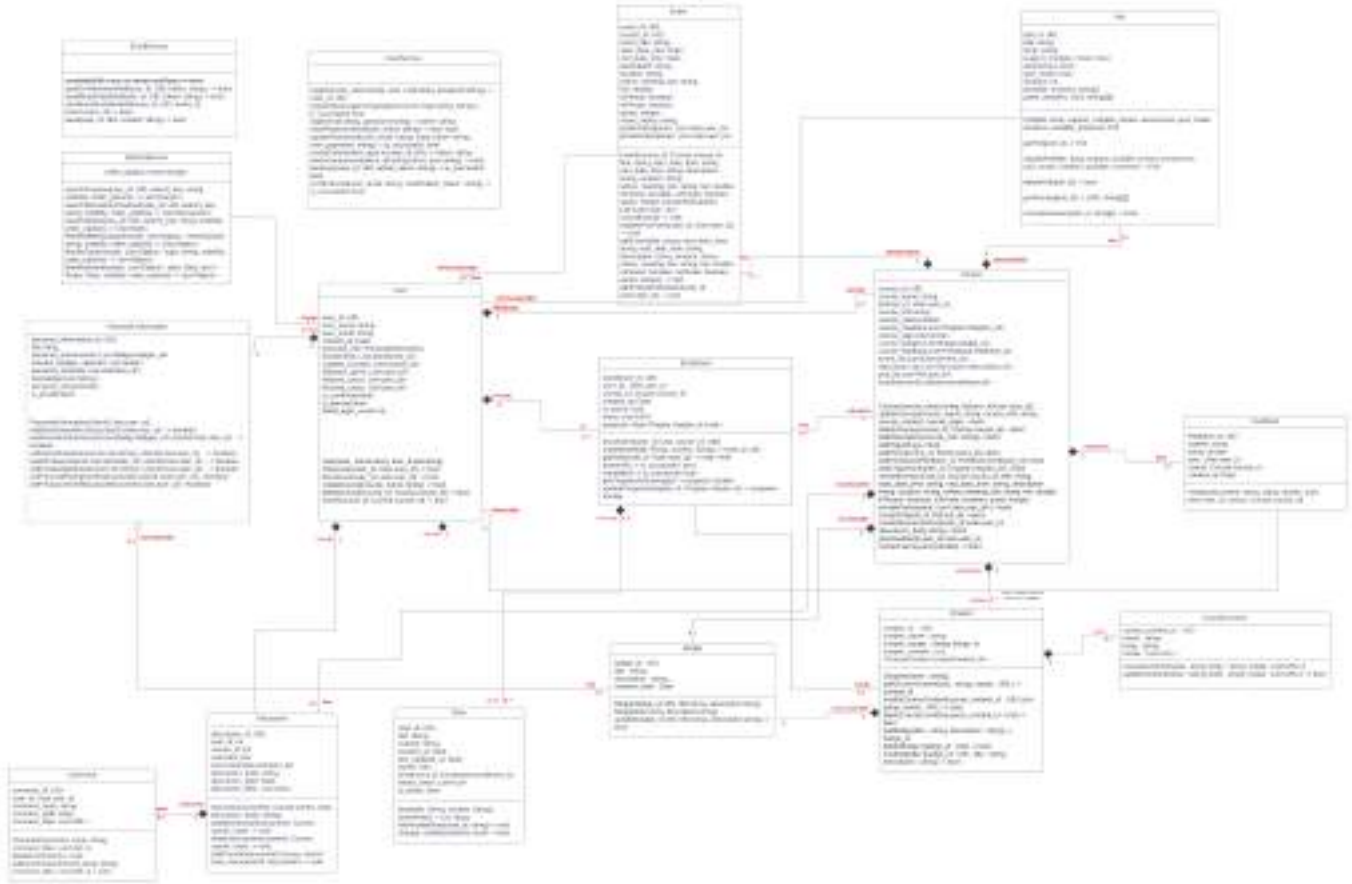
Use Case Diagrams

Can be viewed at [LucidChart](#)

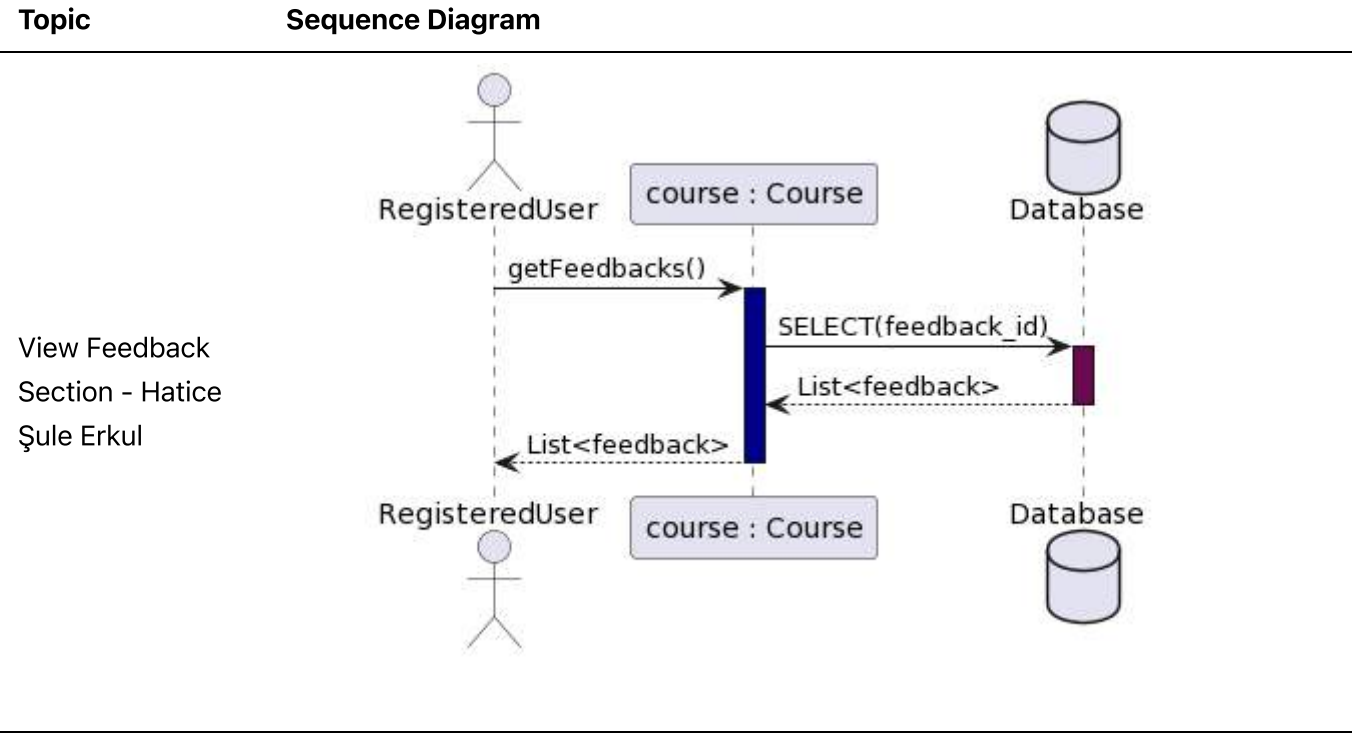


Class Diagrams

Can be viewed at [LucidChart](#)



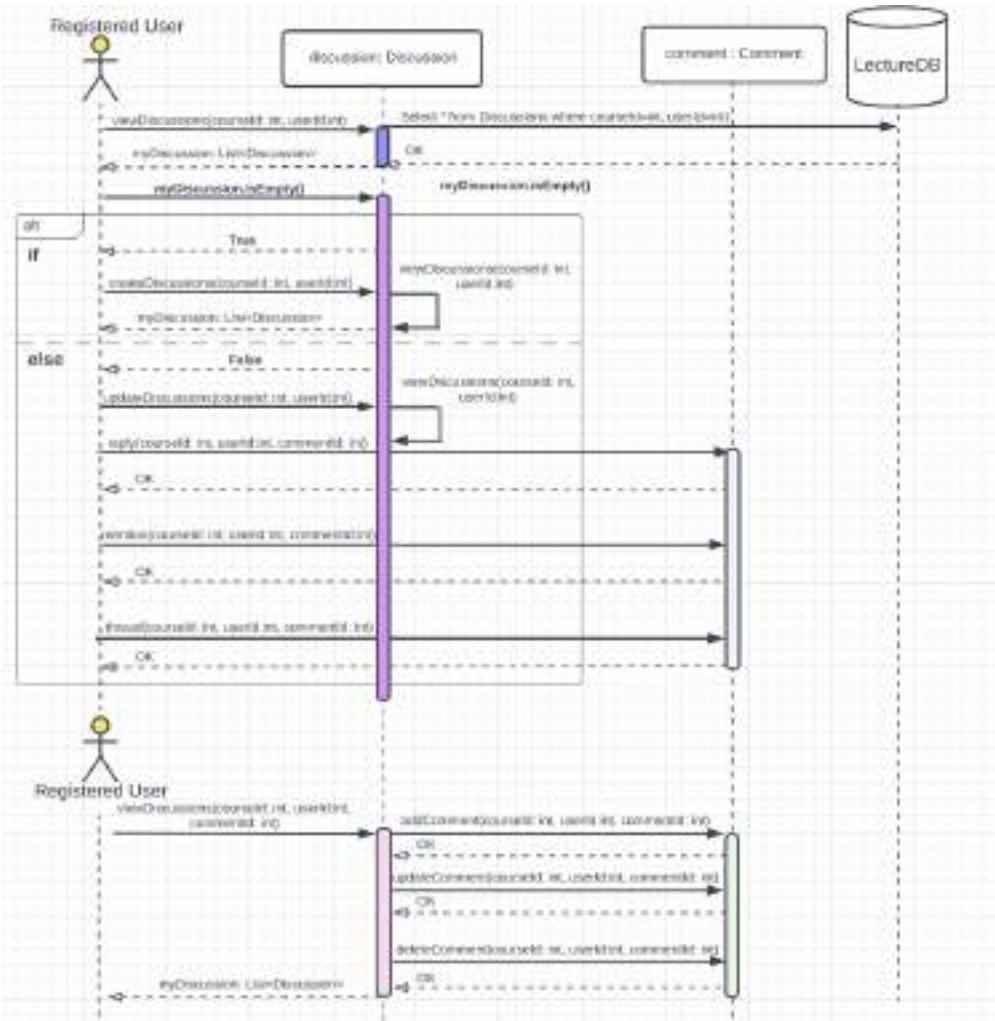
Sequence Diagrams



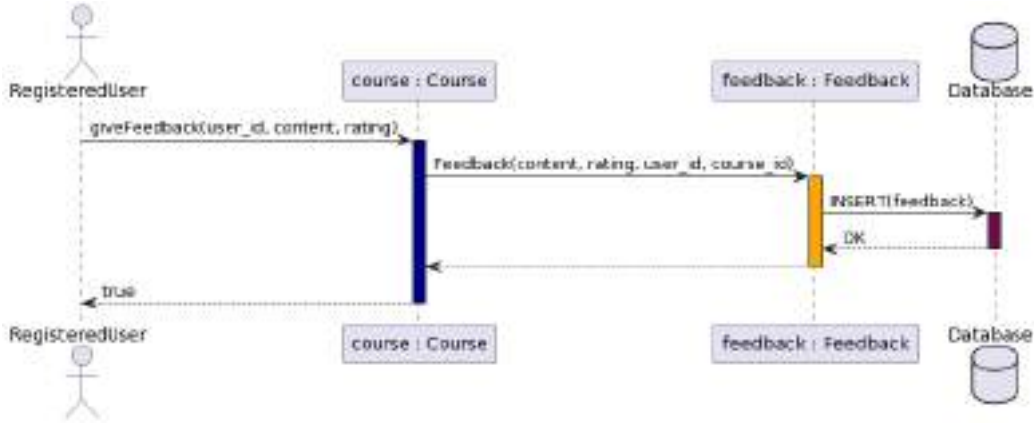
Topic

Sequence Diagram

Create
Discussions with
Comments -
Ahmet Kudu



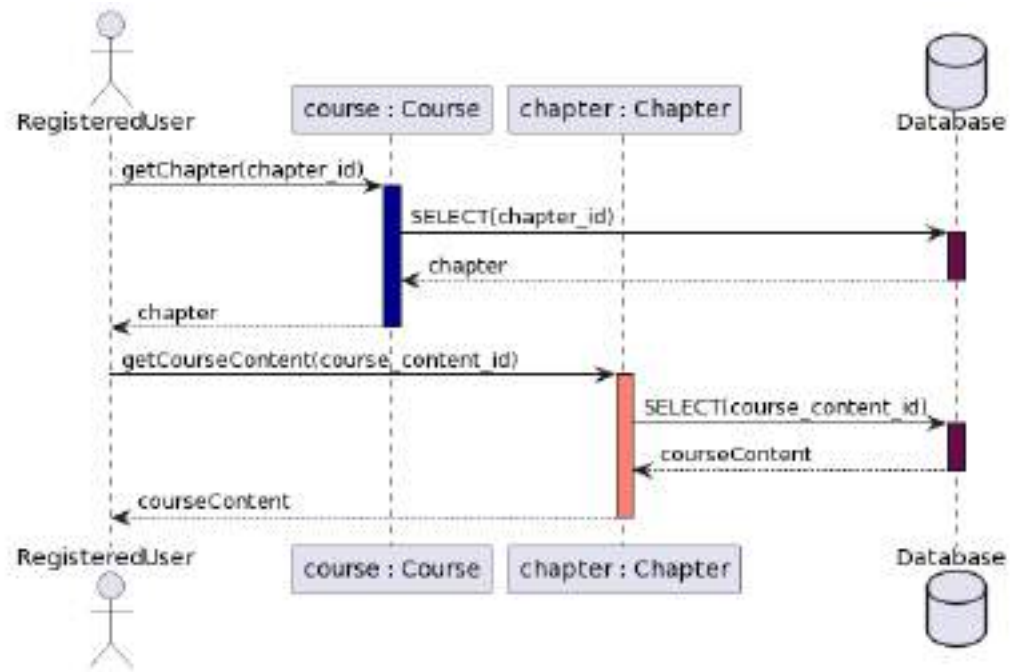
Give Feedback to
a Course - Hatice
Şule Erkul



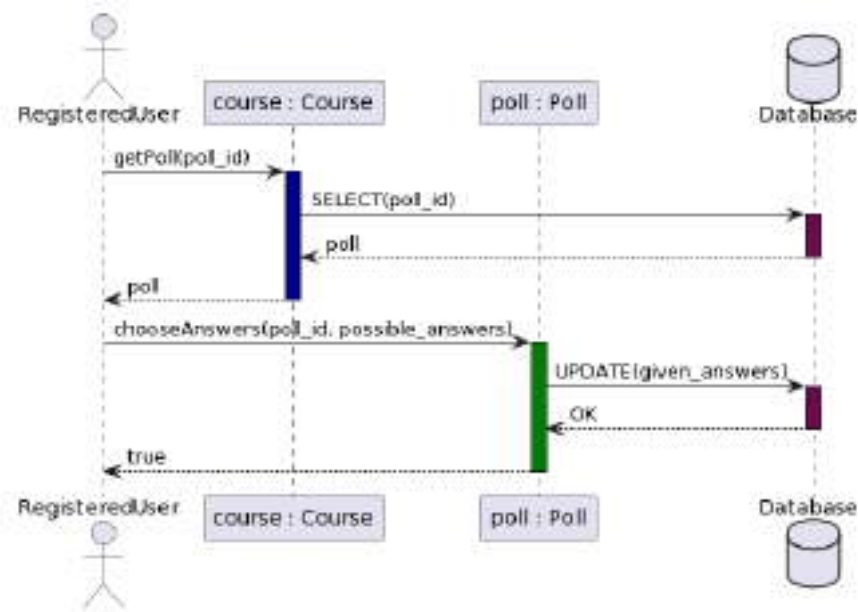
Topic

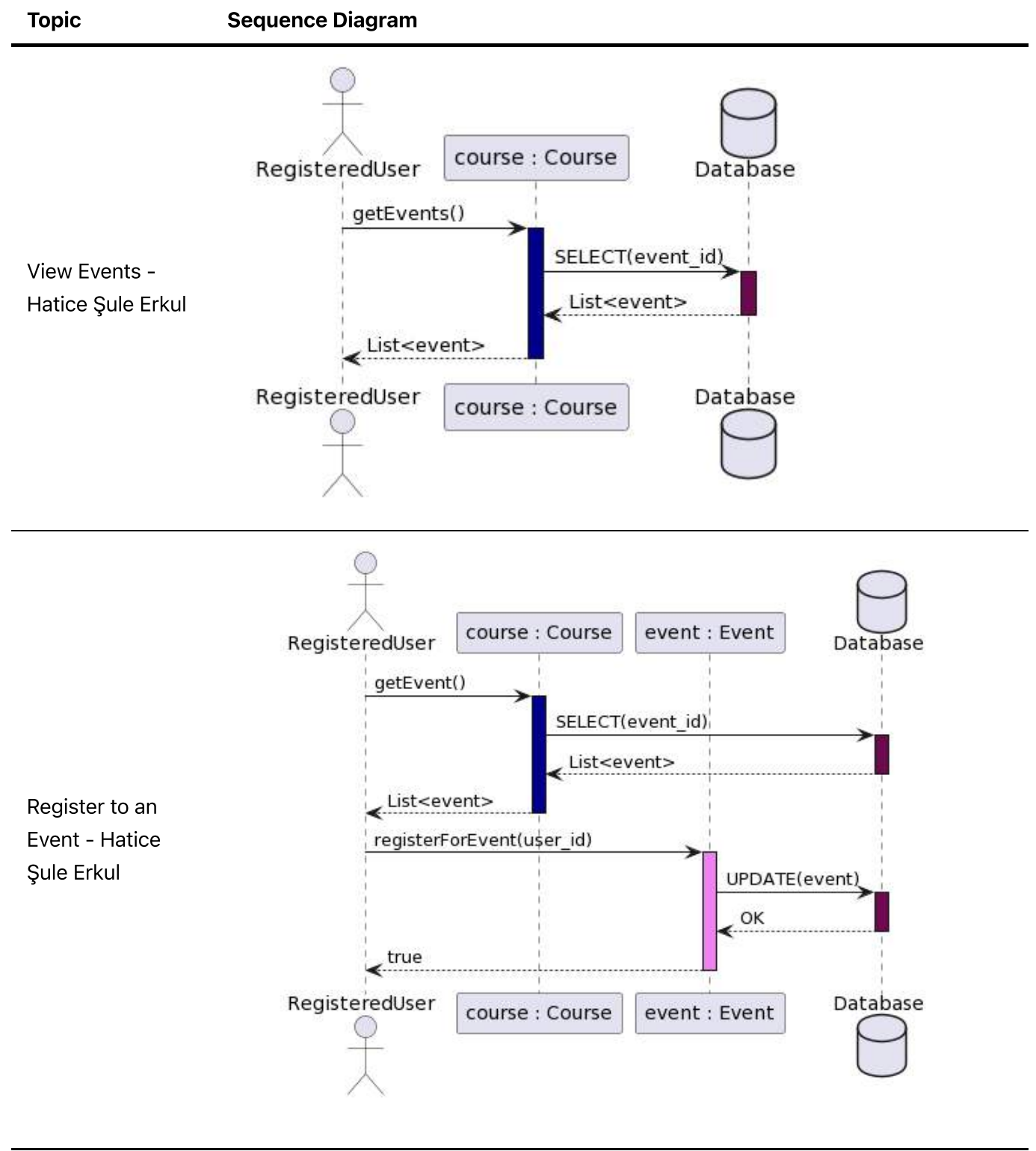
Sequence Diagram

View Course
Content - Hatice
Şule Erkul



Participate in a
Poll - Hatice Şule
Erkul

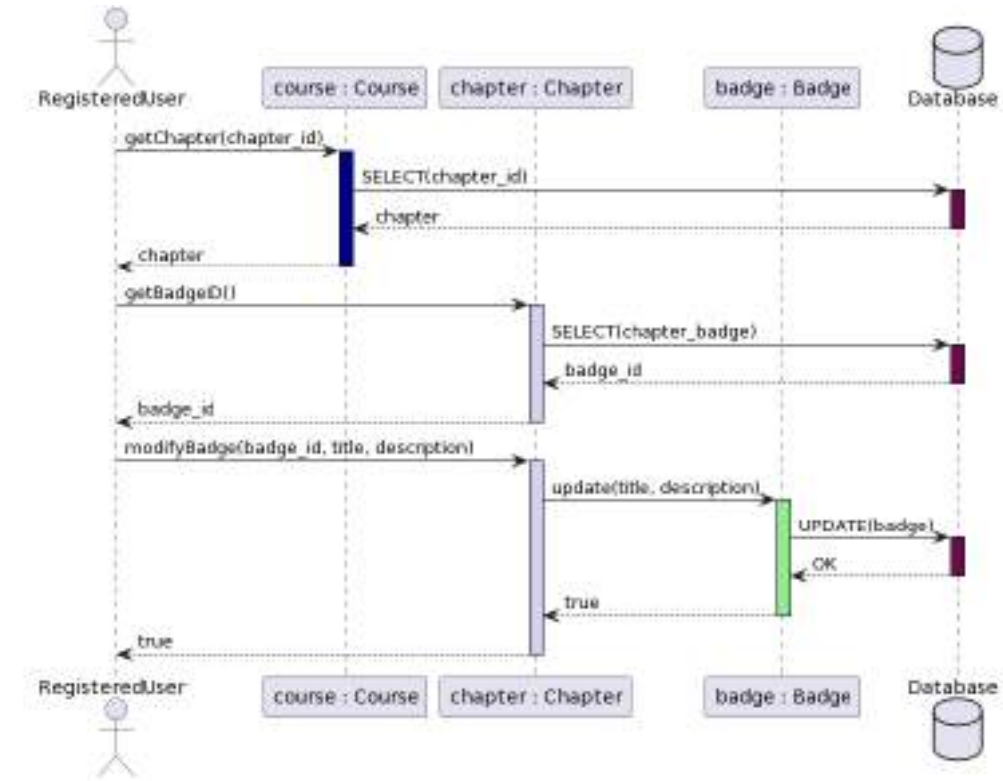




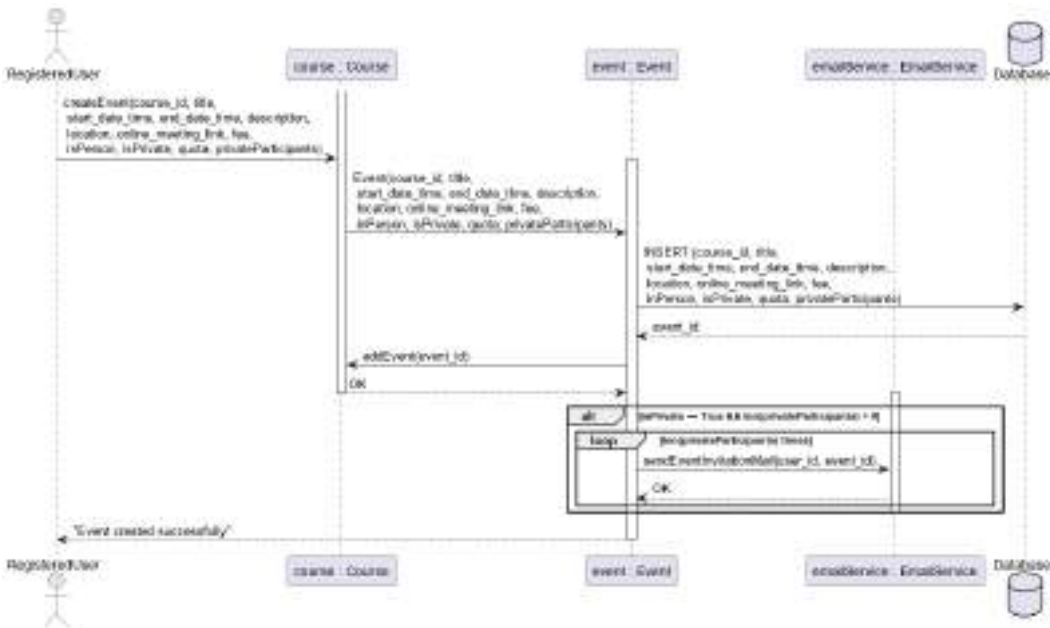
Topic

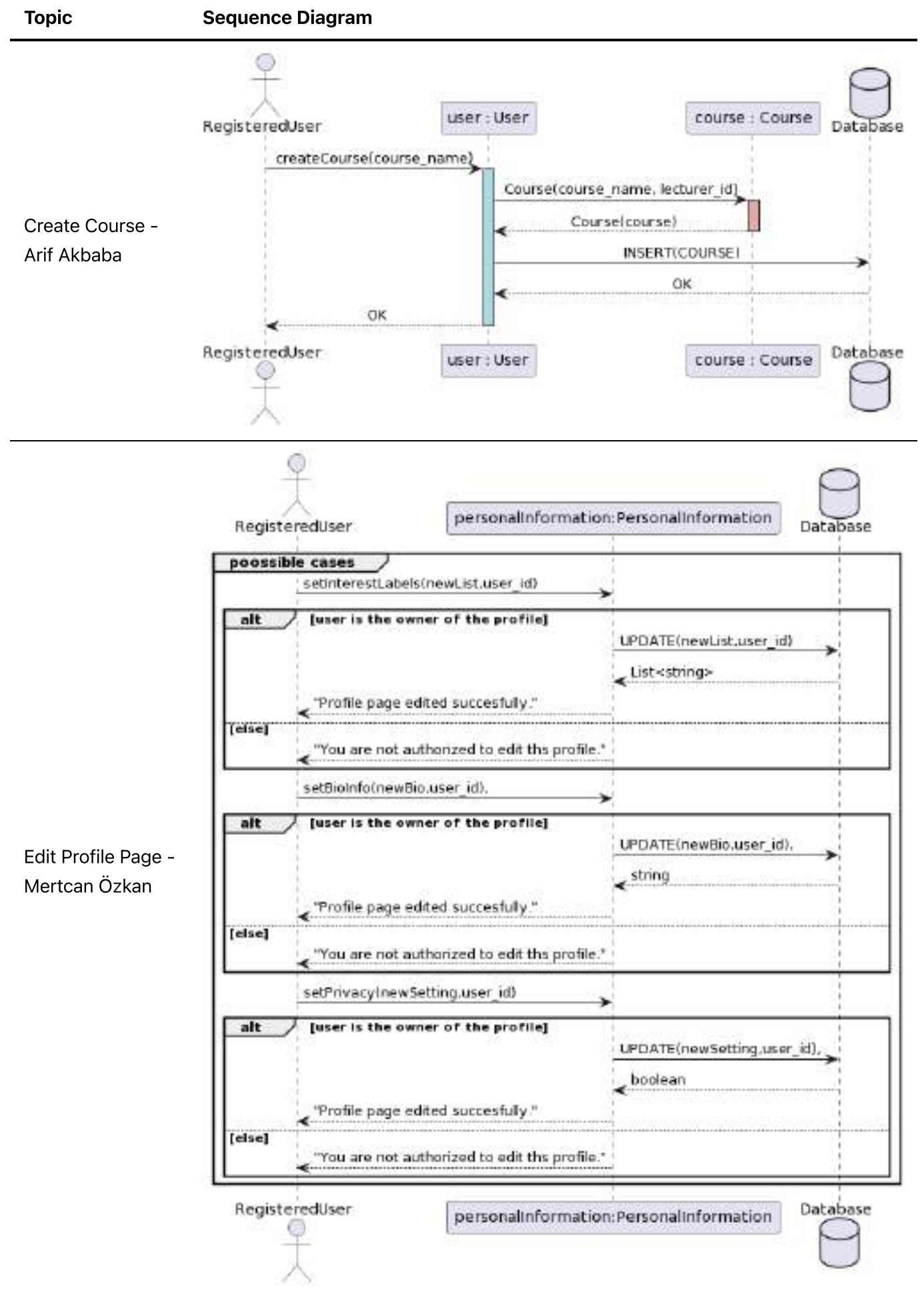
Sequence Diagram

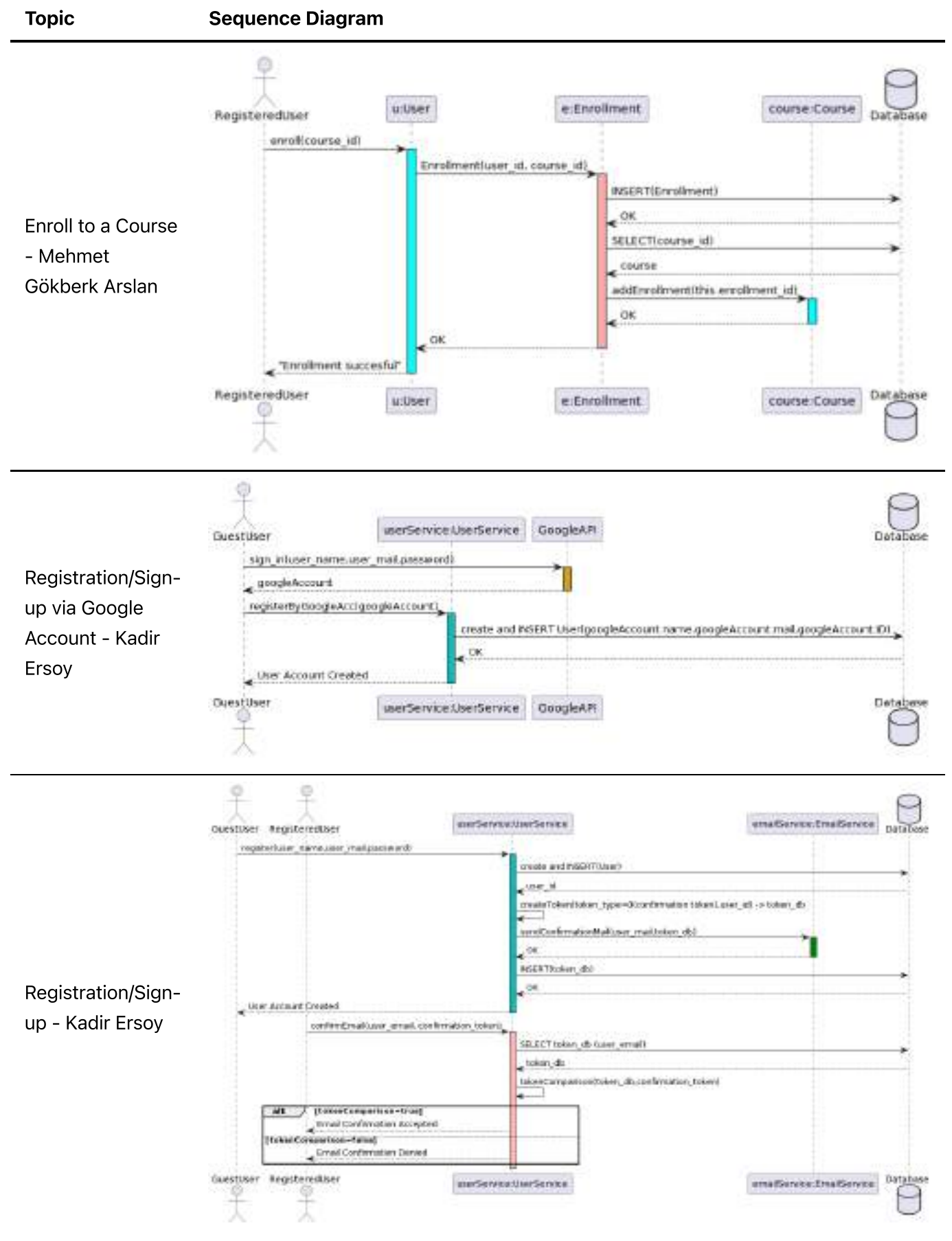
Modify a Badge -
Hatice Şule Erkul



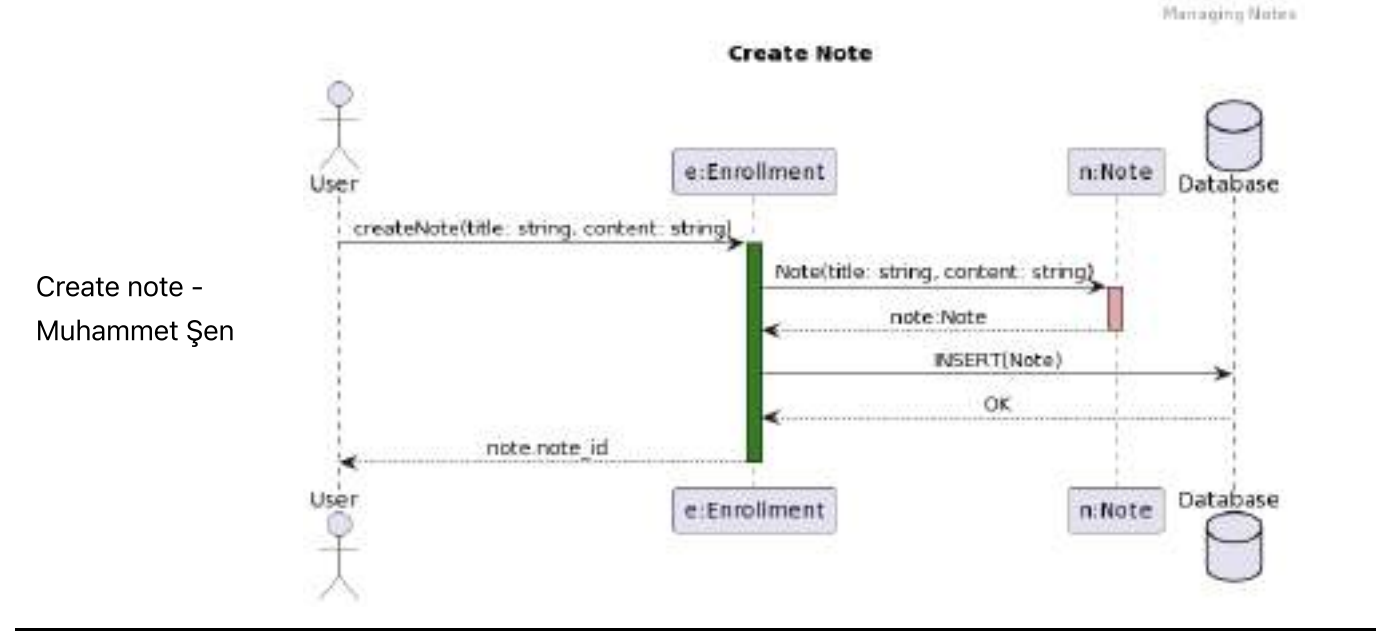
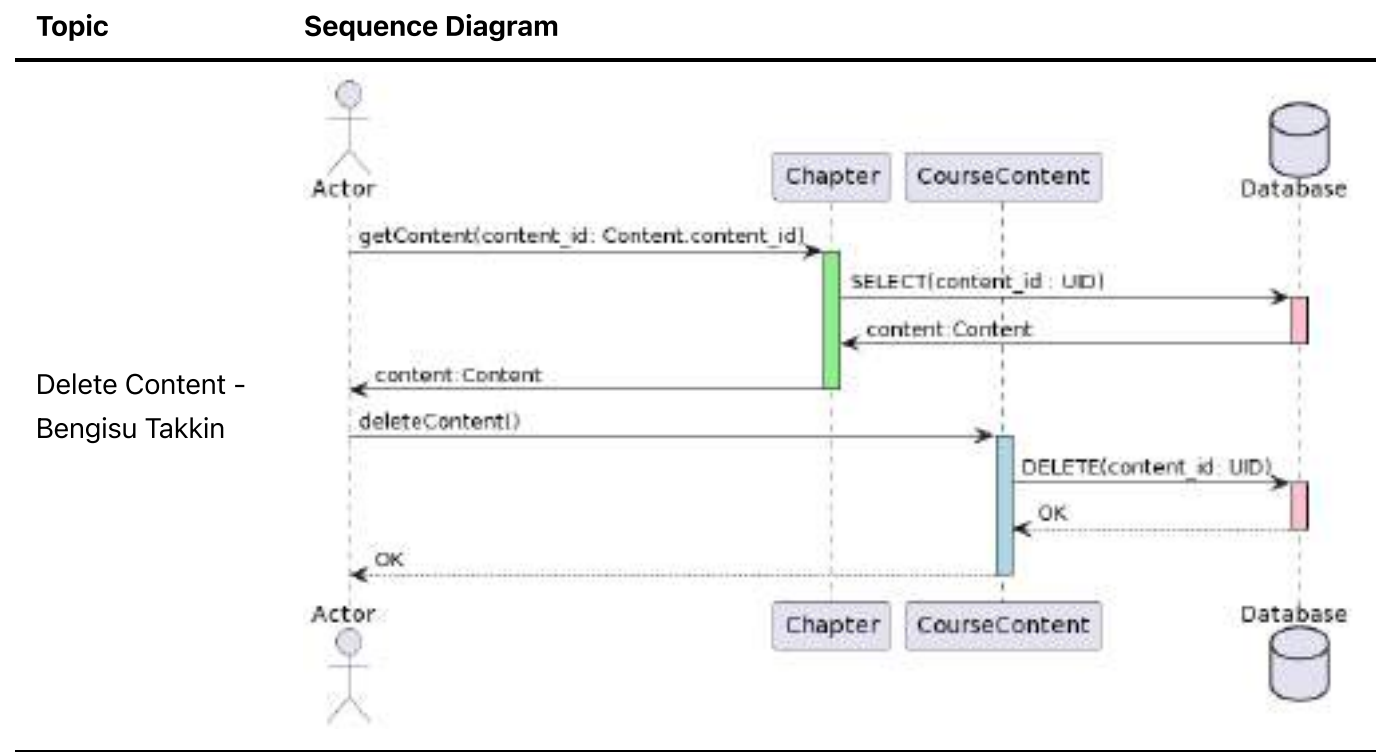
Create Event -
Nurlan Dadashov

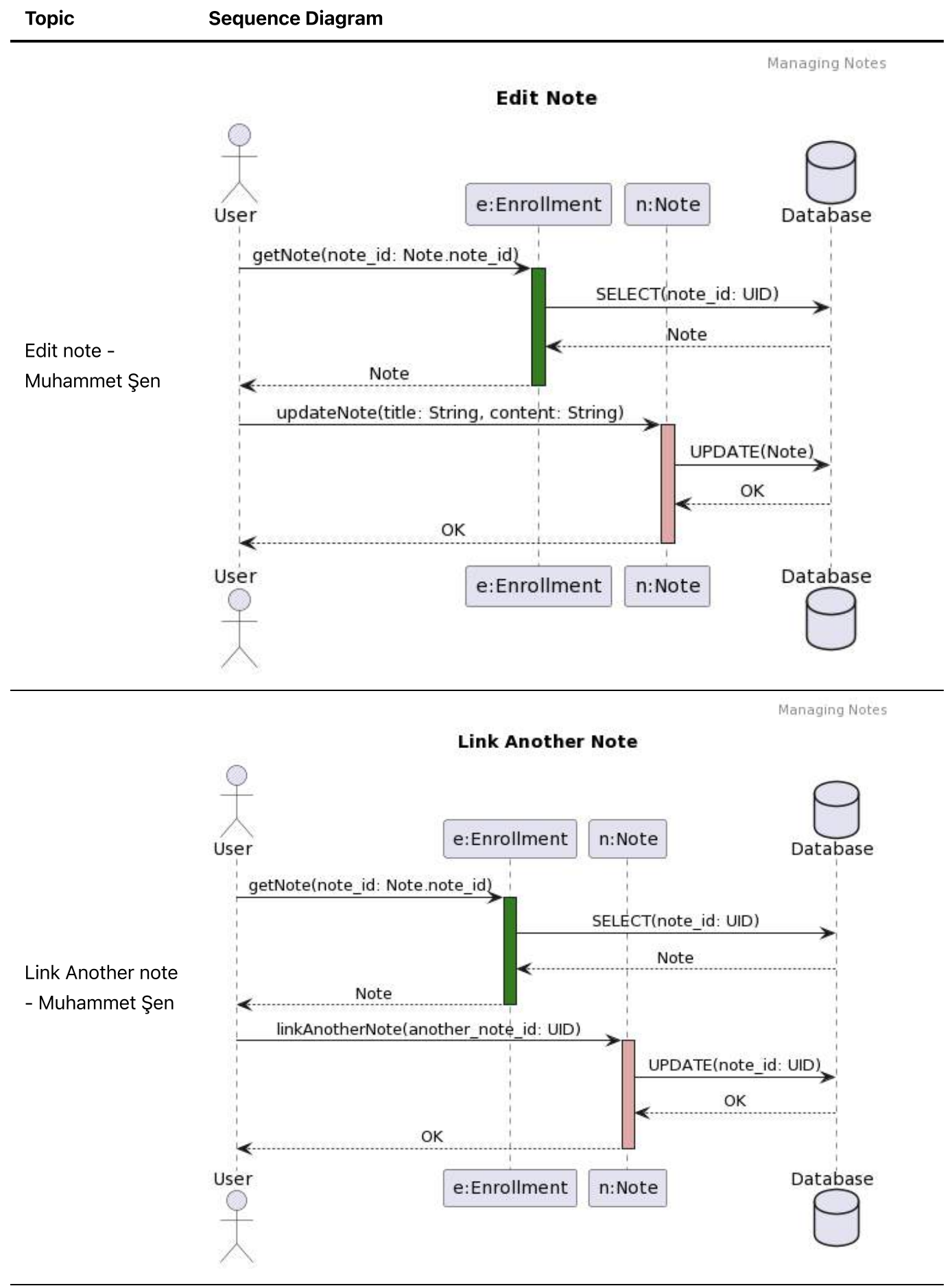


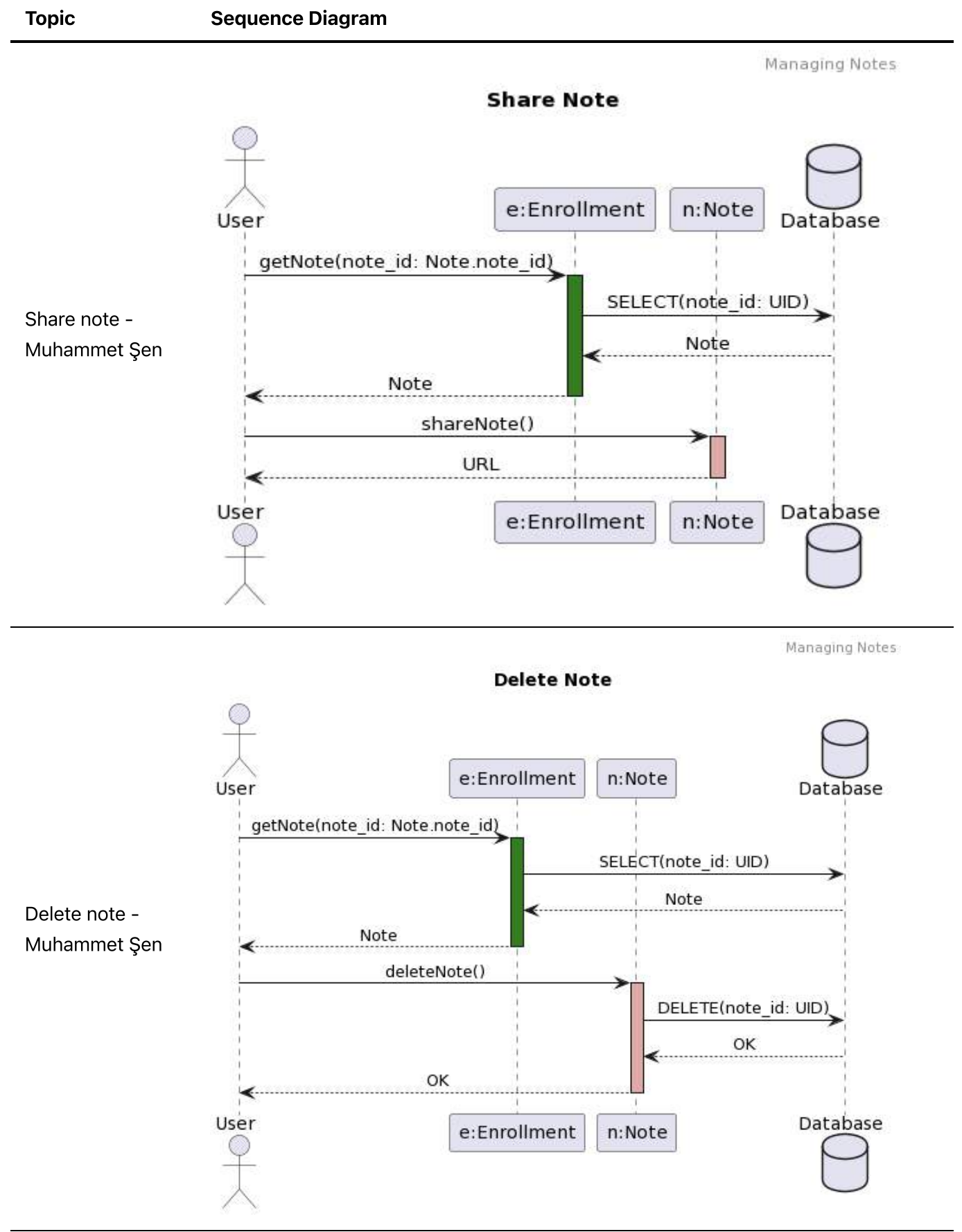




Topic	Sequence Diagram
Search & Filter - Bilal Aytekin	<pre>sequenceDiagram actor RU as RegisteredUser participant SS as search : SearchService participant DB1 as Database participant DB2 as Database RU->>SS: searchCourses(user_id, search_key, orderBy) activate SS SS->>DB1: SELECT Courses... activate DB1 DB1-->>SS: List<Courses> deactivate DB1 SS-->>RU: results deactivate SS RU->>SS: filterBetween(results, start, end = Today, orderBy) activate SS SS->>DB2: activate DB2 DB2-->>SS: List<Object> deactivate DB2 SS-->>RU: deactivate SS</pre>
Create Chapter - Bengisu Takkin	<pre>sequenceDiagram actor A as Actor participant C as Course participant CH as Chapter participant DB as Database A->>C: addChapter(chapter_id: Chapter.chapter_id) activate C C->>CH: Chapter(name : string) activate CH CH-->>C: chapter:Chapter deactivate CH C->>DB: INSERT(chapter) activate DB DB-->>C: OK deactivate DB C-->>A: chapter.chapter_id deactivate C</pre>
Add Badge - Bengisu Takkin	<pre>sequenceDiagram actor A as Actor participant C as Course participant CH as Chapter participant B as Badge participant DB as Database A->>C: getChapter(chapter_id: Chapter.chapter_id) activate C C->>DB: SELECT(chapter_id : UID) activate DB DB-->>C: chapter:Chapter deactivate DB C-->>A: chapter:Chapter deactivate C A->>CH: addBadge(title : string, description : string) activate CH CH->>B: Badge(title:string, description:string) activate B B->>DB: INSERT(badge) activate DB DB-->>B: OK deactivate DB B-->>CH: OK deactivate B CH-->>A: OK deactivate CH</pre>



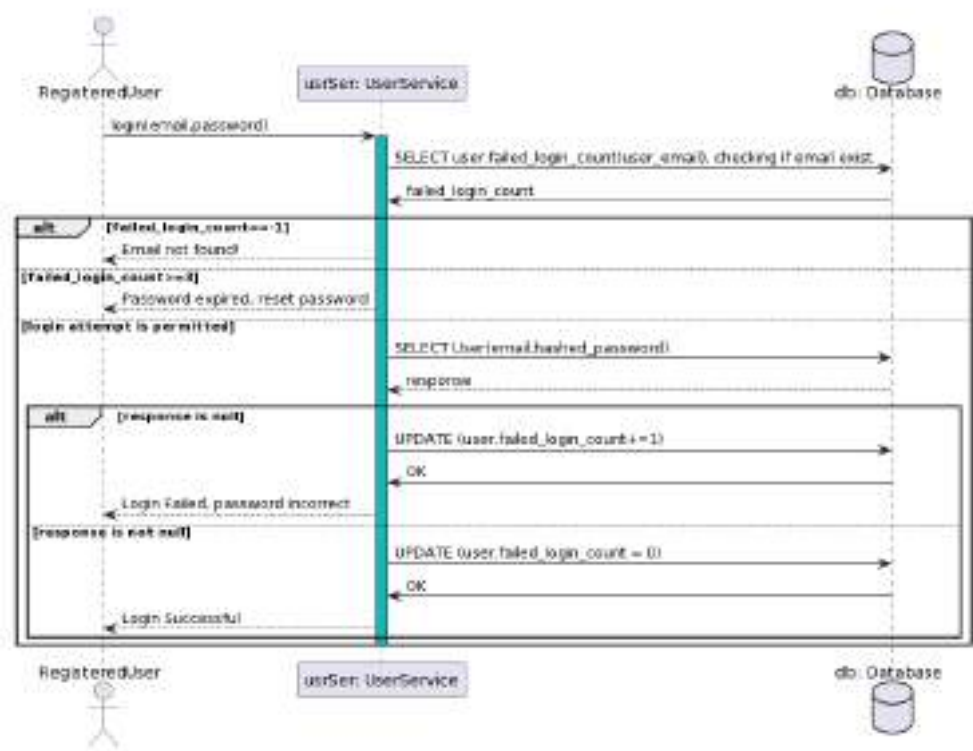




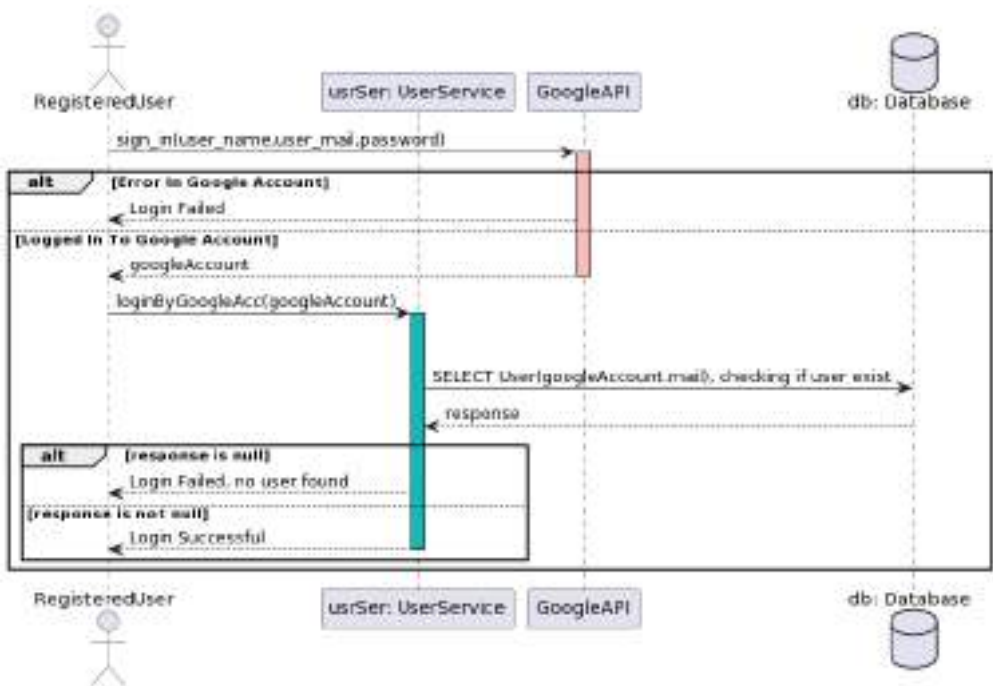
Topic

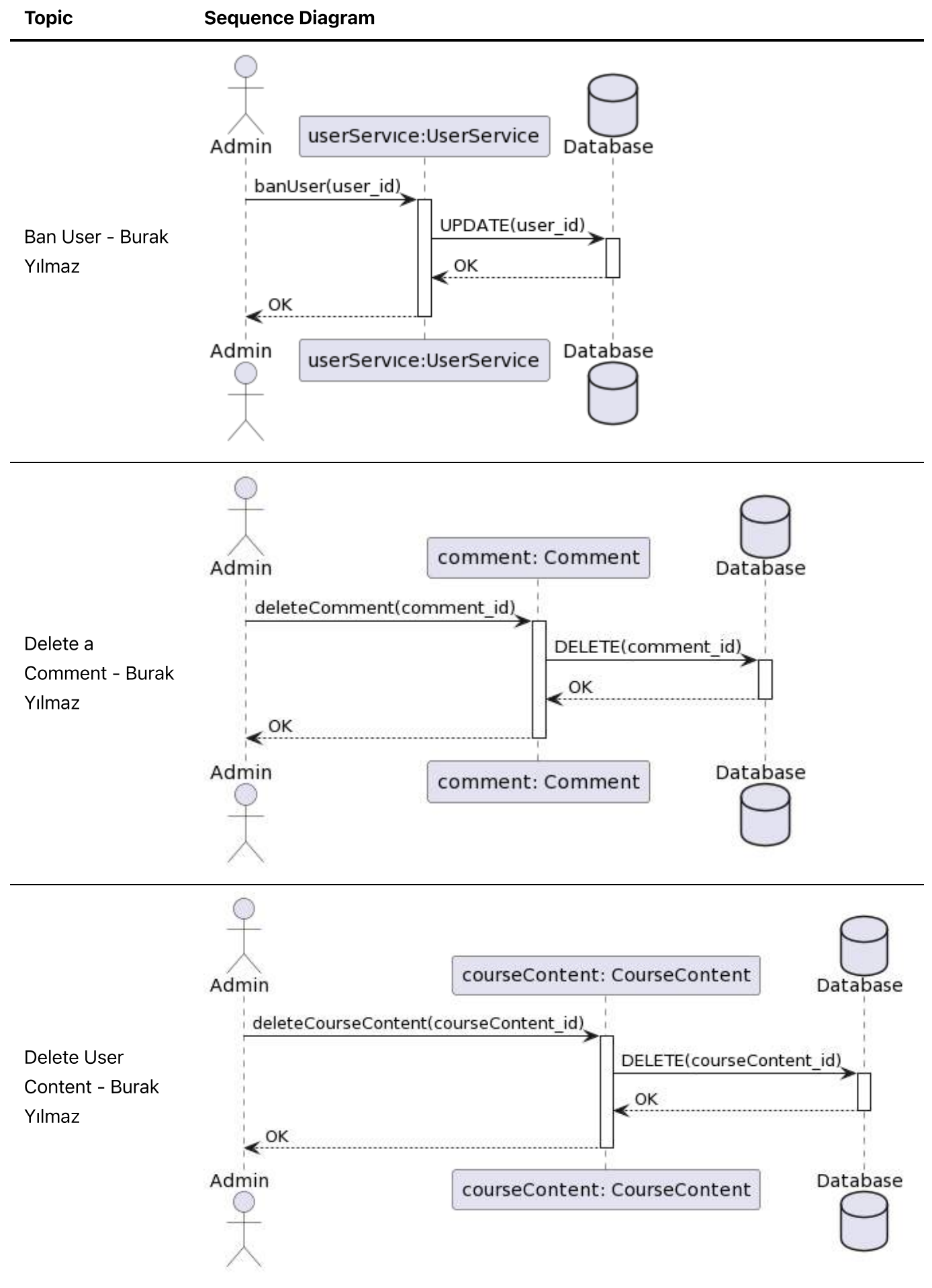
Sequence Diagram

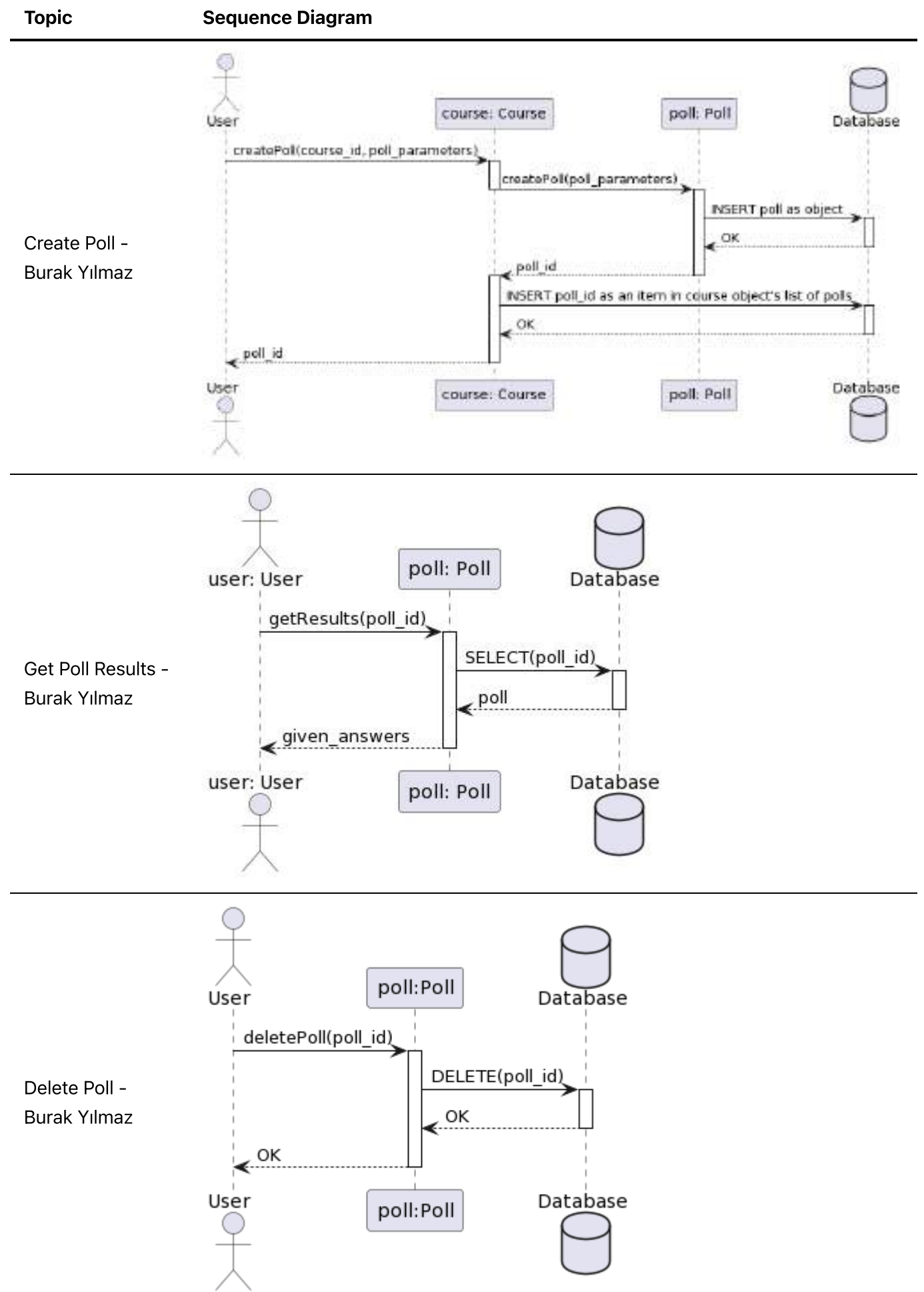
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Lead(L)													
Secondary(S)													
Contributor(C)													
Reviewer (R)													
None(N)													
	Ahmet Kudu	Arif Akbaba	Bengisu Kübra Takkin	Bilal Aytekin	Burak Yilmaz	Hatice Şule Erkul	Kadir Ersoy	Mehmet Gökberk Arslan	Mertcan Özkan	Muhammet Şen	Nurlan Dadashov	Salim Kemal Tirit	
Infrastructure Setup													
Create Personal Wiki Page	C	C	C	C	C	C	L	C	C	C	C	C	C
Write README file	L	N	N	N	N	N	N	N	N	N	N	N	N
Create Communication Plan	R	N	N	N	N	N	N	N	N	N	N	L	L
Create Personal Effort Tracking Template	N	N	N	L	N	N	N	N	N	N	S	N	N
Create Meeting Notes Template	N	N	N	N	N	N	N	N	N	L	S	N	N
Create Issue Template	L	N	N	N	N	N	N	N	N	N	N	N	N
Create Issue Labels	C	N	N	N	N	N	N	N	L	N	N	N	N
Create Wiki Home Page	C	N	N	N	N	L	N	N	N	N	N	N	N
Create Wiki Sidebar	C	N	N	N	N	L	N	N	N	N	N	N	N
Create Slack Workspace	R	N	N	N	L	N	N	N	N	N	N	N	N
Research													
Study Git	C	C	C	C	C	C	C	C	C	C	C	C	C
Create a Wiki Page for Git Research	C	R	R	R	R	R	R	L	R	R	R	R	R
Research Github Repositories	C	C	C	C	C	C	C	C	C	C	C	C	C
Document Favorite Repositories	C	L	C	C	C	C	C	C	C	C	C	C	C
Requirements													
Glossary for Requirements	C	R	R	R	R	L	R	R	R	R	R	R	R
Functional Requirements													
User Requirements	C	R	L	R	R	R	R	R	R	R	R	L	L
Account Feature Requirements	R	R	R	R	R	R	R	R	R	R	R	R	R
Profile Requirements	R	R	R	R	R	C	R	R	L	R	R	R	R
User Actions Requirements	C	R	S	R	R	C	R	R	R	R	R	L	L
Admin User Requirements	L	R	R	R	R	R	R	R	R	R	R	R	R
System Requirements	C	R	R	R	R	R	R	R	L	R	R	R	R
Profile Page Requirements	R	R	C	R	R	R	R	R	L	R	R	C	C
Communication Channel Requirements	C	R	R	R	L	R	R	R	R	R	R	R	R
Note Taking Requirements	R	C	R	R	R	R	R	R	R	R	R	R	R
Recommendations Requirements	N	R	R	R	R	R	R	L	R	R	R	R	R
Search Engine Requirements	N	R	R	L	R	R	R	R	R	R	R	R	R
Annotation Requirements	N	R	R	R	L	R	R	R	R	R	R	R	R
Event Organization Requirements	R	R	R	R	R	R	L	R	R	R	C	R	R
Non-Functional Requirements													
Accessibility and Availability Requirements	N	R	R	R	R	R	R	R	R	R	L	R	R
Security Requirements	N	R	R	R	R	R	R	R	R	R	L	R	R
Privacy Requirements	N	R	R	S	R	R	R	R	C	R	L	R	R
Performance and Reliability Requirements	R	R	R	R	R	R	R	R	R	R	L	R	R
Standarts Requirements	R	R	R	R	R	R	R	R	R	R	L	R	R
Revision of Requirements	R	R	R	R	R	L	C	R	R	R	C	R	R
Tracking of Requirement Wiki Page	C	R	R	R	N	N	N	N	R	L	N	N	N
Ask Questions Regarding Requirements	C	C	C	C	C	C	L	C	C	C	C	C	C
Document Requirement Questions and Answers	C	R	R	R	N	L	N	R	C	R	R	N	N
Scenarios & Mockups													
Scenario: Event Creation	R	R	N	R	N	N	L	N	S	N	R	R	R
Scenario: Creating Discussion	R	N	N	R	N	C	N	R	N	L	R	N	N
Scenario: Note Taking	R	N	C	R	L	N	N	N	N	N	R	N	N
Mockup Web: Event Creation	N	N	R	N	N	N	R	R	R	N	R	L	L
Mockup Web: Creating Discussions	L	N	R	N	N	R	N	R	N	R	R	N	N
Mockup Web: Note Taking	R	R	R	R	R	N	N	R	N	N	L	N	N
Mockup Mobile: Event Creation	N	L	N	N	N	N	R	R	R	N	R	R	R
Mockup Mobile: Creating Discussions	R	N	N	N	N	R	N	L	N	R	R	N	N
Mockup Mobile: Note Taking	R	R	R	L	R	N	N	R	N	N	R	N	N

[illegible]

Lead(L) Secondary(S) Contributor(C) Reviewer (R) None(N)	Ahmet Kudu	Arif Akbaba	Bengisu Kübra Takkin	Bilal Aytekin	Burak Yilmaz	Hatice Şule Erkul	Kadir Ersoy	Mehmet Gökberk Arslan	Mertcan Özkan	Muhammet Şen	Nurlan Dadashov	Salim Kemal Tirit
Delete Note	R	R	R	R	R	R	R	R	R	L	R	R
Edit Profile Page	R	R	R	R	R	R	R	R	L	R	R	R
Login	R	R	R	R	R	R	R	R	R	R	R	L
Create Chapter	R	R	L	R	R	R	R	R	R	R	R	R
Add Badge	R	R	L	R	R	R	R	R	R	R	R	R
Delete Content	R	R	L	R	R	R	R	R	R	R	R	R
View Feedbacks	R	R	R	R	R	L	R	R	R	R	R	R
Give Feedback	R	R	R	R	R	L	R	R	R	R	R	R
View Course Content	R	R	R	R	R	L	R	R	R	R	R	R
Participate in a Poll	R	R	R	R	R	L	R	R	R	R	R	R
View Events	R	R	R	R	R	L	R	R	R	R	R	R
Register to an Event	R	R	R	R	R	L	R	R	R	R	R	R
Meetings												
Document Meeting Notes for Meeting 1	N	N	N	N	N	N	N	N	N	L	N	N
Document Meeting Notes for Meeting 2	N	N	L	N	N	N	N	N	N	N	N	N
Document Meeting Notes for Meeting 3	N	N	N	N	N	N	L	N	N	N	N	N
Document Meeting Notes for Meeting 4	N	N	N	N	N	N	N	N	N	L	N	N
Document Meeting Notes for Meeting 5	N	N	N	N	N	N	N	N	N	N	L	N
Document Meeting Notes for Meeting 6	N	N	N	N	N	N	L	N	N	N	N	N
Document Meeting Notes for Meeting 7	N	N	N	N	N	N	N	N	N	L	N	N
Document Meeting Notes for Meeting 8	N	N	N	N	N	N	N	N	N	N	N	L
Document Meeting Notes for Meeting 9	N	N	N	N	N	L	N	N	N	N	N	N
Document Meeting Notes for Meeting 10	N	N	N	N	N	N	L	N	N	N	N	N
Document Meeting Notes for Meeting 11	N	N	L	N	N	N	N	N	N	N	N	N
Document Meeting Notes for Customer Meeting 1	N	N	N	N	N	N	L	N	N	N	N	N
Document Meeting Notes for Customer Meeting 2	N	N	L	N	N	N	N	N	N	N	N	N
Milestone Report 1												
Executive Summary	R	L	R	R	R	R	R	R	R	R	R	R
Evaluation of Project Repository	R	R	R	R	L	R	R	R	R	R	R	R
Evaluation of Requirements	R	R	R	R	R	R	R	R	L	R	R	R
Evaluation of Scenarios & Mockups	L	R	R	R	R	R	R	R	R	R	R	R
Evaluation of UML Diagrams	R	R	R	R	R	R	R	L	R	R	R	R
Evaluation of Project Plan	R	R	R	R	R	R	L	R	R	R	R	R
Evaluation of Responsibility Assignment Matrix	R	R	R	R	R	L	R	R	R	R	R	R
Evaluation of Communication Plan	R	R	R	R	R	R	R	R	R	R	L	R
Evaluation of Tools Used Until M1	R	R	R	R	R	R	R	R	R	R	R	L
Write Deliverables in a Table with Statuses	R	R	L	R	R	R	R	R	R	R	R	R
Prepare a Project Plan	C	C	C	C	C	C	C	C	C	L	C	C
Prepare RAM	C	C	C	C	C	L	C	C	C	C	C	C
Write Total Work Done in a Table	C	C	C	L	C	C	C	C	C	C	C	C
Compose the Report	R	R	R	L	R	R	R	R	R	R	R	R
Future Research												
Research for Tools												
Containerization	N	N	N	C	N	C	N	C	N	C	N	N
CI/CD	C	C	C	C	C	C	C	C	C	C	C	C
Testing Tools	C	C	C	C	C	C	C	C	C	C	C	C
Cloud Infrastructure Technologies	N	N	N	C	N	C	N	C	N	C	N	N
Backend Technologies	N	N	N	C	N	C	N	C	N	C	N	N
Frontend Technologies	C	N	C	N	C	N	N	N	N	N	C	N
Database Technologies	C	C	C	C	C	C	C	C	C	C	C	C
Mobile Technologies	N	C	N	N	N	N	C	N	C	N	N	C
Final Project Report	C	C	C	C	L	C	C	C	C	C	C	C



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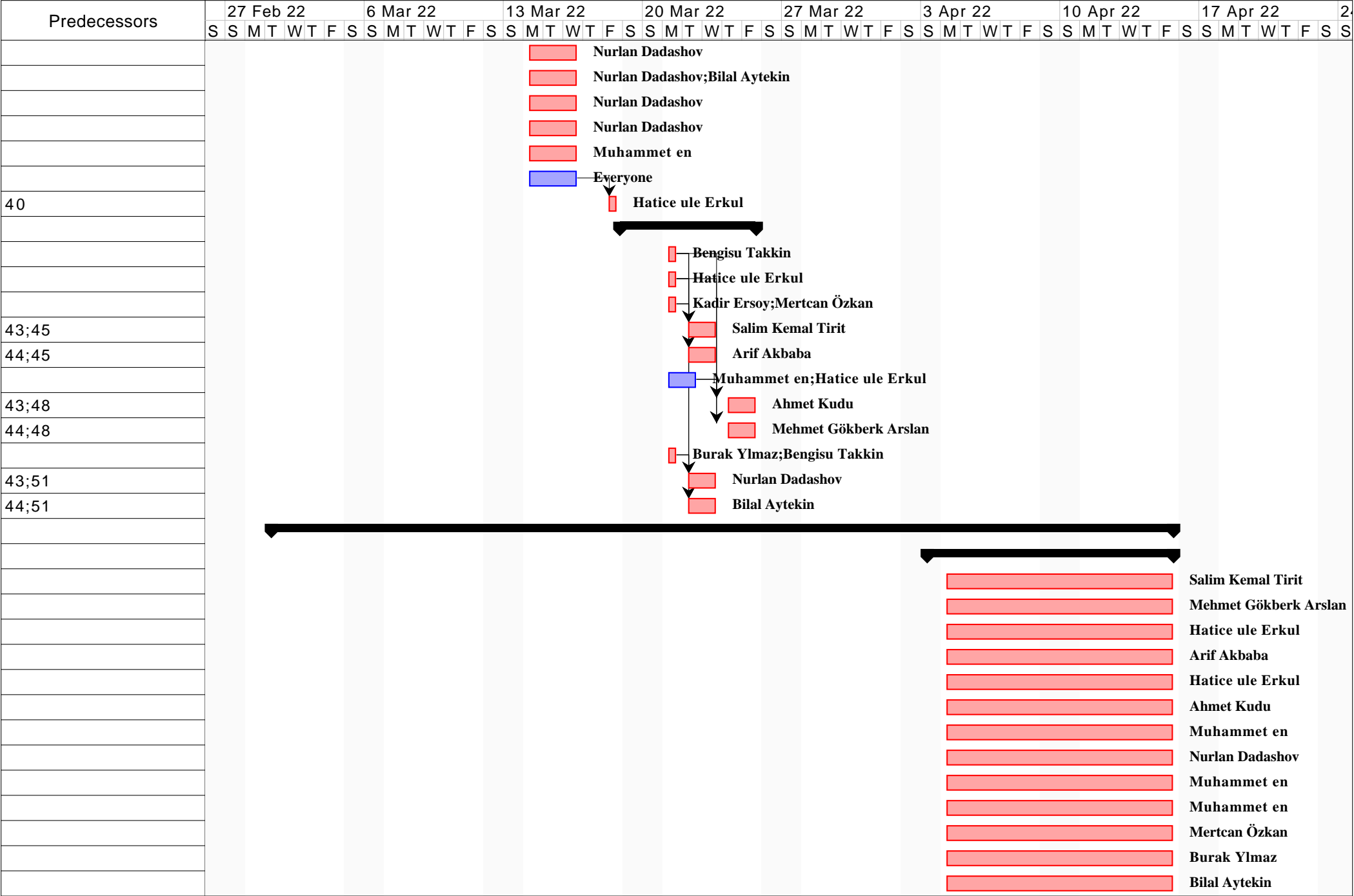
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Nov 22					20 Nov 22					27 Nov 22					4 Dec 22					11 Dec 22					18 Dec 22					25 Dec 22					1 Jan 23					8 Jan 23					15 Jan 23				
T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S			

		Name	Duration	Start	Finish	Resource Names
35		Security Requirements	3 days	3/13/22 8:00 AM	3/16/22 5:00 PM	Nurlan Dadashov
36		Privacy Requirements	3 days	3/13/22 8:00 AM	3/16/22 5:00 PM	Nurlan Dadashov;Bilal Aytekin
37		Performance and Reliability Require...	3 days	3/13/22 8:00 AM	3/16/22 5:00 PM	Nurlan Dadashov
38		Standarts Requirements	3 days	3/13/22 8:00 AM	3/16/22 5:00 PM	Nurlan Dadashov
39		Tracking statuses of Requirement Wi...	3 days	3/13/22 8:00 AM	3/16/22 5:00 PM	Muhammet en
40		Ask Questions Regarding Requirements	3 days	3/13/22 8:00 AM	3/16/22 5:00 PM	Everyone
41		Document Requirement Questions an...	1 day	3/18/22 8:00 AM	3/18/22 5:00 PM	Hatice ule Erkul
42		Scenarios & Mockups	5 days	3/18/22 8:00 PM	3/25/22 5:00 PM	
43		Create Mockup Template for Web	1 day	3/18/22 8:00 PM	3/21/22 5:00 PM	Bengisu Takkin
44		Create Mockup Template for Mobile	1 day	3/18/22 8:00 PM	3/21/22 5:00 PM	Hatice ule Erkul
45		Scenario: Event Creation	1 day	3/18/22 8:00 PM	3/21/22 5:00 PM	Kadir Ersoy;Mertcan Özkan
46		Mockup Web: Event Creation	2 days	3/22/22 8:00 AM	3/23/22 5:00 PM	Salim Kemal Tirit
47		Mockup Mobile: Event Creation	2 days	3/22/22 8:00 AM	3/23/22 5:00 PM	Arif Akbaba
48		Scenario: Creating Discussion	2 days	3/18/22 8:00 PM	3/22/22 5:00 PM	Muhammet en;Hatice ule Erkul
49		Mockup Web: Creating Discussions	2 days	3/23/22 5:00 PM	3/25/22 5:00 PM	Ahmet Kudu
50		Mockup Mobile: Creating Discussions	2 days	3/23/22 5:00 PM	3/25/22 5:00 PM	Mehmet Gökberk Arslan
51		Scenario: Note Taking	1 day	3/18/22 8:00 PM	3/21/22 5:00 PM	Burak Ylmaz;Bengisu Takkin
52		Mockup Web: Note Taking	2 days	3/22/22 8:00 AM	3/23/22 5:00 PM	Nurlan Dadashov
53		Mockup Mobile: Note Taking	2 days	3/22/22 8:00 AM	3/23/22 5:00 PM	Bilal Aytekin
54		Software Design	34 days	3/1/22 8:00 AM	4/15/22 5:00 PM	
55		Class Diagrams	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	
56		Chapter Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Salim Kemal Tirit
57		Comment Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Mehmet Gökberk Arslan
58		Badge Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Hatice ule Erkul
59		Course Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Arif Akbaba
60		Course Content Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Hatice ule Erkul
61		Discussion Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Ahmet Kudu
62		Enrollment Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Muhammet en
63		Event Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Nurlan Dadashov
64		Feedback Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Muhammet en
65		Note Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Muhammet en
66		Personal Information Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Mertcan Özkan
67		Poll Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Burak Ylmaz
68		Seach Service	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Bilal Aytekin



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			11 Sep 22					18 Sep 22					25 Sep 22					2 Oct 22					9 Oct 22					16 Oct 22					23 Oct 22					30 Oct 22					6 Nov 22					13 Nov 22	
V	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M									

Nov 22				20 Nov 22				27 Nov 22				4 Dec 22				11 Dec 22				18 Dec 22				25 Dec 22				1 Jan 23				8 Jan 23				15 Jan 23			
T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S

22 Jan 23						29 Jan 23						5 Feb 23								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S

		Name	Duration	Start	Finish	Resource Names
69		Email Service	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Bengisu Takkin
70		User Class	10 days	4/3/22 8:00 AM	4/15/22 5:00 PM	Kadir Ersoy
71		Use Case Diagrams	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	
72		Register	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Kadir Ersoy
73		Login	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Salim Kemal Tirit
74		Admin User	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Burak Yilmaz
75		Manage Polls	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Burak Yilmaz
76		Organize Event	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Nurlan Dadashov
77		Create Course Content	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Bengisu Takkin
78		Create Course	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Arif Akbaba
79		Manage Notes	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Muhammet en
80		Search	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Bilal Aytekin
81		View Course Content	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Hatice ule Erkul;Mehmet Gökberk Ar...
82		Discussion Forum	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Ahmet Kudu
83		View Profile Page	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Mertcan Özkan;Kadir Ersoy
84		Follow / Block User	9 days	4/3/22 8:00 AM	4/14/22 5:00 PM	Kadir Ersoy
85		Sequence Diagrams	34 days	3/1/22 8:00 AM	4/15/22 5:00 PM	
86		Create Discussion	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Ahmet Kudu
87		Search Courses	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Bilal Aytekin
88		Register with Social Media	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Kadir Ersoy
89		Create Event	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Nurlan Dadashov
90		Enroll to a Course	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Mehmet Gökberk Arslan
91		Edit Profile Page	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Mertcan Özkan
92		Create Course	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Arif Akbaba
93		Poll Actions	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Burak Yilmaz
94		Create Poll	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
95		Get Poll Results	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
96		Delete Poll	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
97		Admin Actions	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Burak Yilmaz
98		Ban a User	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
99		Delete a Course Content	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
100		Delete a Comment	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
101		Manage Note	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Muhammet en
102		Create Note	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	

Predecessors	27 Feb 22							6 Mar 22							13 Mar 22							20 Mar 22							27 Mar 22							3 Apr 22							10 Apr 22							17 Apr 22							24 Apr 22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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4 Apr 22					1 May 22					8 May 22					15 May 22					22 May 22					29 May 22					5 Jun 22					12 Jun 22					19 Jun 22					26 Jun 22				
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F			
Ökberk Arslan																																																	

			11 Sep 22							18 Sep 22							25 Sep 22							2 Oct 22							9 Oct 22							16 Oct 22							23 Oct 22							30 Oct 22							6 Nov 22							13 Nov 22		
T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M																						

Nov 22				20 Nov 22				27 Nov 22				4 Dec 22				11 Dec 22				18 Dec 22				25 Dec 22				1 Jan 23				8 Jan 23				15 Jan 23			
T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S

		Name	Duration	Start	Finish	Resource Names
103		Edit Note	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
104		Link Another Note	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
105		Share Note	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
106		Delete Note	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
107		Login	9 days	4/5/22 8:00 AM	4/15/22 5:00 PM	Salim Kemal Tirit
108		Manage Chapter	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
109		Create Chapter	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Bengisu Takkin
110		Modify Custom Badges	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Hatice ule Erkul
111		Add Badge	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Bengisu Takkin
112		Delete Content	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Bengisu Takkin
113		View Course Content	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	Hatice ule Erkul
114		View Feedbacks	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
115		Give Feedback	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
116		Participate in a Poll	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
117		View Events	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
118		Register to an Event	9 days	3/1/22 8:00 AM	3/11/22 5:00 PM	
119		Meetings	27 days	3/4/22 8:00 AM	4/11/22 5:00 PM	
120		Document Meeting Notes for Meeting 1	1 day	3/4/22 8:00 AM	3/4/22 5:00 PM	Muhammet en
121		Document Meeting Notes for Meeting 2	1 day	3/11/22 8:00 AM	3/11/22 5:00 PM	Bengisu Takkin
122		Document Meeting Notes for Meeting 3	1 day	3/13/22 8:00 AM	3/14/22 5:00 PM	Kadir Ersoy
123		Document Meeting Notes for Meeting 4	1 day	3/18/22 8:00 AM	3/18/22 5:00 PM	Muhammet en
124		Document Meeting Notes for Meeting 5	1 day	3/25/22 8:00 AM	3/25/22 5:00 PM	Nurlan Dadashov
125		Document Meeting Notes for Meeting 6	1 day	4/1/22 8:00 AM	4/1/22 5:00 PM	Kadir Ersoy
126		Document Meeting Notes for Meeting 7	1 day	4/4/22 8:00 AM	4/4/22 5:00 PM	Muhammet en
127		Document Meeting Notes for Meeting 8	1 day	4/5/22 8:00 AM	4/5/22 5:00 PM	Salim Kemal Tirit
128		Document Meeting Notes for Meeting 9	1 day	4/9/22 8:00 AM	4/11/22 5:00 PM	Hatice ule Erkul
129		Document Meeting Notes for Meeting ..	1 day	4/10/22 8:00 AM	4/11/22 5:00 PM	Kadir Ersoy
130		Document Meeting Notes for Meeting ..	1 day	3/14/22 8:00 AM	3/14/22 5:00 PM	Bengisu Takkin
131		Document Meeting Notes for Custom...	1 day	3/23/22 8:00 AM	3/23/22 5:00 PM	Kadir Ersoy
132		Document Meeting Notes for Custom...	1 day	3/30/22 8:00 AM	3/30/22 5:00 PM	Bengisu Takkin
133		Milestone Report 1	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	
134		Executive Summary	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Arif Akbaba
135		Evaluation of Project Repository	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Burak Ylmaz
136		Evaluation of Requirements	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Mertcan Özkan

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Group3-ProjectPlan - page25

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Nov 22				20 Nov 22				27 Nov 22				4 Dec 22				11 Dec 22				18 Dec 22				25 Dec 22				1 Jan 23				8 Jan 23				15 Jan 23			
T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S

		Name	Duration	Start	Finish	Resource Names
137		Evaluation of Scenarios & Mockups	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Ahmet Kudu
138		Evaluation of UML Diagrams	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Mehmet Gökberk Arslan
139		Evaluation of Project Plan	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Kadir Ersoy
140		Evaluation of Responsibility Assignme..	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Hatice ule Erkul
141		Evaluation of Communication Plan	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Nurlan Dadashov
142		Evaluation of Tools Used Until M1	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Salim Kemal Tirit
143		Write Deliverables in a Table with Sta...	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Bengisu Takkin
144		Prepare a Project Plan	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Muhammet en
145		Prepare RAM	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Hatice ule Erkul;Nurlan Dadashov
146		Write Total Work Done in a Table	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Everyone
147		Compose the Report	3 days	4/13/22 8:00 AM	4/15/22 5:00 PM	Bilal Aytekin
148		Future Research	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	
149		Research for tools	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	
150		Containerization	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Bilal Aytekin;Hatice ule Erkul;Mehme...
151		CI/CD	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Everyone
152		Testing tools	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Everyone
153		Cloud Infrastructure Services	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Bilal Aytekin;Hatice ule Erkul;Mehme...
154		Backend Technologies	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Bilal Aytekin;Hatice ule Erkul;Mehme...
155		Frontend Technologies	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Ahmet Kudu;Bengisu Takkin;Burak YI...
156		Database Technologies	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Everyone
157		Mobile Technologies	16 days	4/16/22 8:00 AM	5/9/22 5:00 PM	Arif Akbaba;Kadir Ersoy;Mertcan Özk...
158		Final Project Report	6 days	5/19/22 8:00 AM	5/26/22 5:00 PM	Everyone
159		Implementation	77 days?	9/28/22 8:00 AM	1/12/23 5:00 PM	
160		Backend	77 days?	9/28/22 8:00 AM	1/12/23 5:00 PM	Bilal Aytekin;Hatice ule Erkul;Mehme...
161		Frontend	77 days?	9/28/22 8:00 AM	1/12/23 5:00 PM	Ahmet Kudu;Bengisu Takkin;Burak YI...
162		Mobile	77 days?	9/28/22 8:00 AM	1/12/23 5:00 PM	Arif Akbaba;Kadir Ersoy;Mertcan Özk...
163		Testing	77 days?	9/28/22 8:00 AM	1/12/23 5:00 PM	Everyone
164		Deployment and Hosting	77 days?	9/28/22 8:00 AM	1/12/23 5:00 PM	Everyone

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The figure is a Gantt chart with a timeline from November 2022 to January 2023. The header row lists dates at 7-day intervals: Nov 22, 20 Nov 22, 27 Nov 22, 4 Dec 22, 11 Dec 22, 18 Dec 22, 25 Dec 22, 1 Jan 23, 8 Jan 23, and 15 Jan 23. Below these are columns for days of the week (T, W, T, F, S). A thick black arrow points from the start of the timeline to the end of the 27th of November. Below the arrow, there are five horizontal bars representing tasks. The first bar is labeled 'Bilal Aytekin;Hatice ule I'. The second bar is labeled 'Ahmet Kudu;Bengisu Tak'. The third bar is labeled 'Arif Akbaba;Kadir Ersoy'. The fourth bar is labeled 'Everyone'. The fifth bar is labeled 'Everyone'. The bars are colored in a light red/pink shade with a thin black border.

Task	Start Date	End Date
Bilal Aytekin;Hatice ule I	Nov 22	Nov 27
Ahmet Kudu;Bengisu Tak	Nov 22	Nov 27
Arif Akbaba;Kadir Ersoy	Nov 22	Nov 27
Everyone	Nov 22	Nov 27
Everyone	Nov 22	Nov 27

