# 1. Executive Summary

# **Project Description**

We are designing a social media platform that enables its users to create and share information in a community by creating posts in specific formats. Each user can create or join a community of their liking and create posts in some predetermined post format of their community. These predetermined post formats, which are called post templates, are created by community moderators and used in categorizing posts in that community. Each post template contains several compulsory or optional data fields to be filled, which can be of many types including location, image, video, text, date or a selection. Users can also filter posts based on their post templates and use queries on several data fields on that post template. Post template feature aims to provide an effective and accessible information sharing by providing a well-defined and characteristic outline for each piece of information in that community. Each post must belong to a community and put into that community's post feed. Users can also add other users as a friend after mutual consent and see their friends posts in their own user feed. Communities can be public or private, which in turn, will also define the privacy setting of the posts in that community. Currently, we aim to develop this platform both as a web and mobile application.

In summary, we aim to create a digital platform that enables its users to be a part of a purposeful community with each having their own specialized language for sharing information. In our platform, each community can define distinct and well-defined blocks of information which paves way for users to create specialized communities around a purpose.

### **Project Status**

Infrastructure setup for the development is completed as we created several communication channels on platforms Slack and Discord, organized and filled our repository in Github, and determined our weekly meeting schedule using a doodle. We are also done with the initial requirements elicitation as we made a domain research, had a customer meeting and created several scenarios and their respective mockups. We also produced several design documents including class diagram for describing system entities, components and the relation between them, use case diagram, to determine possible actions the user can take, and several sequence diagrams that describe the interaction between classes during a user action. In addition, we also created RAM and Gannt chart for effort tracking, produced our first milestone report and we are ready to move forward through the development.

### **Moving Forward**

We are currently ready to start implementation as we did a significant amount of research and brainstorming for understanding the nature of this project. Even though we spent a lot of time shaping requirements table and design outlines during this preliminary work, we are expecting that the requirements will expand and change during implementation. At this point, we had realized that effective communication is very critical as each assignment and task we undertook required organized collaborative effort. For this reason, we are planning to remain committed to our communication plan and define the roles of each team member in development. For the roles, we are currently planning to split into teams of frontend, backend and mobile developers.

# 2.List and Status of Deliverables

Deliverable	Status	Frequency	Description
Github Wiki Page	In Progress	Updated as needed	Documentation for the project and up-to-date information on team members, weekly meeting notes, weekly assessments
Github İssues	In Progress	Daily	Current and past issues about the project, with helpful and colorful labels.
Meeting Notes	In progress	Weekly	A summary of the discussions and decisions of the weekly scheduled meeting. A table of the division of weekly assignments can be seen at the end of every page.
Requirements	Complete	Completed (for now)	Requirements to be satisfied by the project. This page also includes a glossary and comparison of our project with other similar social networking websites.,
User Scenarios & Mockups	Complete	Completed	This page includes three scenarios that showcase the several uses of our project. A mock ui for both android and web, as well as detailed scenarios can be found here.
Design Diagrams	Complete	If Needed	These diagrams include a use case diagram, a class diagram and a sequence diagram.
Milestone Report	Complete	Completed	This document.

# 3. Evaluation of the Status of Deliverables

- Github Wiki Page: The wiki page is continuously updated. A summary of our scheduled meetings are added every week. Pages such as "requirements", "scenarios" and "design documents" are added according to the type of our weekly assignments. This pages provides an overall view of our current work and our progress in a compact manner.
- Github Issues: All open and closed issues regarding our project can be found here.
   The progression of our weekly assignments can be seen here. Custom labels such as "help needed" and "review needed" are used to increase productivity and alert other team members to a member's progress in an assignment.
- Meeting Notes: Meeting notes are taken every week during scheduled meetings.
   They are then assembled by a team member as a summary in markdown language and uploaded on the wiki.
- Requirements: The requirements elicitation of the project is completed and can be
  easily accessed using the sidebar of the wiki. There are no expected additions to be
  made in the requirements page at this moment.
- User Scenarios and Mockups: A mockup of the web and android UIs as well as example use scenarios can be found here. They can be accessed using the sidebar on the wiki.
- **Design Diagrams:** Use case, class and sequence diagrams have been created for the project. They are more "first draft" than a "final version", and some changes might be required as the project proceeds.
- Milestone Report: This report.

# 4.Evaluation of Tools and Processes Used

- Github: Github is the main platform where our project will be developed. We have
  only used the wiki and issue management features of github so far. It will be
  incredibly useful once we start coding, since it will let us keep record of our progress,
  and give the option to branch and/or merge as we try and add more features to our
  code base.
- **Slack:** We use slack due to its tight integration with other platforms. Channels and integration are the main features that make slack invaluable for us.
- **Zoom:** We use zoom for our weekly meetings, since everyone has zoom installed and configured on their computers for the lectures.
- **Discord:** We use discord for asynchronous communication. In addition to the channels, voice chat and livestream capabilities, we also use discord to communicate with our TA.
- Moqups: This tool was used to create the mockup UI for the android version of our project. Moqups is a streamlined web app that helps create and collaborate in real-time on mockups and diagrams.
- Lucidchart: Lucidchart was used for the use case, class and sequence diagrams. It allows multiple team members to work on the same diagram simultaneously, and offers UML support.
- **Google Docs:** Google docs was used to create this document. Similar to lucidchart, it allows multiple team members to work on the same document.
- ProjectLibre: We used the project management software ProjectLibre to produce a
  Gantt chart of our team effort until now. ProjectLibre is an open-source project
  management software that supports many features like Gantt charts, network
  diagrams and PERT graphs. While we are currently unaccustomed to using this
  software, we intend to learn and use it in the future.

# 5. Summary of Work Done

Member Name	Contributions
Elif Akalın	<ul> <li>Contacted my teammates and formed the Whatsapp group for immediate communication.</li> <li>Created a personal wiki page.</li> <li>Contributed to the favorite repositories page.</li> <li>Researched for and found interesting repositories.</li> <li>Scheduled and attended meetings.</li> <li>Took notes for the first meeting.</li> <li>Invited our TA to the Discord channel.</li> <li>Attended the customer meeting for clarification.</li> <li>Created Scenario 3 with Berke and Hakan.</li> <li>Reviewed the other scenarios.</li> <li>Searched for tools to create parts of the milestone.</li> <li>Made research on Github, UML and else.</li> <li>Worked on the Gantt chart with my teammates.</li> <li>Filled in and reviewed the responsibility assessment matrix.</li> </ul>

Berke Argın	<ul> <li>Created personal wiki page.</li> <li>Created a doodle to determine weekly meeting schedule.</li> <li>Contributed to the favorite repositories page.</li> <li>Made a domain research and filled in the glossary table.</li> <li>Attended many of the weekly PS' for feedback.</li> <li>Presented our team work to TA during some PS'.</li> <li>Attended weekly meetings.</li> <li>Attended Customer Meeting and asked questions to TA.</li> <li>Reviewed and updated requirements table in wiki.</li> <li>Created Scenario 3 with Elif and Hakan.</li> <li>Created a mockup for Scenario 3.</li> <li>Created an initial class diagram in UML and later modified it during creating some other diagrams.</li> <li>Reviewed and made small tweaks in use case diagram.</li> <li>Created sequence diagrams for post creation, post template creation and post filtering with Muhammed.</li> <li>Wrote executive summary for Milestone 1</li> <li>Reviewed and gave feedback to my teammates on some of their work.</li> <li>Made research on many topics including Github, UML, requirement elicitation and other topics concerning software design.</li> <li>Worked on the Gantt chart with teammates.</li> <li>Filled in and reviewed RAM.</li> </ul>
Hakan Balık	<ul> <li>Creating personal wiki page</li> <li>Creating the README page of the repository</li> <li>Investigating github repositories of interest</li> <li>Adding several issues and labels to repository</li> <li>Updating "About" of the repository</li> <li>Attending the majority of the meetings</li> <li>Taking meeting notes and uploading them to github</li> <li>Taking notes during customer meeting</li> <li>Creating Mockup Scenario 3 with Berke and Elif</li> <li>Reviewed Use Case Diagram with Emrah and Cem</li> <li>Creating several sections of this report. Transferring Mockups &amp; Scenarios and Diagrams from github to here</li> <li>Filling RAM</li> </ul>
Emrah Doğan	<ul> <li>Creating personal wiki page</li> <li>Creating Documentation page</li> <li>Creating Slack Channel</li> <li>Finding favorite github repository</li> <li>Attending weekly meetings</li> <li>Attending Customer Meeting and receiving some feedback from TA</li> <li>Analyzing and updating the System Requirements</li> <li>Updating mockup Accepting Criteria</li> <li>Designing Use Cases Diagram</li> <li>Reviewing Sequence Diagram</li> <li>Reviewing other mockup scenarios</li> <li>Reviewing UML diagrams final states</li> <li>Filling RAM</li> </ul>

Muhammed Göktepe	<ul> <li>Creating personal wiki page</li> <li>Finding favorite github repository</li> <li>Designing labels for issues</li> <li>Adding some issues</li> <li>Writing user requirements and system requirements first version. Also, prepared a draft for non-functional requirements.</li> <li>Attending weekly meetings</li> <li>Attending Customer Meeting and receiving some feedback from TA</li> <li>Finding a tool for Mockup UI</li> <li>Creating mockup Scenario II with Emir</li> <li>Creating UI for mockup Scenario II with Emir</li> <li>Modifying class diagram</li> <li>Modifying use case diagram based on feedback from TA</li> <li>Creating first version of sequence diagram and modify</li> </ul>
	<ul> <li>sequence diagram</li> <li>Reviewing RAM and adding some content to RAM</li> <li>Creating roadmap Gantt Chart with the group members</li> </ul>
Cem Kaya	<ul> <li>Creating the wiki homepage, sidebar and several empty wiki pages to be populated later.</li> <li>Creating the personal wiki page template</li> <li>Preparing the draft of requirements page, including but not limited to a partially filled comparison table, glossary, and the selection of section and subsection names</li> <li>Attending the PS and receiving feedback from the TA, and updating the requirements accordingly.</li> <li>Taking meeting notes during the customer meeting</li> <li>Finding a tool for creating mockup UIs</li> <li>Designing the mock UI for Scenario I</li> <li>Designing Scenario 1 with Yunus</li> <li>Modifying the use case and sequence diagrams according to the feedback by the TA</li> <li>Creating several sections of the milestone report. See RAM for further details.</li> </ul>
Emir Hıfsı Öztoprak	<ul> <li>Creating personal wiki page</li> <li>Researching on other github repositories</li> <li>Writing privacy section in the user requirements part</li> <li>Attending weekly meetings</li> <li>Added meeting notes to github for the first meeting</li> <li>Attending the Customer meeting with our TA</li> <li>Creating mockup scenario 2 with Muhammed</li> <li>Creating UI for mockup scenario 2 with Muhammed</li> <li>Reviewing the class diagram and use case diagram</li> <li>Reviewing the sequence diagram</li> <li>Learning more about WBS, Gantt, UML, Critical path and UML</li> </ul>
Bilal Tekin	<ul> <li>Creating Discord Server</li> <li>Creating personal wiki page</li> <li>Searching favorite Github repository</li> <li>Updating wiki home page</li> </ul>

	<ul> <li>Taking notes during meetings and putting them to github (Meeting 3-4-5-6-7 pages)</li> <li>Updating Sidebar frequently</li> <li>Creating Sequences and updating classes and usecases</li> <li>Updating mockup Accepting Createria, System requirements.</li> <li>Writing comparison table, requirements, Responsibility Matrix, Summary of work done of Milestone-1 assignment</li> <li>Finding tool (Jira) for drawing timeline</li> <li>Creating Class, UseCase, and Sequence pages in Github</li> <li>Contributing Roadmap (Gantt Chart)</li> <li>Reviewing all works of other groups</li> </ul>
Yunus Emre Topal	<ul> <li>Creating personal wiki page</li> <li>Populating github information page</li> <li>Git repository research and introduction</li> <li>Adding questions to our Questions page</li> <li>Arranging User Requirements page</li> <li>Attending customer meeting</li> <li>Making mockup scenario 1 with Cem</li> <li>Editing System Requirements page further</li> <li>Making initial version of Use Case diagram</li> <li>Attending PS</li> <li>Presenting our work to TA</li> <li>Editing Class diagram</li> <li>Editing Roadmap (Gantt Chart)</li> <li>Attending every group meeting</li> <li>Reviewing other mockup scenarios</li> <li>Reviewing UML diagrams final states</li> </ul>

# 6.Deliverables

### a.Communication Plan

Participants	Place	Purpose	When
Team Members	Zoom	General Discussion	Every Thursday at 20.00
Team Members	Slack	Weekly Progress Review	When Needed
Team Members	Discord	General Discussion	When Needed
Team Members	WhatsApp	Urgent Communication	When Needed

# **b.Requirements**

# Comparison

Here are several platforms that features a community system.

- **Facebook:** One of the most popular social media and social networking platform. While it does not directly have a community based structure, it features a user-created groups system with many features.
- **Reddit:** A social news platform where users can create or post content on both public and private communities which are called "subreddits".
- **Discord:** A VoIP and instant messaging platform. It features a community system in which each community is called a "server", where users can join public or private servers to chat and voice chat with other members of those servers.
- **Tumblr:** A social networking and microblogging platform. It supports a group blog feature where multiple users can edit or post on a single blog. Users can also chat on these shared blogs.
- **VK**: A social media and social networking platform that is mostly popular on Russia. Its general structure is nearly identical to Facebook.
- 4Chan: A imageboard website that has no user registration system. Its users can
  anonymously post images or texts in fixed threads of various topics including maths,
  science, music and politics.

Platform	User created communities	News Feed	Market place	Multimedia Sharing	Tags	Event sharin g	Privac y settin gs	Friend s/Follo wers	Direct Messagin g	Recommend ation System
Facebook	Yes	Yes	Yes	Video, Image, GIF	Yes	Yes	Yes	Yes	Yes	For communities and friends
Reddit	Yes	Yes	No	Video, Image, GIF	Yes	No	Yes	No	Yes	For communities
Tumblr	Yes	Yes	No	Video, Image, GIF	Yes	No	Yes	Yes	Yes	No
Discord	Yes	No	No	No	No	No	Yes	Yes	Yes	No
VK	Yes	Yes	No	Video, Image, GIF	Yes	Yes	Yes	Yes	Yes	For communities and friends
4Chan	No	No	No	Video, Image, GIF	No	No	No	No	No	No

# Glossary

- **Community:** Used in this context as online communities, which is a type of community that interacts through a digital platform.
- Event sharing feature: A feature that enables posting a event announcement with location, dress code and other relative information. Also, it is common for this feature to include a poll on interest over that event.
- Friends/Followers feature: A feature typically seen in social networking platforms. It
  enables a form of online connection between users that usually gives permission
  see, and comment on each of their posted contents. One important difference
  between friending and following someone over these networks is that the former is a
  mutual relationship while latter is one-sided.
- **Imageboard:** A type of internet forum where users typically posts images with text to talk and discuss about various topics.
- **Instant Messaging**: A type of technology that provides real time communication over internet.
- User: A person that uses a digital platform.
- **Marketplace:** Used in this context as an online platform where users can trade goods and commodities.
- **Microblogging:** A specific type of blogging where both length and file size of a blog is substantially limited.
- **News Feed:** A special system where users access a accumulation of online content which are collected from several sources on the users choosing.

- **Social Media:** Digital platforms that enables users to create and share contents with other users.
- **Social Network:** Digital platforms where each user can find, connect and communicate with other users based on their hobbies, careers and other interests.
- **Tag:** A keyword that can be assigned to any kind of data that generally enables easy and fast access on it later on.
- **VoIP:** Abbreviation for Voice over Internet Protocol, which is the general name for communication technologies for multimedia data transfer over Internet Protocols.

# Requirements

# 1. Functional Requirements

#### 1.1 User Requirements

- 1.1.1 Account Features
  - o 1.1.1.1 Registration
    - 1.1.1.1 Users shall register to app by their e-mail address and password.
    - 1.1.1.1.2 Users enter their password 2 times to prevent typos.
    - 1.1.1.1.3 E-mail addresses of users must be unique.
    - 1.1.1.4 Users shall determine a unique username.
    - 1.1.1.5 Users must confirm their e-mail adresses.
    - 1.1.1.1.6 Users should be able to register to app by linking their social media accounts(twitter, facebook etc.).
  - o 1.1.1.2 Log in
    - 1.1.1.2.1 Users can log in to their account with their email/username and password.
    - 1.1.1.2.2 If a user logged in to their account with their phone, then the next time they open the app they will be logged in automatically.
    - 1.1.1.2.3 Users can connect their facebook or twitter accounts to log in our app.
    - 1.1.1.2.4 When a user log in, they will directed to their homepage.
  - 1.1.1.3 Changing password/username
    - 1.1.1.3.1 Users can change their username if the username they wish to user is available.
    - 1.1.1.3.2 If users forgot their password or just want to change it they can do it with e mail confirmation.
  - o 1.1.1.4 Account Privacy
    - 1.1.1.4.1 Users can make their profile public or private.
    - 1.1.1.4.2 Users can accept follow requests by permission or immediately.
    - 1.1.1.4.3 Users can block other users so those users can not see their profile/posts.

#### • 1.1.2 Community Features

- **1.1.2.1** Everyone can create a community unless it is already exists.
- 1.1.2.2 In communities, users can share posts related to that community.
- **1.1.2.3** In communities, users can comment and react(like/dislike) on other users posts.
- 1.1.2.4 In communities, users can arrange events with details.
- **1.1.2.5** In communities, there will be group chat for users to communicate with each other.
- **1.1.2.6** Communities can be public or private.

#### • 1.1.3 Moderating Features

- 1.1.3.1 Communities needs moderators for group chats to prevent ill behaviour(racism, harassing, trolling etc.)
- **1.1.3.2** Communities can change moderators by using poll when necessary.
- 1.1.3.3 Moderators can ban users if the users engage in an ill behaviour.
- 1.1.3.4 Moderators and community creator should put up some rules for newcomers to behave.

#### 1.2 System Requirements

#### • 1.2.1 Notification

- **1.2.1.1** System notifies users when they get direct messages.
- 1.2.1.2 System notifies users when there is a new post in their communities
- **1.2.1.3** System notifies users when people like/dislike their posts.
- **1.2.1.4** System notifies users when people comment their posts.
- 1.2.1.5 System notifies users when people like/dislike comments.
- **1.2.1.6** System notifies users when people comment comments.
- 1.2.1.7 System gives an option to users disallow notifications that come from
  - **1.2.1.7.1** direct messages
  - 1.2.1.7.2 posts
  - 1.2.1.7.3 comments
  - 1.2.1.7.4 like/dislike

#### • 1.2.2 Recommendation

- 1.2.2.1 System recommends groups to the users according to their groups
- 1.2.2.2 System recommends the most followed groups to the users
- 1.2.2.3 System recommends posts to the users according to their likes or comments.
- o 1.2.2.4 System recommends the most followed posts to the users
- **1.2.2.5** System recommends users according to the users it follows.
- **1.2.2.6** System recommends users when people comment on their posts.

#### • 1.2.3 Searching

- **1.2.3.1** Users can search other user accounts.
- o 1.2.3.2 Users can search for communities.
- 1.2.3.3 Users can search for posts in a community.
- 1.2.3.4 Users can search for location.

#### • 1.2.4 Filtering

- o 1.2.4.1 System allows users to filter communities by
  - 1.2.4.1.1 Name
  - 1.2.4.1.2 Link
  - 1.2.4.1.3 Number of like/dislike
  - 1.2.4.1.4 Number of comments
  - **1.2.4.1.5** Number of members
  - 1.2.4.1.6 Tags
  - 1.2.4.1.7 Location

#### • 1.2.5 Home Page

- 1.2.5.1 Users should be able to see posts from their communities on their home page.
- 1.2.5.2 Users should be able to search for posts/users/communities from home pages search bar.
- 1.2.5.3 Users should be able to switch to another page from home page.
- 1.2.5.4 Users should be able to like or comment to posts on their home page.
- **1.2.5.5** Users should be able to filter posts by keyword or tags.

#### • 1.2.6 Users Subscribed Communities Page

- **1.2.6.1** Users should be able to see communities they subscribed to.
- **1.2.6.2** Users should be able to search for communities.
- 1.2.6.3 Users should be able to see their role in that community (admin or normal user)
- 1.2.6.4 Users should be able to sort their communities by various criteria (latest activity/most popular/moderated communities first etc.)
- 1.2.6.5 Users should be able to see how many post shared on that community after their last visit.

#### • 1.2.7 Community Page

- **1.2.7.1** Users should be able to see posts from that community in that communities page.
- 1.2.7.2 Users should be able to like or comment posts from that community.
- 1.2.7.3 Users should be able to report posts from that community for ill behaving.
- **1.2.7.4** Users should be able to create a new post.
- **1.2.7.5** Users should be able to sort post by various criteria.
- 1.2.7.6 Users should be able to search for posts with keywords from search bar
- 1.2.7.7 Admin users should be able to see join requests for that community.
- 1.2.7.8 Admin users should be able to remove posts or ban users from that community.
- 1.2.7.9 Posts must support multiple data field types including text, image, location.
- **1.2.7.10** Users must use a predefined datatype template for posting.
- 1.2.7.11 Users should be able to add existing tags to their posts.

#### • 1.2.8 Settings Page

- 1.2.8.1 Users should be able to change their accounts privacy options.
- 1.2.8.2 Users should be able to change mode of the app (light and dark mode).
- 1.2.8.3 Users should be able to disable notifications for direct messages/new posts/pending requests etc.
- **1.2.8.4** Users should be able to log out from the app.
- **1.2.8.5** Users should be able to change their username if that name is available.
- 1.2.8.6 Users should be able to add profile pictures from settings menu.

# 2. Nonfunctional Requirements

#### 2.1 Availability

- 2.1.1 Application shall be available on Android based mobile application stores.
- 2.1.2 Program shall be available on Web Browsers such as Safari and Chrome.

#### 2.2 Standards

- 2.2.1 The semantic taggings should be supported with Wikidata.org
- 2.2.2 The system must follow the rules of W3C Activity Streams Standards 2.0

#### 2.3 Privacy

#### • 2.3.1 User Privacy

- 2.3.1.1 Users can choose whether their activities are public, private or followers only. (their likes/dislikes,posts, comments, the events they attended, etc.).
- 2.3.1.2 Users can choose whether the list of groups they are a member of is public, private or followers only.
- **2.3.1.3** The username and profile picture of a user are both public.
- 2.3.1.4 Users need to accept the privacy policy before registration.
- 2.3.1.5 A user can block other users. Blocked users can't see the activities
  of that user and also can't message them.

#### • 2.3.2 Community Privacy

- o **2.3.2.1** The communities can be public or private (members only).
- 2.3.2.2 The join requests of users to private communities must be approved by a community moderator.
- 2.3.2.3 Users can join public communities freely.
- 2.3.2.4 Only community members can share posts in a community.
- 2.3.2.5 Moderators can kick/ban members who engage in an ill behaviour (racism, harassing, trolling, etc.).

#### • 2.3.3 Event Privacy

- **2.3.3.1** The events of a community can be public or private.
- 2.3.3.2 The event organisations in a community must be approved by a community moderator.
- 2.3.3.3 The users who will attend an event will be updated if there are any changes in the plan of that event.
- 2.3.3.4 The private informations of an event (meeting time, exact location, etc.) will only be shared with the attending users.
- 2.3.3.5 The event organisers are allowed to choose which members will attend their event.

#### 2.4 Security

- 2.4.1 Usernames and e-mails must be unique for each user.
- 2.4.2 There should be roles which defines who can what.
- 2.4.3 We can use JWT or cookies to authenticate users

#### 2.5 Performance

- **2.5.1** Backend must be written for applications. There are some options we can choose.
  - Java: Springboot
  - Javascript: Nodejs
  - Python: Django
- **2.5.2** Frontend must be written for applications. There are some options we can choose.
  - React Native
  - Flutter
  - Java
  - Swift
- **2.5.3** Database is important. We have options.
  - MongoDB
  - Mysql

# c.Scenarios and Mockups

### 1. Scenario 1

#### Persona



- John Doe
- 23 Years Old
- Boğaziçi University Junior Student
- Lives in Hisarüstü
- Currently Pursuing Bachelor's Degree in Computer Engineering
- Admin of the Boğaziçi Housing Community

# Story

- John Doe is an enthusiastic user of our app.
- He had to change 4 houses in 2 semesters, which he did not enjoy. He wants to make sure everyone can find a house in Hisarüstü at reasonable prices.
- He wants to make sure the Boğaziçi Housing community is a spam-free place.
- He checks for spam content daily and bans user accordingly.
- He just broke his old phone, and he is using a brand new phone.

### **Preconditions**

 He is not a first-time user. He actually founded the Boğaziçi Housing community. However, he just broke his phone and he has to sign in for the first time on this phone.

#### Goals

- He wants to login with his new phone.
- He wants to check for spam content and ban users.

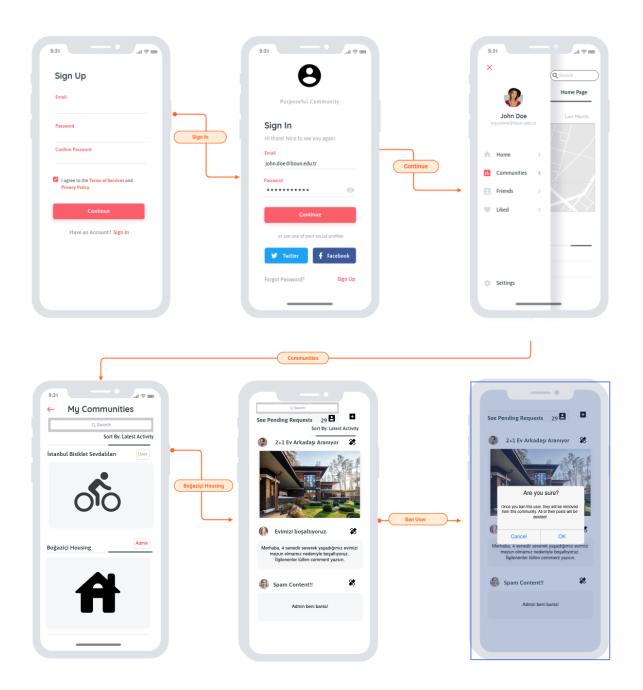
### **Acceptance Criteria**

- (1.1.1.1) Unregistered users shall be able to register either using an username/password or their social media accounts.
- (1.1.1.2) Registered users shall be able to login either using their username/password or social media.
- (1.1.3.2) Users who forgot their password shall be able to reset their passwords by clicking "Forgot Password?".
- (1.1.1.2.4) Users shall be initially directed to their homepages.
- (1.2.5.3) Users shall be able to switch to their homepage, communities, friends and liked posts.
- (1.2.5.2 and 1.2.5.5) Users shall be able to search and filter posts according to several criteria.
- (1.2.8) Users shall be able to configure privacy options as well as app options from the settings menu.
- (1.2.6.2 and 1.2.6.4) Users shall be able to search for and sort communities by several criteria.
- (1.2.6.3) Users shall be able to see which communities they moderate.
- (1.2.7.5 and 1.2.7.6) Users shall be able to search for and sort posts by several criteria.
- (1.2.7.3) Users shall be able to report posts they deem unfit for the community.
- (1.2.7.4) Users shall be able to post on communities they belong to.
- (1.2.7.7) Community admins shall see an admin-only toolbar where they see pending requests, reported posts and so on.
- (1.2.7.8) Community admins shall be able to either delete posts or ban users.

# **Scenario with Mockups**

- John Doe was an admin, but he broke his phone.
- He bought a new phone and installed the app.
- He opened the app for the first time on this phone. Since he never logged in on this phone before, he saw the sign-up screen.
- He tapped sign-in, since he was already an active user.
- He entered his username and password. He did not login using his social media, since he uses this app exclusively.
- He tapped continue.

- He was logged in and directed to his homepage. He used the sidebar to switch to communities view.
- He saw the 2 communities he was a part of: Istanbul bisiklet sevdalilari and Boğaziçi Housing. The communities were sorted by latest activity.
- He tapped Boğaziçi Housing, where he is the admin.
- He saw 29 pending requests, as well as a spam post.
- He decided to not only remove the post, but ban the user from the community.
- He saw a popup to confirm that he was sure.
- He banned the user from the community.



# 2. Scenario 2



Sebastian Vettel

### Persona

- Sebastian Vettel
- 33 years old
- He is from Heppenheim, West Germany
- He is married and has two children
- He is a Formula 1 driver for Aston Martin

# Story

- Sebastian Vettel downloaded our app months ago and uses it to follow the news about F1 and F1 communities.
- Since he has been racing for 15 years, he has lots of friends who are Formula 1 drivers as well.
- Since F1 drivers travel around the world often, he can only keep in touch with his friends via our app.
- He wants to buy gifts for his friend Daniel Ricciardo for his birthday, but he forgot the exact date.
- He wants to make sure the date.
- He also wants to learn more about Daniel's hobbies so that he can buy a better gift for him.

#### **Preconditions**

• He is not a first-time user. He signs in with email and password.

### Goals

- He wants to login with his phone.
- He wants to enter Daniel's profile.
- He wants to tap the "about" button to see Daniel's personal info.

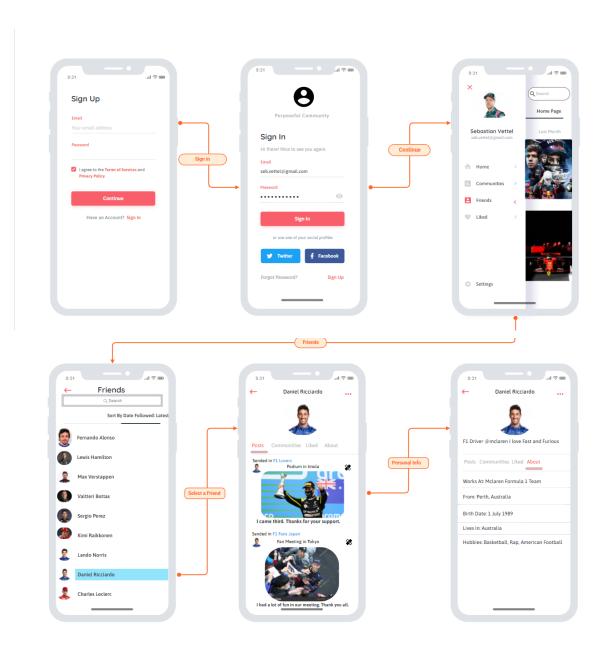
### **Acceptance Criteria**

- (1.1.1.1 and 1.1.1.6) Unregistered users shall be able to register either using a username/password or their social media accounts.
- (1.1.2.1) Registered users shall be able to login either using their username/password or social media.
- (1.1.3.2) Users who forgot their password shall be able to reset their passwords by clicking "Forgot Password?".
- (1.1.1.2.4) Users shall be initially directed to their homepages.
- (1.2.5.3) Users shall be able to switch to their homepage, communities, friends and liked posts.
- (1.2.3 and 1.2.4) Users shall be able to search and filter posts according to several criteria.
- (1.1.1.4) Users shall be able to configure privacy options as well as app options from the settings menu.
- (1.2.6.4 and 1.2.7.5) Users shall be able to search for and sort friends by several criteria.
- (1.1.2.2) Users shall be able to post on communities they belong to.
- (1.1.1.4) Users shall be able to see information about their friends.
- (1.1.1.4.1) Users shall be able to see the public posts their friends shared.
- (1.1.1.4) Users shall be able to see the communities followed by their friends.
- (1.1.2.3) Users shall be able to see the posts that are liked by their friends.

### **Scenario with Mockups**

- Sebastian Vettel was a user, and he has been using this app for four months.
- He opened the app on this phone and tapped sign-in, since he was already an active user.
- He entered his email and password.
- He tapped continue.
- He was logged in and directed to his homepage. He used the sidebar to switch to friends view.

- He saw his friends. They were sorted by date followed: latest.
- He tapped Daniel Ricciardo's page.
- He saw the posts Daniel sent to different public communities.
- He tapped the about button to see Daniel's personal information.
- He saw Daniel's bio and saw his birthday and hometown.
- He also saw the hobbies of Daniel and chose a gift based on these.



# 3. Scenario 3



Beth Harmon in 70's.

### Persona

- Beth Harmon
- 73 years old
- Currently resides in Kentucky.
- Chess prodigy who currently holds a FIDE Elo 2673.

# Story

- Beth Harmon is a professional chess player, mostly active in 60's and 70's.
- Even though her age, she likes to spend her time in a chess community to study chess and answer other peoples questions.
- She is currently retired, however she still follows the chess news and participates in tournaments.

# **Preconditions**

- Beth already has an account and joined several communities.
- Beth is logged in to the website through a web browser.
- She is familiar with the community post filtering feature.

#### Goals

- Beth wants to browse the Chess Community page.
- She wishes to find a tournament which fits her schedule.

### **Acceptance Criteria**

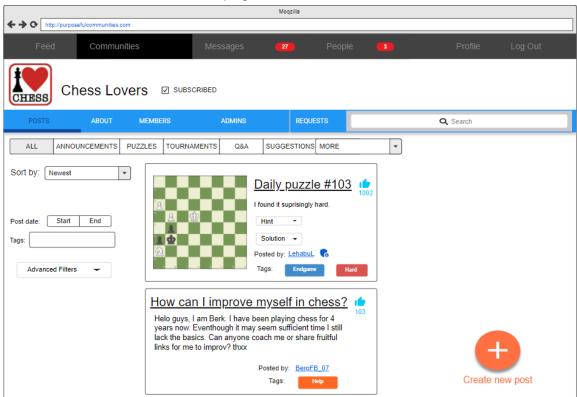
- (1.1.1.2.2) Users should be able to stay logged-in after closing the app or browser.
- (1.2.7.9) Posts must support multiple data field types including text, image, location.
- (1.2.4) For several types of data fields used in posts, there must be some predefined comparison -methods and queries to be used in filtering posts.
- (1.2.7.10) Users must use a predefined datatype template for posting.
- (1.2.4) Users should be able to add existing tags to their posts.
- (1.2.7.9) Post datatypes must support some text formatting including dropdown texts and hyperlinks.
- (1.2.3.3) Users should be able to browse posts in groups based on their datatypes.
- (1.2.7.11) Users should be search and filter specific types of posts with some predefined comparison methods and queries

# **Scenario with Mockups**

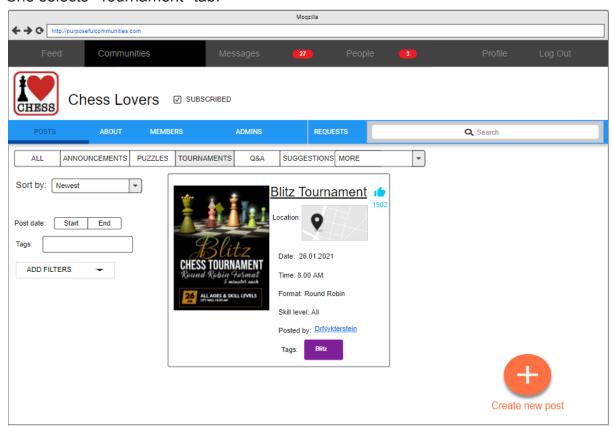
- Beth opens the "Chess Lovers" community page.
- She selects the "Tournaments" tab.
- She filters the tournaments posts by their location, date and time.
- She wishes to attend a tournament on that same day between 11.00 and 18:00.
- But there is no tournament fitting her preferences.
- So she decides to host her own tournament and let her fellow chess players know on the community.
- She presses the create new post button.
- She fills the predetermined fields of the tournament datatype and posts it.

# Mockup

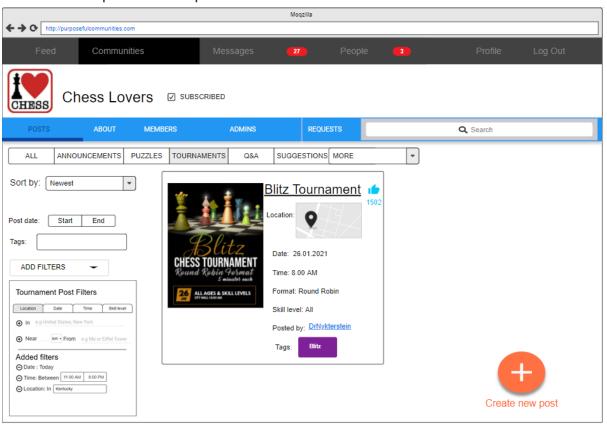
• Beth views the "Chess Lovers" page.



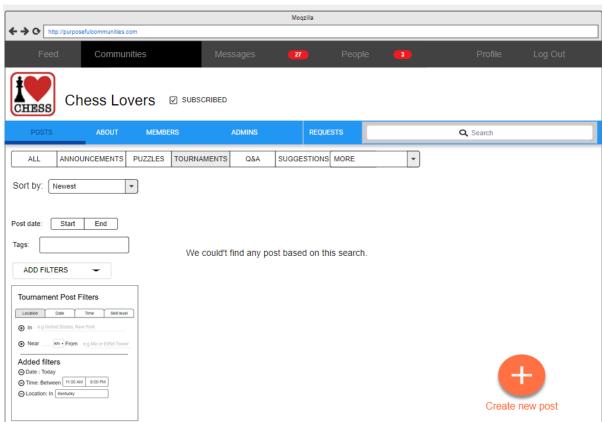
She selects "Tournament" tab.



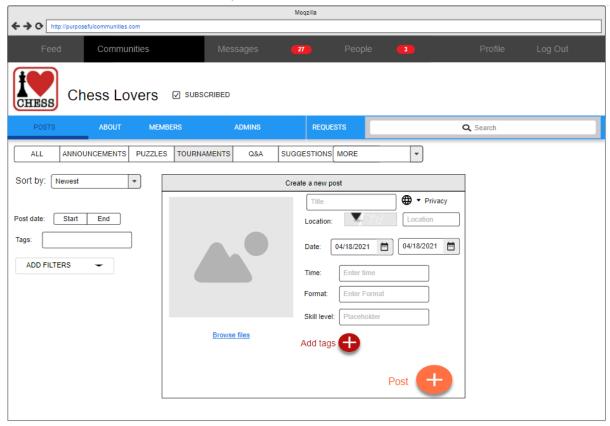
• She filters the posts on her preferences.



• There is no tournament fitting her.

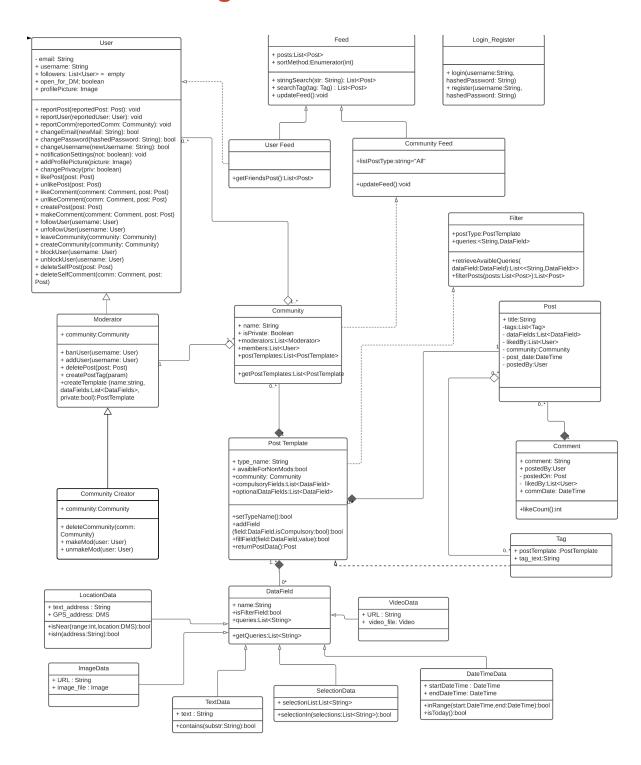


• She creates a new Tournament post.



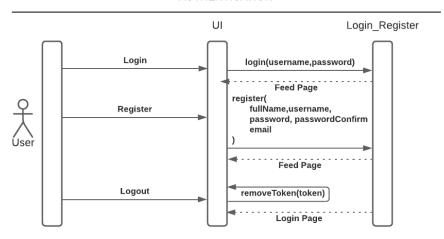
# d.Software design documents in UML

# 1. Class Diagram

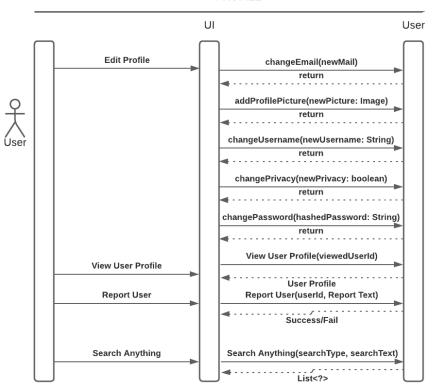


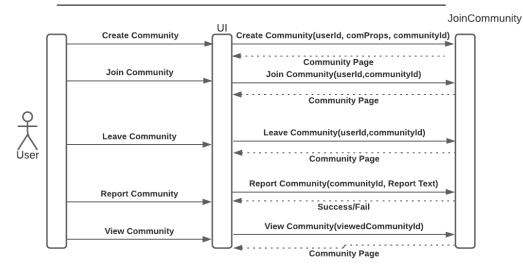
# 2. Sequence Diagram

#### **AUTHENTICATION**

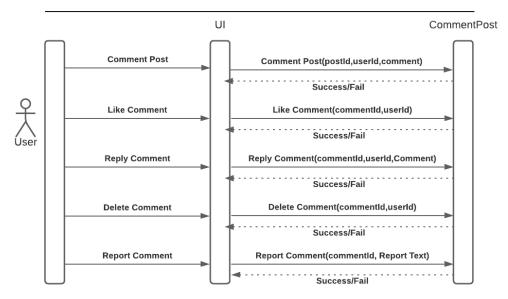


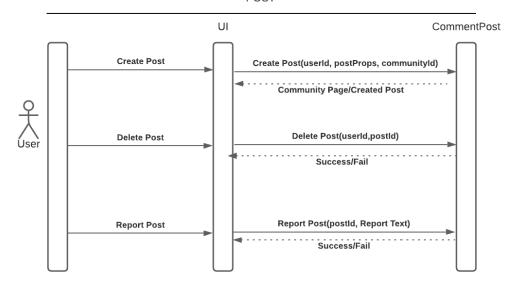
#### **PROFILE**



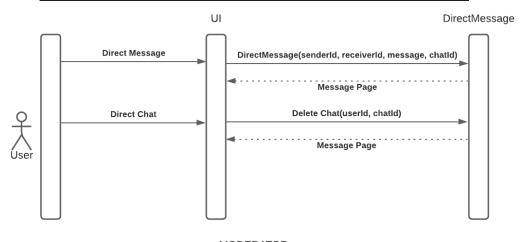


#### COMMENT

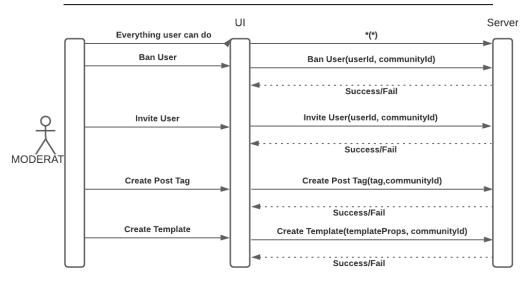




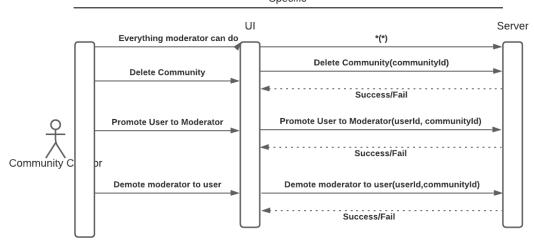
#### CHAT / MESSAGE



#### MODERATOR SPECIFIC

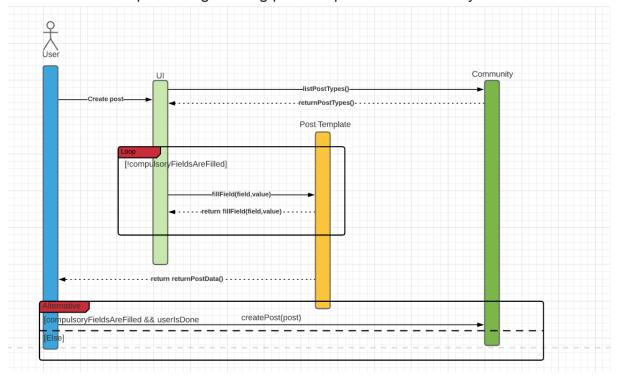


#### Community Creator Specific



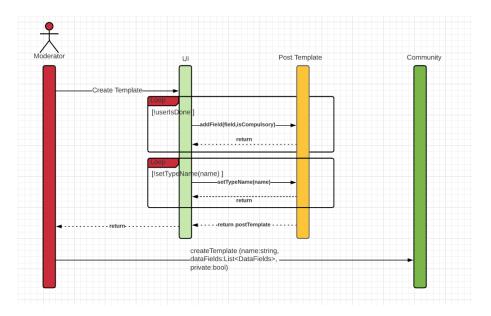
# 1. Creating Post in a Community

User can create a post using existing post templates in community.



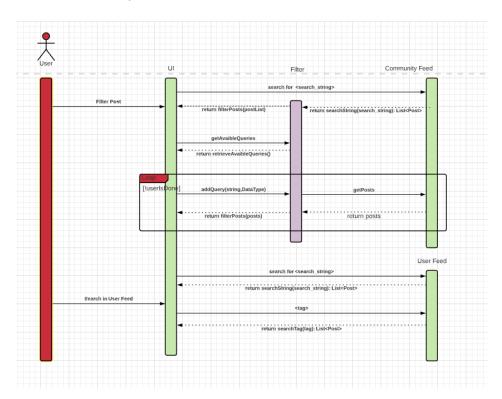
# 2. Creating Post Templates in a Community

- Moderators can create post templates in community.
- Moderators can add many fields to templates.

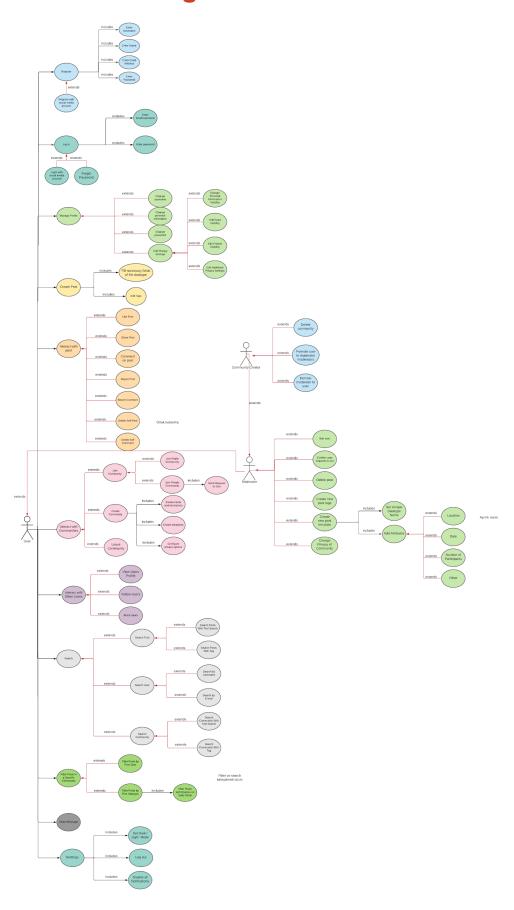


# 3. Filtering and Searching in Feeds

- Users can filter posts in communities.
- Users can search posts in their feed.



# 3. Use Case Diagram



# e.Project plan and RAM

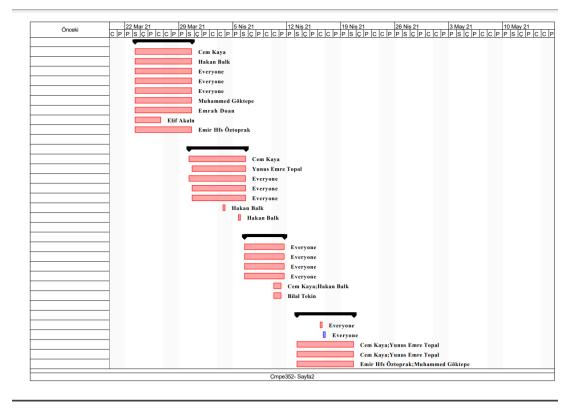
Green -> Lead Blue -> Secondary Yellow -> Contributor Magenta -> Approval Orange -> Review Red -> No contribution	Hakan BALIK	Elif AKALIN	Berke ARGIN	Emrah DOĞAN	Muhammed GÖKTEPE	Cem KAYA	Emir Hıfsı ÖZTOPRAK	Bilal TEKİN	Yunus Emre TOPAL
Infrastruct	ure Se	tup							
Creating the wiki home page									
Creating the sidebar									
Creating personal wiki pages									
Customizing readme.md									
Creating & Joining Slack Channel									
Creating & Joining Discord Channel									
Creating and participating in weekly meeting doodle									
Creating a communication plan									
Customizing the issue labels									
Research on github as a version management system									
Documenting our favorite repos on the wiki page									
Taking Meeting Notes									

Further Infras	ructur	e Setu	ıp							
Creating & Joining Trello Group										
Creating templates for personal pages										
Inviting our TA to the Discord channel										
Requiremen	s Elici	tation								
Preparing the draft of the requirements page										
Preparing the draft of the questions page										
Deciding on the sections and subsections of the requirements page										
Creating the comparison table										
Creating the glossary										
Elicitation of user requirements										
Elicitation of system requirements										
Elicitation of standards, security and performance										
Elicitation of availability and privacy										
Custome	r Meeti	ng								
Arranging Customer Meeting										
Attending the pre-meeting PS										
Attending the customer meeting										
Asking relevant questions to the customer										
Taking meeting notes										
Documenting meeting notes										
Updating the requirements as needed										
Scenarios and Mockups										
Finding tool to create mockups										
Creating the "Moderating a Community" scenario										
Creating the mockup UI for this scenario										
Creating the "Viewing a friend's profile" scenario										
Creating the mockup UI for this scenario										

Creating the "Filtering posts and creating a new one" scenario								
Creating the mockup UI for this scenario								
Revisions and	Modifi	cation	าร					
Adding more requirements								
Adding items to the glossary								
Modifying scenarios and mockups								
Final check of requirements								
Design documents: Use cases, cla	ss dia	grams	s, seq	uence	diagr	ams		
Choosing a tool to create the diagrams								
Creating the use cases diagram								
Creating the class diagram								
Creating the sequence diagram								
Receiving feedback from the TA regarding the diagrams								
Updating the use cases diagram								
Updating the class diagram								
Updating the sequence diagram								
Project Planning: T	he firs	st mile	stone	)				
Creating the overall design of the report								
Choosing a tool to create the report on								
Migrating content from github wiki to google docs								
Creating the executive summary								
Creating the list and status of deliverables								
Evaluation of the status of deliverables and their impact								
Evaluation of tools and processes used								
A summary of work done by each team member								
Creating the responsibility assignment matrix								
Creating gantt chart for roadmap								

# 7.RoadMap

<b>(B)</b>	Ad	Süre	Balat	Bitirme	Kaynak Adlar
	Infrastructure Setup	2 günler?	23.03.2021 08:00	30.03.2021 17:00	
Ö	Repository Wiki Page	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Cem Kaya
Ö	Repository ReadME page	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Hakan Balk
Ö	Personal Wiki Pages	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Everyone
Ö	Github Research	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Everyone
Ö	Github Favorite Repositories	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Everyone
<b>8</b>	Customize Issue Labels	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Muhammed Göktepe
•	Creating Communication Plan	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Emrah Doan
Ö	Meeting Notes 1	1,333 günler?	23.03.2021 08:00	26.03.2021 17:00	Elif Akaln
Ö	Creating Meeting Page	7,375 günler?	23.03.2021 08:00	30.03.2021 17:00	Emir Hfs Öztoprak
	Requirements Elicitation	2 günler?	30.03.2021 08:00	06.04.2021 17:00	
Ö	Creating Requirements Page	7,375 günler?	30.03.2021 08:00	06.04.2021 17:00	Cem Kaya
Ö	Create Questions Page	7 günler?	30.03.2021 17:00	06.04.2021 17:00	Yunus Emre Topal
Ö	Investigate and think about Requirements	7,375 günler?	30.03.2021 08:00	06.04.2021 17:00	Everyone
Ö	Update Requirements Page	7 günler?	30.03.2021 17:00	06.04.2021 17:00	Everyone
Ö	Update Questions Page	7 günler?	30.03.2021 17:00	06.04.2021 17:00	Everyone
Ö	Take notes during the meeting	0,333 günler	03.04.2021 17:00	04.04.2021 01:00	Hakan Balk
Ö	Creating Meeting Page	0,333 günler	05.04.2021 17:00	06.04.2021 01:00	Hakan Balk
<b>∔</b> I	Requirements Elicitation Continued	1.167 günl	06.04.2021 12:00	11.04.2021 17:00	Everyone
<u>.</u>	,			11.04.2021 17:00	Everyone
8				11.04.2021 17:00	Everyone
8		-		11.04.2021 17:00	Everyone
8		5,208 günler?	06.04.2021 12:00	11.04.2021 17:00	Everyone
	Take Meeting Notes 3	0 günler	10.04.2021 08:00	11.04.2021 08:00	Cem Kaya;Hakan Balk
	Upload Meeting Notes 3			11.04.2021 08:00	Bilal Tekin
	Scenarios and Mockups	2 günler?	13.04.2021 08:00	20.04.2021 17:00	
	Weekly meeting and dividing workshare.	0,333 günler	16.04.2021 08:00	16.04.2021 16:00	Everyone
	Customer meeting	0,333 günler	16.04.2021 18:00	17.04.2021 01:59	Everyone
Ö	Creating Scenario 1	2 günler	13.04.2021 08:00	20.04.2021 17:00	Cem Kaya;Yunus Emre To
	Creating mockup of Scenario 1	2 günler?	13.04.2021 08:00	20.04.2021 17:00	Cem Kaya;Yunus Emre To
Ö	Creating mockup or Scenario 1	z guilloi :			
		Infrastructure Setup Repository Wiki Page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repositories Require Repositories Customize Issue Labels Creating Communication Plan Meeting Notes 1 Creating Meeting Page Requirements Elicitation Creating Requirements Page Requirements Page Investigate and think about Requirements Update Requirements Page Requirements Page Create Questions Page Creating Meeting Page Requirements Elicitation Continued Requirements Elicitation Continued Update Comparison Table Update Glossary Update Functional Requirements Update Non-Functional Requirements Requirements Update Non-Functional Requirements Requirem	Infrastructure Setup Repository Wiki Page Repository Wiki Page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository ReadME page Repository Repositories Regular Communication Requirements Requirements Elicitation Requirements Elicitation Requirements Elicitation Requirements Page Requirements Requirements Requirements Requirements Requirements Elicitation Continued Requirements Elicitation Continued Requirements Elicitation Continued Requirements Elicitation Requirements Requirements Sequenter Requirements Sequenter Requirements Sequenter Requirements Elicitation Continued Requirements Sequenter Requirements Requirements Requirements Requirements Requirements Requirem	Infrastructure Setup   2 günler?   23.03.2021 08:00   Repository Wiki Page   7,375 günler?   23.03.2021 08:00   Repository ReadME page   7,375 günler?   23.03.2021 08:00     Repository ReadME page   7,375 günler?   23.03.2021 08:00     Repository ReadME page   7,375 günler?   23.03.2021 08:00	Infrastructure Setup   2 günler?   23.03.2021 08:00   30.03.2021 17:00



	<b>®</b>	Ad	Süre	Balat	Bitirme	Kaynak Adlar
32	Ö	Creating mockup of Scenario 2	2 günler?	13.04.2021 08:00	20.04.2021 17:00	Emir Hfs Öztoprak;Muhamm
33	o	Creating Scenario 3	2 günler	13.04.2021 08:00	20.04.2021 17:00	Berke Argn;Elif Akaln;Haka.
34		Creating mockup of Scenario 3	2 günler?	13.04.2021 08:00	20.04.2021 17:00	Berke Argn;Elif Akaln;Haka.
35		Updating requirements table	7,375 günler?	13.04.2021 08:00	20.04.2021 17:00	Everyone
36		Design documents	2,667 günl	20.04.2021 17:00	30.04.2021 17:00	
37	Ö	Research UML Diagrams and Tools	10 günler?	20.04.2021 17:00	30.04.2021 17:00	Everyone
38	Ö	Creating Use Case Diagram	2,667 günler?	20.04.2021 17:00	30.04.2021 17:00	Cem Kaya;Emrah Doan;Ha.
39	o	Creating Class Diagram	10 günler?	20.04.2021 17:00	30.04.2021 17:00	Berke Argn
40	o	Creating Sequence Diagram	2,667 günler?	20.04.2021 17:00	30.04.2021 17:00	Berke Argn;Bilal Tekin;Muha
41	o l	Meeting Notes 5	1 gün?	22.04.2021 17:00	23.04.2021 17:00	Bilal Tekin
42		Project Planning: The first milestone	2,667 günl	28.04.2021 08:00	09.05.2021 17:00	
43	Ö	Timeline Tool Search	11,375 günler?	28.04.2021 08:00	09.05.2021 17:00	Everyone
44	Ö	Milestone Report	11,375 günler?	28.04.2021 08:00	09.05.2021 17:00	Everyone
45	8	Meeting Notes 6	1.375 günler?	02.05.2021 08:00	03.05.2021 17:00	Bilal Tekin

