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FACULTY OF ENGINEERING
COMPUTER ENGINEERING DEPARTMENT**

Project Report
Version 2

CENG 408

Innovative System Design and Development II

W-COOP TOBB AWEB MOBILE APPLICATION

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Abstract

Women entrepreneurs' participation is getting more important by creating diversity in both public and private enterprises and leaving a social impact on society. Female leaders inspire young women to reach their goals and achieve more in their respective areas. With the digitalization of the business world, women entrepreneurs have also moved their networks to digital. Many web applications focus on empowering the relationship between women entrepreneurs all around the world. Several applications developed in Turkey aim to develop a communication network for woman entrepreneurs as well. Therefore, this paper aims to review the literature concerning the applications and organizations that aim to create a network that will help women to expand their businesses in both private and public sectors, and it focuses on the projects that are held in Turkey, which are W-BUN and ANGIKAD. Additionally, it also highlights the differences between the “TOBB Ankara Women Entrepreneurs Board Mobile Application”, and the projects mentioned above.

Keywords:

Women entrepreneurs, mobile application, networking, communication, online, digitalization, web application, women empowerment, technology

Özet:

Kadın girişimcilerin iş dünyasına katılımı toplum üzerinde sosyal bir etki bırakıyor ve hem kamu hem de özel işletmelerde çeşitlilik yaratmasıyla beraber daha da önem kazanıyor. Kadın liderler, genç kadınlara hedeflerine ulaşmaları ve çalıştıkları alanlarda daha fazlasını başarmaları için ilham veriyor. İş dünyasının dijitalleşmesi ile birlikte kadın girişimciler de iş ağlarını dijitale taşıdı. Dünyanın her yerinde kadın girişimciler arasındaki ilişkiyi güçlendirmeye odaklanan birçok web uygulaması geliştiriliyor. Türkiye'de de geliştirilen birçok uygulama, kadın girişimcilere yönelik bir iletişim ve dayanışma ağı geliştirmeyi hedefliyor. Bu nedenle bu makale, kadınların hem özel hem de kamu sektöründeki işlerini büyütmelerine yardımcı olacak bir ağ oluşturmayı hedefleyen uygulama ve kuruluşlara ilişkin literatürü incelemeyi amaçlamakta ve özellikle Türkiye'de gerçekleştirilen projeler olan W-BUN ve ANGIKAD'a odaklanmaktadır. Ayrıca “TOBB Ankara Kadın Girişimciler Kurulu Mobil Uygulaması” ile yukarıda belirtilen projeler arasındaki farklara da dikkat çekmektedir.

Anahtar Kelimeler:

Kadın girişimciler, mobil uygulama, ağ oluşturma, iletişim, çevrimiçi, dijitalleşme, web uygulaması, kadının güçlenmesi, teknoloji

1. Introduction

1.1 Company Background

TOBB Women Entrepreneurs Council (TOBB KGK) is an advisory body within TOBB that develops general policies and contributes to the formation of views on women entrepreneurship. The Board was also established to support women entrepreneurs in realizing their entrepreneurial ideas with training, capacity building support.

Our software development mentors Meltem KOCA and Kırçıçeği KORKMAZ are one of the founders of ACSO [1], which gathers two separate companies ACTIVATE [2] and SONO [3] under one roof.

Activate IT is a company specialized in education portals, distance education systems, school management systems, Oracle ADF (Application Development Framework), and e-commerce.

SONO Software is a company that specializes in cloud computing, corporate management systems (internal control and risk management, internal audit, strategic plan) artificial intelligence, factory automation, and e-commerce [4].

1.2 Problem Statement

With the pandemic, women entrepreneurs have become unable to expand their network with each other in both the private and public sectors. With our mobile application project, women in the TOBB Women Entrepreneurs Board aim to communicate easily with each other, expand their networks, and eliminate unemployment.

1.3 Background or Related Work

To adapt to the world of digital technology, various applications have been developed to gather women entrepreneurs under one roof and to create a network where all women can communicate with each other and help to expand their businesses further.

The first project is called WINGS Network [5] aims to create an effective, recognizable, and sustainable EU-wide network and online platform to make the current education sources accessible to female entrepreneurs.

The second project is called AWEN (ASEAN Women Entrepreneurs Network) [6], which is a network of women to exchange knowledge and experience; develop and propose initiatives to promote economic and trade activities to enhance gender equality, empower and strengthen entrepreneurship skills for women in ASEAN (The Association of Southeast Asian Nations) Community.

The third project is called W-BUN Project [7] which is coordinated by KAGIDER (Türkiye Kadın Girişimciler Derneği) (The Women Entrepreneurs Association of Turkey) and financed by EU and Republic of Turkey, and its shareholders are KAISDER (Kadın İşveren ve Sanayiciler Derneği) and BUIKAD (Bursa İş Kadınları ve Yöneticileri Derneği) (Bursa Businesswomen and Executives Association). The W-BUN Project is based on the view that women entrepreneurs are the pioneers of value-added production and the increase in exports and aims to provide service and consultancy to women and participating in non-governmental organizations.

The fourth project is called ANGIKAD which is a Women Entrepreneurs Association, a non-governmental organization founded in 2007 that creates many national and international projects with its powerful profile of members who are active in almost every sector, is also providing scholarship and mentorship support through its earnings for the education of female students.

1.4 Solution Statement

The project is a mobile application for women in the TOBB Women Entrepreneurs Board to get to know each other, communicate, and open up. In this application, there will be applications to be developed according to the needs besides the transfer of information. In this way, the trade of women who are members of the board will be improved. In the application, there will be management, file sharing, meeting, CV bank, advertising, projects, appointment, calendar, announcements, news, B2B, sharing, and communication modules. With its expandable infrastructure, developments will continue when needed.

1.5 Contribution

To adapt to the world of digital technology, many applications have been developed to create a wide network that all women from every province and even every country can communicate with each other and help to expand their businesses further. TOBB Ankara Women Entrepreneurs Board mobile application is required to establish awareness and communication among members of the TOBB Women Entrepreneurs Council.

2. Literature Search

A mobile application is an application that is designed to run on a mobile device. These mobile applications manage to provide users with quality services and experiences [8].

A web application is a computer program that utilizes web browsers and web technology to perform tasks over the Internet [9].

To adapt to the world of digital technology, various applications have been developed to gather women entrepreneurs under one roof and to create a network where all women can communicate with each other and help to expand their businesses further.

For instance, the project called WINGS Network aims to create an effective, recognizable, and sustainable EU-wide network and online platform to make the current education sources accessible to female entrepreneurs. This project also focuses on strengthening the exchange of innovative information and experiences between female entrepreneurs, project managers, and learning communities on a multilingual platform, and creating a virtual market for e-commerce to foster new business opportunities [10].

Another example is AWEN (ASEAN Women Entrepreneurs Network), which is a network of women to exchange knowledge and experience; develop and propose initiatives to promote economic and trade activities to enhance gender equality, empower and strengthen entrepreneurship skills for women in ASEAN (The Association of Southeast Asian Nations) Community. AWEN is a network of businesswomen and their organizations, representing women in all economic sectors in the ASEAN Member States. AWEN aims to create a promising and supportive environment for women entrepreneurship in the Southeast Asian Nations [11].

In the examples mentioned above, we explained two projects that are held by foreign countries. WINGS is a web-shop-based network that enables women to display their products and increase their potential for success. AWEN is a regional network that only accepts women entrepreneurs from Southeast Asian countries. Unlike these applications, TOBB Ankara Women Entrepreneurs Board Mobile Application provides a suitable environment for Turkish women to support each other in the business world.

From this part of the paper, we will discuss the projects that are held in Turkey.

2.1 W-BUN (Women Business Network) Project

The W-BUN Project is coordinated by KAGIDER (Türkiye Kadın Girişimciler Derneği) (The Women Entrepreneurs Association of Turkey) and financed by EU and Republic of Turkey, and its shareholders are KAISDER (Kadın İşveren ve Sanayiciler Derneği) and BUIKAD (Bursa İş Kadınları ve Yöneticileri Derneği) (Bursa Businesswomen and Executives Association).

KAGIDER is a non-governmental organization that aims to strengthen women entrepreneurs both socially and politically. Besides, the goal is to bring attention to the societal contributions of women entrepreneurs in maintaining gender equality within society [12].

KAISDER is one of the shareholders of the W-BUN Project. It is an organization for female employers and industrialists in Turkey. KAISDER's goal is to achieve gender equality in the economic growth cycle. They aim to create a network between organizations, bringing men and women to the same level and unite them in a national network. The aim is to bring all women's entrepreneurial organizations from different parts of Turkey under one umbrella to improve their communication power and solidarity [13].

BUIKAD is the other shareholder of the W-BUN Project. The aim of BUIKAD is "to strengthen the existence of women by increasing their competence in competitive business life, rather than giving women better working conditions". Their goals are to increase the employment rate of women in business life [14].

The W-BUN Project is based on the view that women entrepreneurs are the pioneers of the value-added production and the increase in exports and aims to provide service and consultancy to women and participating non-governmental organizations and contribute to the global goal of the Grant Scheme for Partnership and Networks [15], through enabling women to be more active in policy and decision-making processes. This project is designed to bring many small and medium-sized women entrepreneurs together.

The Minister of Family, Labour, and Social Services, Zehra Zümrüt Selçuk said that the WBUN will make great contributions to both increase awareness and improve mutual communication. A stimulating climate will be created for everyone with the exchange of ideas and information held there.

A website called "Ticaretin Kadınları" [16], which was established as the first step to implement the W-BUN Project is a platform with strong technical infrastructure and high capacity. This web platform is designed to be a powerful tool for women to be successful in the field of public and private sectors, to purchase goods and services, and to access the necessary information and markets.

2.2 ANGIKAD

ANGIKAD Women Entrepreneurs Association is a non-governmental organization founded in 2007, which provides support to women entrepreneurs to support a social structure for strengthening the status of women in the business world and increasing their contributions to the national economy in line with an understanding of democracy, civil society.

Entrepreneur businesswoman members of ANGIKAD are active in a wide range of sectors such as agriculture, economy, tourism, advertising, industry and foreign trade, service, press-design, health

services, insurance, consultancy, telecommunication, technology, energy, construction, law, landscape architecture. Furthermore, ANKIGAD carries out national and international studies and projects in connection with many local, national, and international institutions and organizations since its date of establishment [17].

The mobile application provided by ANKIGAD is available on App Store and Google Play Store. The size of the application is 32.3 MB. The main purpose of this application is to give information about their projects and help their members to reach each other.

2.3 TOBB Ankara Women Entrepreneurs Board Mobile Application

TOBB Women Entrepreneurs Council (TOBB KGK) is an advisory body within TOBB that develops general policies and contributes to the formation of views on women entrepreneurship. The Board was also established to support women entrepreneurs in realizing their entrepreneurial ideas with training, capacity building support.

The Chairman of the Board, whose Honorary President is M. Rıfat Hisarcıklıoğlu, is Nurten Öztürk, the Founding Member of the Board of Opet.

In addition to determining policies and pioneering the development of entrepreneurship culture among women to improve the potential of women entrepreneurs in our country in terms of quantity and quality and to make them better equipped; TOBB KGK, which has duties such as providing career development opportunities by teaching personal development ways to women [18].

The project is a mobile application for women in the TOBB Women Entrepreneurs Board to get to know each other, communicate, and open up. In this application, there will be applications to be developed according to the needs besides the transfer of information. In this way, the trade of women who are members of the board will be improved. In the application, there will be management, file sharing, meeting, CV bank, advertising, projects, appointment, calendar, announcements, news, B2B, sharing, and communication modules. With its expandable infrastructure, developments will continue when needed.

The project is the first for TOBB Women's Boards. In the beginning, Ankara would become the pilot area (with around 400 members), then the mobile application would start accepting members from all 81 cities of Turkey. Recently, the mobile application is planned to launch for all 81 cities at the same time.

The application will be enriched with machine learning and artificial intelligence algorithms. These algorithms will be run after the data is gathered.

2.4 Library Research

Due to the pandemic, we could not benefit from libraries while researching for our project.

2.5 Internet Research

In our research on the internet, we have used the templates that have been provided on the Çankaya University Computer Engineering Templates Web page. Additionally, we have controlled and checked IEEE Reference Guides. Finally, we have used the official pages of WINGS, AWEN, WBUN, ANGIKAD projects in our research while researching sample project examples for our project.

3. Summary

3.1 Technology Used

Flutter will be used for the frontend. The application will be a hybrid one that will be able to run on both iOS and Android.

HTTP-based restful API will be used. Application security will be provided by the TLS certificate.

WebSocket will be used if necessary.

If we need more CPUs from Amazon, it will increase the Amazon Web Services (AWS) Lambda's memory.

Cognito will be used to identify the members' ID. Authentication and validation of the IDs will be handled in Cognito. Members will also be able to log in with a Google or a Facebook account.

RDS and/or DynamoDB will be used.

4. Software Requirements Specification

4.1 Introduction

4.1.1 Purpose

In this document, the technical description of all software requirements of the W-COOP - TOBB Ankara Women Entrepreneurs Board Mobile Application is provided. This document will explain the specific requirements, user characteristics, product functions, and constraints of the application.

4.1.2 Scope of Project

W-COOP - TOBB Ankara Women Entrepreneurs Board Mobile Application is a project for women in the TOBB Women Entrepreneurs Board to get to know each other, communicate, and open up.

This application:

- Allows Board members to register to the application, create a profile that will function as their CV, limit who can see their personal information, view the news and announcements on their feed, view meetings on their calendar, and exchange their ideas simultaneously with other members both in private and in a group.
- Allows admins to perform operations according to their authorities.
- Establishes an efficient communication channel between the members and visitors.

4.1.3 Glossary

Table 1 Glossary of SRS

Term	Definition
W-COOP	Women Cooperation
TOBB	Türkiye Odalar ve Borsalar Birliği
IEEE	Institute of Electrics & Electronics Engineering
iOS	iPhone Operating System
CV	Curriculum Vitae
TLS	Transport Layer Security
AWS	Amazon Web Services
RDS	Relation Database Service
API	Application Programming Interface

4.1.4 Overview of Document

This SRS document is prepared according to the IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications [19], and the other document specified in subsection 1.4 [20].

Section 2.0 of the SRS gives a general description of the W-COOP - TOBB Ankara Women Entrepreneurs Board Mobile Application. It offers product perspectives and functions, dependencies of the application, assumptions, general constraints, and user characteristics. Section 3.0 includes all the specific properties for creating the design following the IEEE Std. 830-1998 Annex A, Template A.3 [19]. This SRS document includes design constraints, functional and performance requirements, external interface, and attributes requirements for the W-COOP - TOBB Ankara Women Entrepreneurs Board Mobile Application.

4.2 Overall Description

This part describes the overall features that affect the W-COOP - TOBB Ankara Women Entrepreneurs Board Mobile Application and its requirements. To be comprehensible, this section of the document presents a background for the prerequisites. Section 3 of the SRS contains a specific definition.

4.2.1 Product Perspective

4.2.1.1 System Interfaces

This application will have serverless backend architecture so, Amazon Web Services will be used. SpringBoot, Micronaut, GraalVM can be used as needed in the development of the system.

4.2.1.2 User Interfaces

The language of the required user interfaces will be Turkish. There will also be language support in English.

4.2.1.3 Hardware Interfaces

The users must have a mobile phone or tablet for using this application.

4.2.1.4 Software Interfaces

Ionic will be used for the frontend. The application will be a hybrid one that will be able to run on both iOS and Android.

4.2.1.5 Communication Interfaces

HTTP-based restful API will be used. Application security will be provided by the TLS certificate. WebSocket will be used if necessary.

4.2.1.6 *Memory Constraints*

Our application has a serverless backend so there are no particular memory constraints. Constraints will be optimized after testing the application's performance requirements. If we need more CPUs from Amazon, it will increase the AWS Lambda's memory.

4.2.2 Product Function

4.2.2.1 *Member Access*

Members will access the application with their e-mail and password. The e-mails will be approved by character authorization acceptance. If any of the required information is entered wrong, the application will show them an assisting error message.

4.2.2.2 *Administrator Access*

Admins will access the application with their e-mail and password. The e-mails will be approved by character authorization acceptance. If any of the required information is entered wrong, the application will show them an assisting error message.

4.2.3 User Characteristics

4.2.3.1 *Members*

- Member must be a member of the TOBB Women Entrepreneurs Board.
- Member must read and understand the Turkish or English language.
- Member must have the basic knowledge of how to use a mobile application.

4.2.3.2 *Administrators*

- Admin must be an individual selected by the TOBB Women Entrepreneurs Board.
- Admin must read and understand the Turkish or English language.
- Admin must have a general knowledge of how to use a mobile application.

4.2.4 Constraints

The person who wants to register as a member has to fill register form. After sending this form, the Membership Admin will check this form, if approved, the admin will send an email to inform the user that their membership is approved.

4.2.5 Assumptions and Dependencies

Every user of this application must have the appropriate software and hardware configuration stated in previous sections.

4.2.6 Apportioning of Requirements

The application is going to be launched in 81 cities of Turkey at the same time. Depending on the success rate of the mobile application in Turkey, it is also planned to launch in foreign countries. Therefore, it is important that the project can be maintained and updated efficiently.

4.3 Requirements Specification

4.3.1 External Interface Requirements

4.3.1.1 User interfaces

There are no external user interfaces.

4.3.1.2 Hardware interfaces

This application will have a serverless backend architecture and it will be cloud-based so we do not need any extra hardware interfaces.

4.3.1.3 Software interfaces

AWS Lambda will be used for a serverless backend.

API Gateway will be used to access the backend.

For the database, DynamoDB will be used.

4.3.1.4 Communication interfaces

Since all of the above software interfaces are components that will run outside of the application server, communication will be provided by the external software interfaces mentioned above. Besides these, there is no need for an extra communication interface.

4.3.2 Functional Requirements

4.3.2.1 Member Use Case

Use Case:

- Login
- Create a profile
- Edit profile
- View the feed
- View the meetings
- Talk with other users on chat groups
- Logout

Diagram:

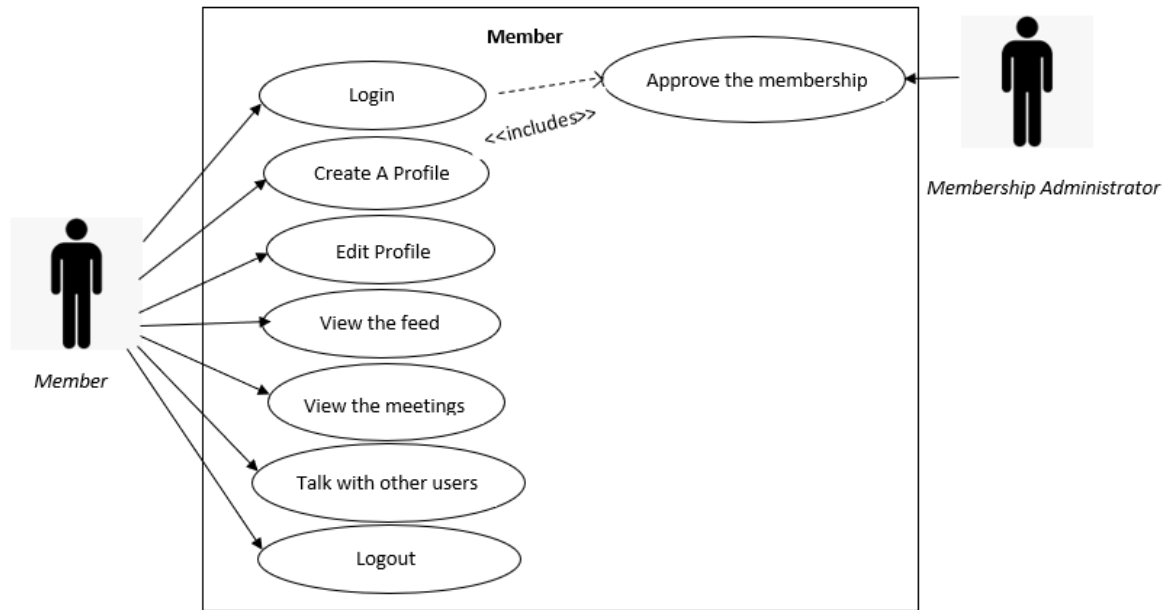


Figure 1 Member Use Case

Brief Description:

Member diagram (*Figure 1*) explains the basic operations which are related to the operations that member can perform. Member and admins can perform the following functions: Login and Logout. Apart from these, the member can create a profile that will function as their CV and limit who can see their personal information, view the news and announcements on their feed, view the meetings on their calendar page, and talk with other members both in private and in a chat group.

Initial Step by Step Description:

1. If the Membership Administrator approved the registration of the member, they can log in to the application by entering their e-mail and password correctly.
 - 1.1 If not, the application must warn them with an assisting message, and the member should re-login.
2. When logged in successfully, the feed page will welcome the member. On this page, the member can view the announcements, news, and projects.
3. If the member logs in to the application for the first time, they can create a profile by opening the Profile page. Member can limit who can see their information such as public, private, and only for members.
4. Members can list, view, add and edit the meetings and news.
5. Members can talk with each other in groups.
6. By clicking the icon of the members, the member can view other members' profiles.
7. Members can logout from the application.

4.3.2.2 Membership Administrator

Use Case:

- Login
- Check the request form for member
- Approve the request to give a role to a member
- Logout

Diagram:

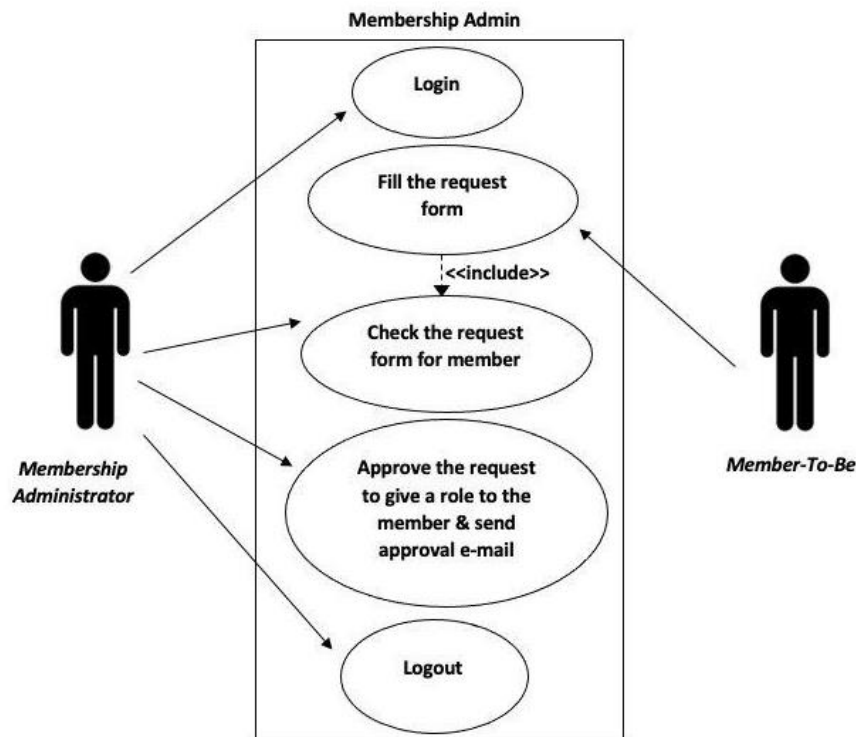


Figure 2 Membership Administrator Use Case

Brief Description:

The Membership Admin diagram (*Figure 2*) explains the operations of Membership Admin can perform in the application. Membership Admin can perform the following functions: Login, Check the request form for the member, Approve the request to give a role to a member, and Logout.

Initial Step by Step Description:

1. If Membership Admin selects Login, they log into the system with their information (email/password).
 - 1.1 If Membership admin enters wrong information, they need to re-login.
2. If the Membership admin enters the application successfully, they check the application to whether there is any request form from the member. If Member-To-Be fills the request form, the form will appear on the Membership Admin's page.

3. If there is a request from a member, Membership Admin approves the request to give a role to the member.
4. If Membership Admin does not approve the request to give a role to the member, that member does not get a membership.
5. If Membership Admin selects Logout, they exit from the system.

4.3.2.3 *Permission Administrator*

Use Case:

- Login
- Give permission to the other admins
- Logout

Diagram:

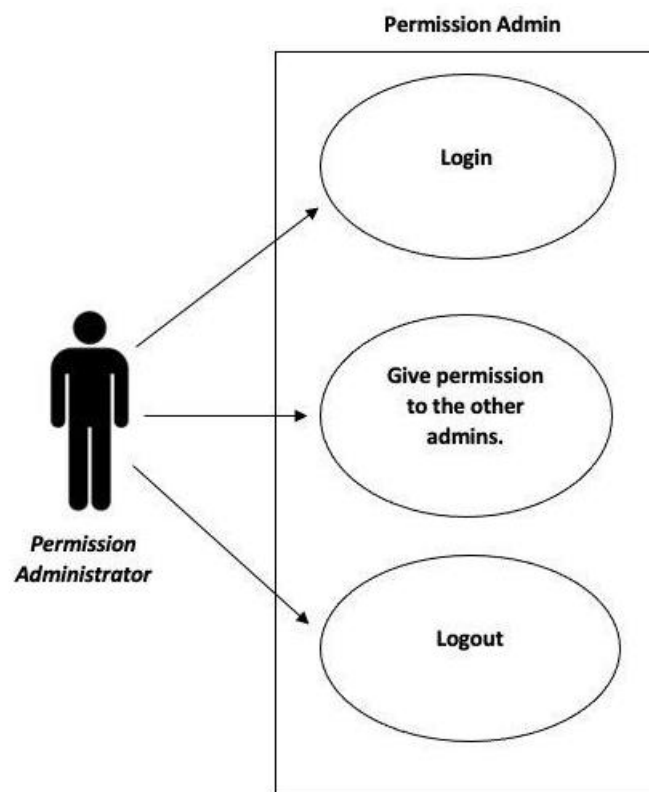


Figure 3 Permission Administrator Use Case

Brief Description:

In Permission Admin diagram (*Figure 3*) explains the operations of Permission Admin can perform in the application. Permission Admin can perform the following functions: Login, Give permission to the other admins, Logout.

Initial Step-By-Step Description:

1. If Permission Admin selects Login, they log into the system by their information (email/password).

1.1 If permission admin enters wrong information, they need to re-login.

2. If needed, Permission Admin gives permission to the other admins.

3. If Permission Admin selects Logout, they exit from the system.

4.3.3 Performance Requirements

The application will be able to respond to an average of 60 requests per minute.

In-page transitions within the application will be created in a manner not exceeding 3 seconds.

Login will not be very fast in terms of security.

4.3.4 Security Requirements

The limited number of women will be a member of the application. Only the members of the Board can use the application.

4.3.5 Design Constraints

This application is designed for a limited number of women members.

4.3.6 Software system attributes

4.3.6.1 Reliability

The application must operate 95% of the time. The number of defects should not exceed 15 per function.

4.3.6.2 Availability

In the beginning, Ankara would become the pilot area (with around 400 members), then the mobile application would start accepting members from all 81 cities of Turkey. Recently, the mobile application is planned to launch for all 81 cities at the same time. Therefore, it is important the project can be maintained and updated.

4.3.6.3 Security

This application has an authorization system for users to identify their different access types. Consequently, different users will have non-identical authorization to access the application. The authority permissions will be handled with Micronaut.

4.3.6.4 Maintainability

The application should meet the changing requirements effortlessly considering the infrastructure of the application does not need major changes. The prerequisites of the application software while developing will be met by adding new sub-functions.

4.3.6.5 Portability

Every user must have a mobile phone or tablet for reaching this application using Google Play Store or App Store.

The application will be a hybrid one that will be able to run on both iOS and Android.

4.3.6.6 Performance

The application is planned to be working for a long time.

4.3.6.7 Adaptability

The application is going to be launched in all 81 cities at the same time. Depending on the success rate of the mobile application in Turkey, it is also planned to launch in foreign countries. Therefore, it is important that the project can be maintained and updated efficiently.

4.3.7 Other Requirements

There are no other requirements.

5. Software Design Descriptions

5.1 Introduction

5.1.1 Purpose

The sixth section of this report provides the technical explanation of all hardware and software design of the W-COOP - TOBB AWEB Mobile Application.

The purpose of this document is to define and visualize the design considerations, navigation, screen definitions, constraints, process, and database design of the system.

5.1.2 Scope

W-COOP - TOBB Ankara Women Entrepreneurs Board Mobile Application is an application for Board members to get to know each other, communicate, and open up. The sixth section of the document contains complete descriptions and features of this application. By using UML diagrams and use cases, the design of the whole project will be explained visually.

5.1.3 Glossary

Table 2 Glossary of SDD

Term	Definition
W-COOP	Women Cooperation
TOBB	Türkiye Odalar ve Borsalar Birliği
AWEB	Ankara Women Entrepreneurs Board
SDD	Software Design Descriptions
CV	Curriculum Vitae
DB	Database
IEEE	Institute of Electrical and Electronics Engineers
UML	Unified Modeling Language
SRS	Software Requirement Specification
URL	Uniform Resource Locator
Web Site	A place on the world wide web

5.1.4 Overview of Document

The SDD section is prepared according to the IEEE Std 1016-2009, IEEE Standard for Information Technology - Systems Design- Software Design Descriptions [21]. This SDD document provides the details of how the TOBB AWEB Mobile Application is done.

Section 5.2 of this SDD document gives a general design description of the design entities. This section explains each one of these entities in detail. Section 5.3 describes the architecture of the system. Section 5.4 describes Database Design. Uses cases and sequence diagrams are shown in sections 5.5 and 5.6 respectively. Interface design is provided in section 5.7.

5.2 Deployment Diagram

5.2.1 Design Considerations

5.2.1.1 Class Diagram

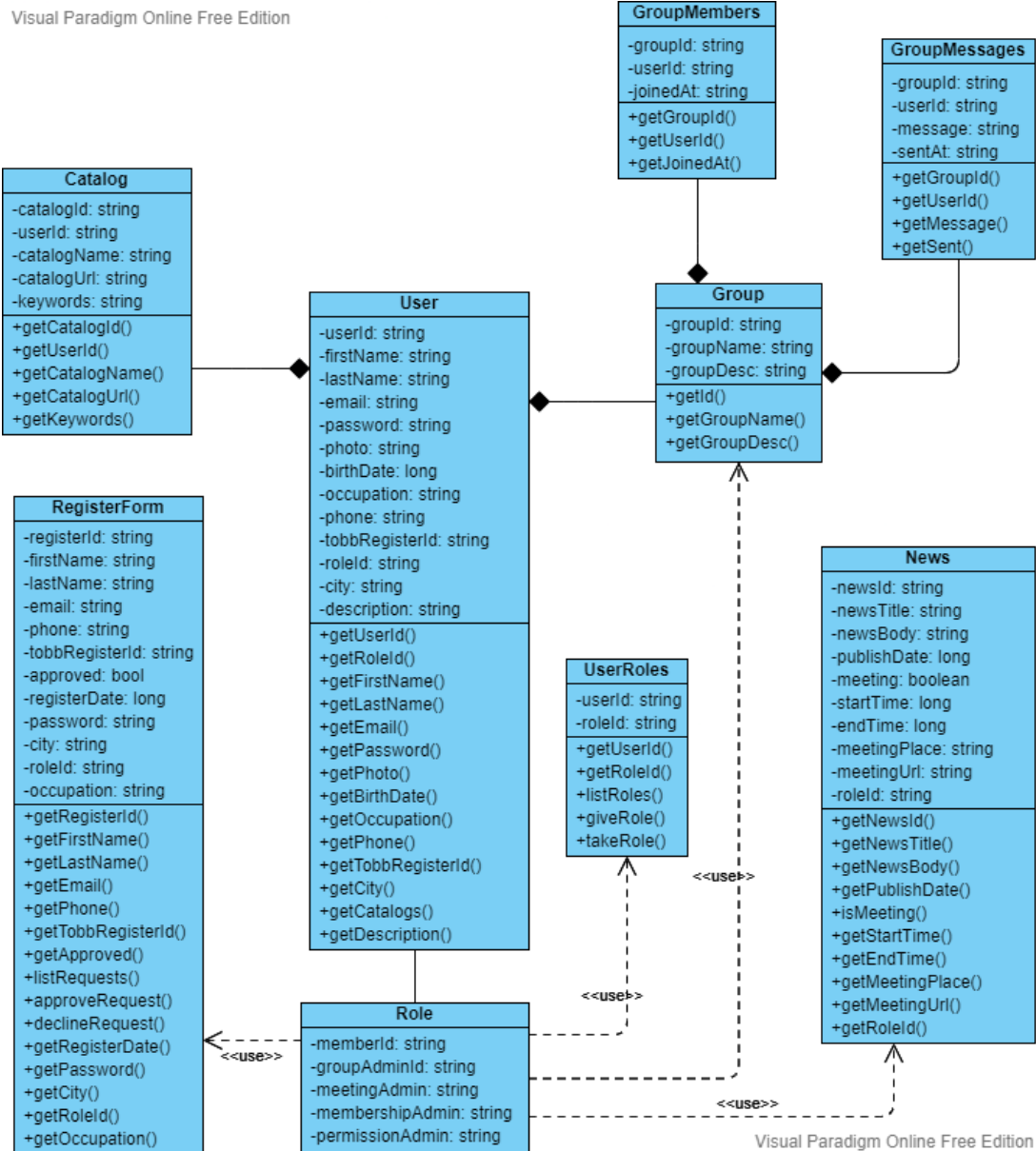


Figure 4 Class Diagram of the Application

Figure 4 shows connections between the entities in the application. Main class is the User class. With the roleId variable, each user will have different authentication and one user may have more than one role.

Roles are defined in the Role class. It is responsible for the connections to the UserRoles, and RegisterForm classes which will only be used by the respective admins. Permission Admin will use the UserRoles class Membership Admin will use the RegisterForm class.

Catalog class is for the profile of the user, stating their occupation. Catalog class will have a composition relationship with the User class. If there is no User class, there will be none of it. They exist together.

The Group class is for created chat rooms. This class uses GroupMembers and GroupMessages classes.

5.2.2 Design Elements

5.2.2.1 Register

Summary: Member-to-be can be registered to the application if they are a member of TOBB AWEB.

Actor: Member-to-be

Trigger: Register button

Precondition: Member-to-be must be a member of TOBB AWEB.

Basic Sequence:

1. Member-to-be shall open the application.
2. On the login page, there will be a button for the registration page. After hitting the Register button, member-to-be will be directed to the Register page.
3. After filling in their information, they must hit the Register button.
4. If their membership is approved, member-to-be will receive an e-mail and will be able to create a password.

Exception: E-mail address could already be taken or password does not meet the standards.

Post Condition: If their registration form is approved by the membership admin, member-to-be can create a password and log in to the application.

Priority: High

Assumptions: Member-to-be must be connected to the internet.

5.2.2.2 Login

Summary: Members and admins can log in to the application.

Actor: Member, All admins

Trigger: Login button

Precondition: Member and all admins must register before trying to log in to the application.

Basic Sequence:

1. Member and all admins shall open the application.
2. If the member and all admins did not login before, the opening page will be the Login page.
3. Member and all admins shall log in to the application using their Google or Facebook account or by entering their e-mail and password.

4. After the login operation, the member and all admins will be directed to the Create a Profile page if they are logging in for the first time. Further logins will direct them to the Feed page.

Exception: Member and all admins can enter the wrong e-mail and password combination or wrong e-mail format.

Post Condition: Member and all admins will be redirected to the Create a Profile page if they are logging in for the first time. Further logins will direct them to the Feed page.

Priority: High

Assumptions: Member and all admins must be connected to the internet.

5.2.2.3 View the feed

Summary: Members and all admins can view announcements, projects, and news on the Feed page.

Actor: Member, All admins

Trigger: Feed page icon, Refresh button

Precondition: Member and all admins must log in to the application.

Basic Sequence:

1. Member and all admins shall hit the Feed page icon at the bottom left of the screen to open the Feed page.
2. Members and all admins can scroll down to see the announcements, projects, and news.
3. To see more, members and all admins can hit the headlines of the announcements, projects, and news.
4. By hitting the Refresh button, members and all admins can refresh the Feed page.

Exception: Database connection can be failed.

Post Condition: After refreshing the page, the new announcements, projects, and news will be seen on the page.

Priority: Medium

Assumptions: Member and all admins must be connected to the internet.

5.2.2.4 View the profile

Summary: Members and all admins can view their profile and other member's profile.

Actor: Member, All admins

Trigger: Profile icon, the profile picture of other members and admins

Precondition: Member and all admins must log in to the application and must have been created a profile.

Basic Sequence:

1. Member and all admins must hit the profile icon to view their profile.
2. Member and all admins can scroll down through their profile page.

3. By hitting the Refresh button, members and all admins can refresh their profile page.
4. Member and all admins can view other member's profiles by hitting the profile picture of the member and admins.
5. Member and all admins can scroll down through the other member's profile pages.
6. By hitting the Refresh, members and all admins can refresh the other member's profile page.

Exception: Database connection can be failed.

Post Condition: Member and all admins will be directed to their Profile page.

Priority: High

Assumptions: Member and all admins must be connected to the internet.

5.2.2.5 Edit the profile

Summary: Members and all admins can edit their profiles.

Actor: Member, All admins

Trigger: Edit button

Precondition: Member and all admins must log in to the application and must have been created a profile and open the Profile page.

Basic Sequence:

1. Member and all admins must open their Profile page and hit the Edit button.
2. Member and all admins can edit their personal information by re-entering the fields they want. They can also change the privacy settings by hitting the respective feature.
3. Member and all admins can save the changes by hitting the Save button.

Exception: Database connection can be failed.

Post Condition: Member's and all admins' profiles will be updated.

Priority: High

Assumptions: Member must be connected to the internet.

5.2.2.6 View the Meetings

Summary: Members and all admins can view the Calendar page and see the meetings.

Actor: Member, All admins

Trigger: Calendar icon, Refresh

Precondition: Member and all admins must log in to the application.

Basic Sequence:

1. Member and all admins must open the Calendar page by hitting the calendar icon.

2. Member and all admins can scroll down through the months on the Calendar page and see the meetings belonging to the respective month.
3. By hitting the Refresh button, members and all admins can refresh the CV Bank page.
4. They can join the meeting by hitting the URL of it.

Exception: Database connection can be failed.

Post Condition: After hitting the refresh button, the page will be refreshed.

Priority: Medium

Assumptions: Member and all admins must be connected to the internet.

5.2.2.7 View the chat panel

Summary: Members and all admins can view the chat panel and communicate with other members.

Actor: Member, All admins

Trigger: Chat Panel Button, Refresh

Precondition: Member and all admins must log in to the application.

Basic Sequence:

1. Member and all admins must open the chat panel.
2. On this page, members and all admins can view the chat groups that they belong to.
3. Member and all admins can send messages to the chat groups.
4. Member and all admins can refresh the Chat Panel by hitting the Refresh button.

Exception: Database connection can be failed.

Post Condition: After hitting the refresh button, the page will be refreshed.

Priority: Medium

Assumptions: Member and all admins must be connected to the internet.

5.2.2.8 Logout

Summary: Member and all admins can logout from the application.

Actor: Member, All admins

Trigger: Logout button on the Profile page.

Precondition: Member and all admins must log in to the application.

Basic Sequence:

1. Members and all admins can log out from the application by hitting the Logout button on their Profile page.

Exception: No exceptional scenario.

Post Condition: Member and all admins will be redirected to Login Page.

Priority: High

Assumptions: Member and all admins must be connected to the internet.

5.2.2.9 Add a meeting

Summary: Member can add a meeting to the Calendar page.

Actor: Member

Trigger: Add Meeting button, Add button

Precondition: Member must log in to the application and open the Calendar page.

Basic Sequence:

1. Member must hit the Add Meeting button.
2. After filling in the blanks, they hit the Add button.

Exception: Database connection can be failed.

Post Condition: The added meeting will be seen on the Calendar page by the member.

Priority: Medium

Assumptions: Member must be connected to the internet.

5.2.2.10 Add a news

Summary: Member can add news/announcements to the feed page.

Actor: Member

Trigger: Plus button, Share button

Precondition: Member must log in to the application and open the Feed page.

Basic Sequence:

1. Member must hit the Plus button.
2. After filling in the blanks, they hit the Share button.

Exception: Database connection can be failed.

Post Condition: Added news will be seen on the feed page by other users.

Priority: Medium

Assumptions: Member must be connected to the internet.

5.2.2.11 Check the request forms from member-to-be

Summary: The Membership Administrator can check the new requests if there are any membership requests or not.

Actor: Membership Administrator

Trigger: Refresh Button

Precondition: Membership Admin must log in to the application.

Basic Sequence:

1. Membership Administrator must open the Membership Requests page.
2. By hitting the Refresh button, the Membership Administrator can refresh the page. If there is no request, the page will be blank.
3. Membership Administrator can scroll down through the Membership Requests page.

4. Membership Administrator can view the respective membership request by hitting on it.

Exception: No exceptional scenarios.

Post Condition: By hitting the Refresh button, the Membership Requests page will be refreshed.

Priority: High

Assumptions: The Membership Administrator must be connected to the internet.

5.2.2.12 Approve/Decline membership request

Summary: Membership Administrator can approve the request to give a role to a member if the member-to-be is a member of W-COOP.

Actor: Membership Administrator

Trigger: Approve button, Decline Button

Precondition: Membership Administrator must log in to the application, open the Membership Requests page, and view the respective membership request.

Basic Sequence:

1. Membership Administrator must hit the Approve button if they want to approve the respective membership request.
2. Membership Administrator must hit the Decline button if they want to decline the respective membership request.

Exception: Database connection can be failed.

Post Condition: If the membership is approved, an e-mail will be sent to the respective member-to-be. If the membership is declined, the request form will be discarded from the Membership Requests page of the Membership Administrator.

Priority: High

Assumptions: The Membership Administrator must be connected to the internet.

5.2.2.13 List roles

Summary: Permission Administrator can list the roles given to the users.

Actor: Permission Administrator

Trigger: Refresh button

Precondition: Permission Administrator must log in to the application.

Basic Sequence:

1. Permission Administrator must open the Roles page. All users with their roles will be listed on this page.
2. By hitting the Refresh button, the Permission Administrator can refresh the page.
3. Permission Administrator can scroll down through the Roles page.
4. Permission Administrator can view the respective user's roles to change them by hitting on them.

Exception: Database connection can be failed.

Post Condition: By hitting the Refresh button, the Membership Requests page will be refreshed.

Priority: High

Assumptions: The Permission Administrator must be connected to the internet.

5.2.2.14 Give/Take permissions to/from the users

Summary: Permission Administrator can give roles to the other users.

Actor: Permission Administrator

Trigger: Check button

Precondition: Permission Administrator must log in to the application, open the Permissions page and select a user.

Basic Sequence:

1. After selecting the user, the Permission Administrator can give an admin role to them or take an admin role from them using the check button.

Exception: Database connection can be failed.

Post Condition: If a role is given, the selected user will have the authority according to their given permission. If a role is taken, the selected user will lose authority.

Priority: High

Assumptions: The Permission Administrator must be connected to the internet.

5.2.3 Tools Used

Mockflow.com [22] is used for designing screen definitions in section 5.2, Dia 0.97.2 for Architecture Design in section 5.3, online.visual-paradigm.com [23] for the UML Diagram in section 5.2.2.1, DbDesigner.net [24] for Database Design in section 5.4, and MS Word 365 for the Use Cases in section 5.6.1 and Sequence Diagrams in section 5.6.2.

5.2.4 Constraints

Not only the software development team obeys the IEEE standard [19] [20] [21] for the software development process stated in the references section, but also there are rules, which manipulate the whole requirements process.

In-page transitions within the application will be created in a manner not exceeding 3 seconds.

The number of instant users in the application will be between 5 and 10 users for now. It will be able to respond to an average of 60 requests per minute.

Only Admins and Board Members can access the application when they enter their login information. All these issues are covered in the following sections.

5.2.5 Assumptions and Dependencies

Every user of this application must have the appropriate software and hardware configuration stated in previous sections. Appropriate software configurations are Android 9.0 and iOS 10.

5.2.6 Software Architecture

W-COOP Mobile Application software will be designed according to *Figure 5*.

The application will have a serverless backend and can be accessed from Android and iOS software-based devices. The database is intended to hold at minimum 380 W-COOP members' information which includes their personal and business information.

5.2.7 Hardware Architecture

Devices that run on Android and iOS software need to have enough storage to operate the W-COOP - TOBB AWEB Mobile Application.

5.3 Architecture Design

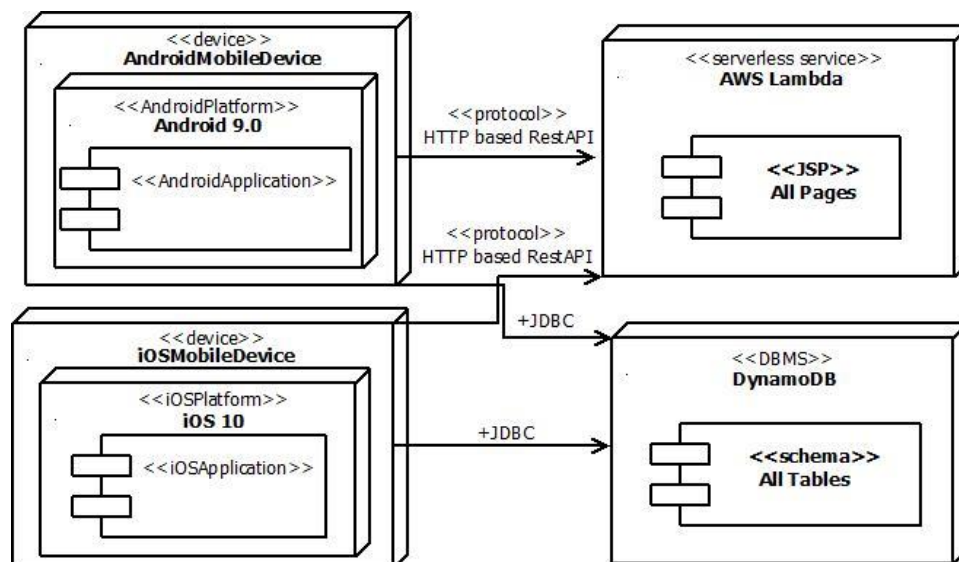


Figure 5 Architecture Design of the Application

5.4 Database Design

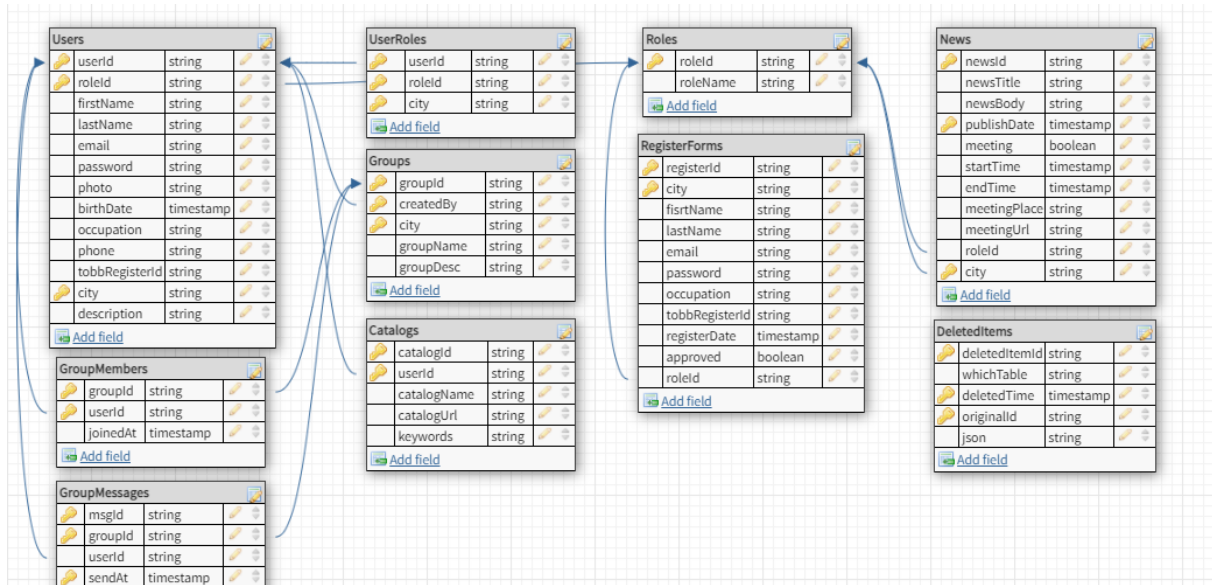


Figure 6 Database Design of the Application

Figure 6 shows the database design of the application. The keys of the tables are shown using key symbol. First key is the Hash key, which is the partition key. Second key is the Range key which will be used to sort the items. Third keys are either global secondary index or local secondary index hash/range keys, which enables to write queries without using the original hash and range keys.

Catalog, GroupMembers and GroupMessages are referenced to the User table with `userId` key. User and UserRoles tables are referenced to the Roles table with the `roleId` key. GroupMembers and GroupMessages tables are referenced to the Group table with the `groupId` key.

Deleted items will be hold in DeletedItems table.

In DynamoDB, there is no relation but in the database design above, the relations are shown in order to be more understandable.

5.5 Use Cases

Use cases are already explained in section 4.3.2. The figures are also shown in this section so as not to break the integrity of the report.

5.5.1 Member

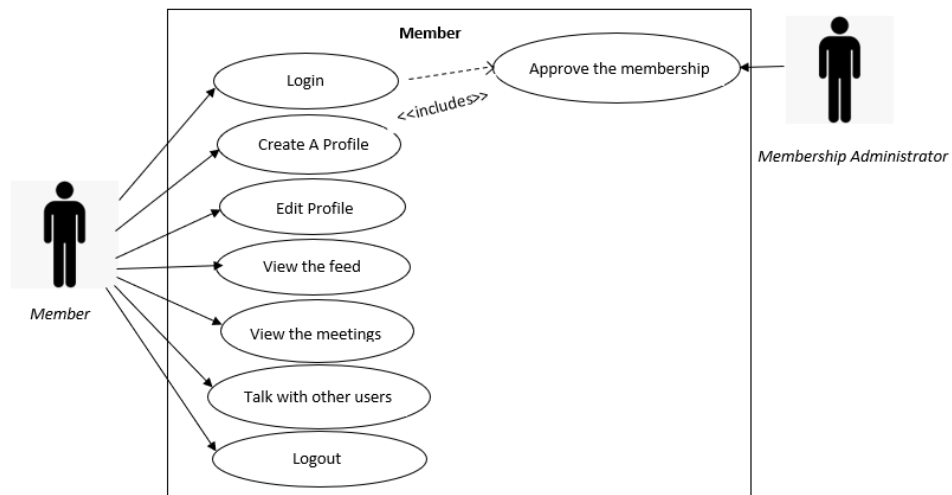


Figure 7 Member Use Case Diagram

5.5.2 Membership Administrator

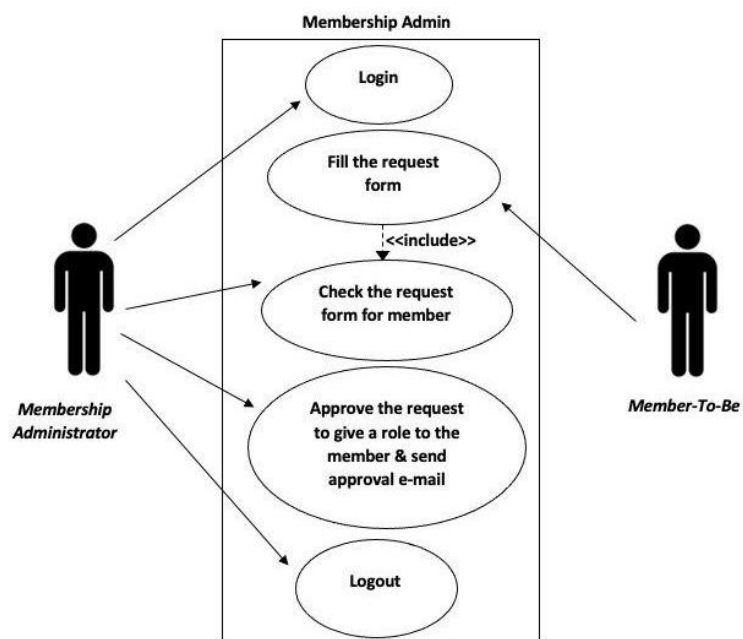


Figure 8 Membership Administrator Use Case Diagram

5.5.3 Permission Administrator

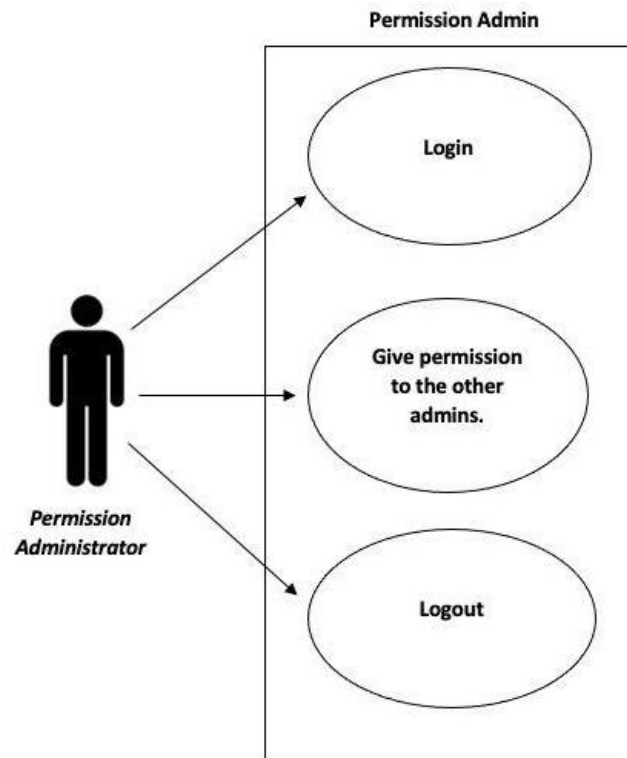


Figure 9 Permission Administrator Use Case Diagram

5.6 Sequence Diagrams

Sequence diagrams for all users are in sections below.

5.6.1 Member

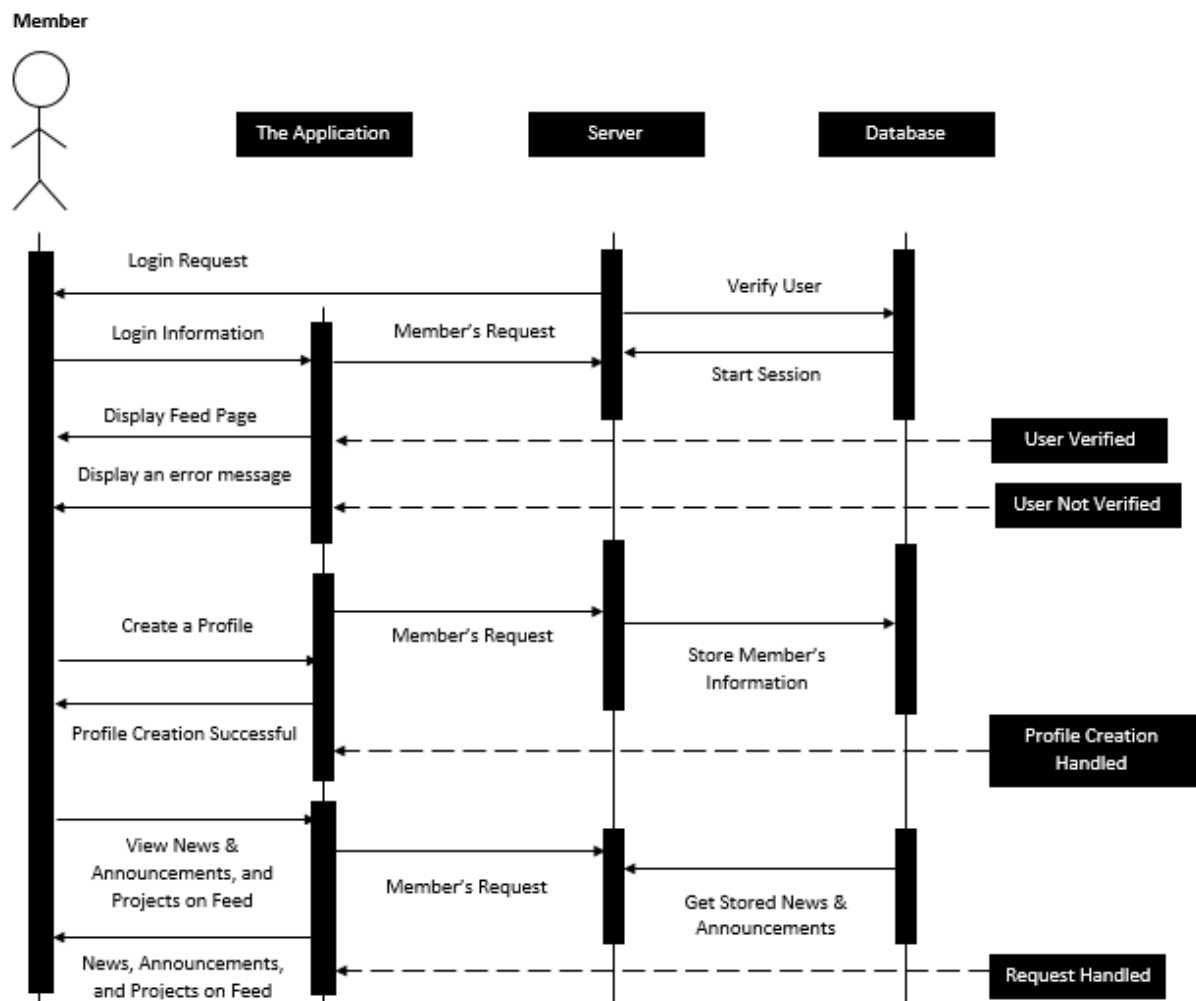


Figure 10.1 Member Sequence Diagram

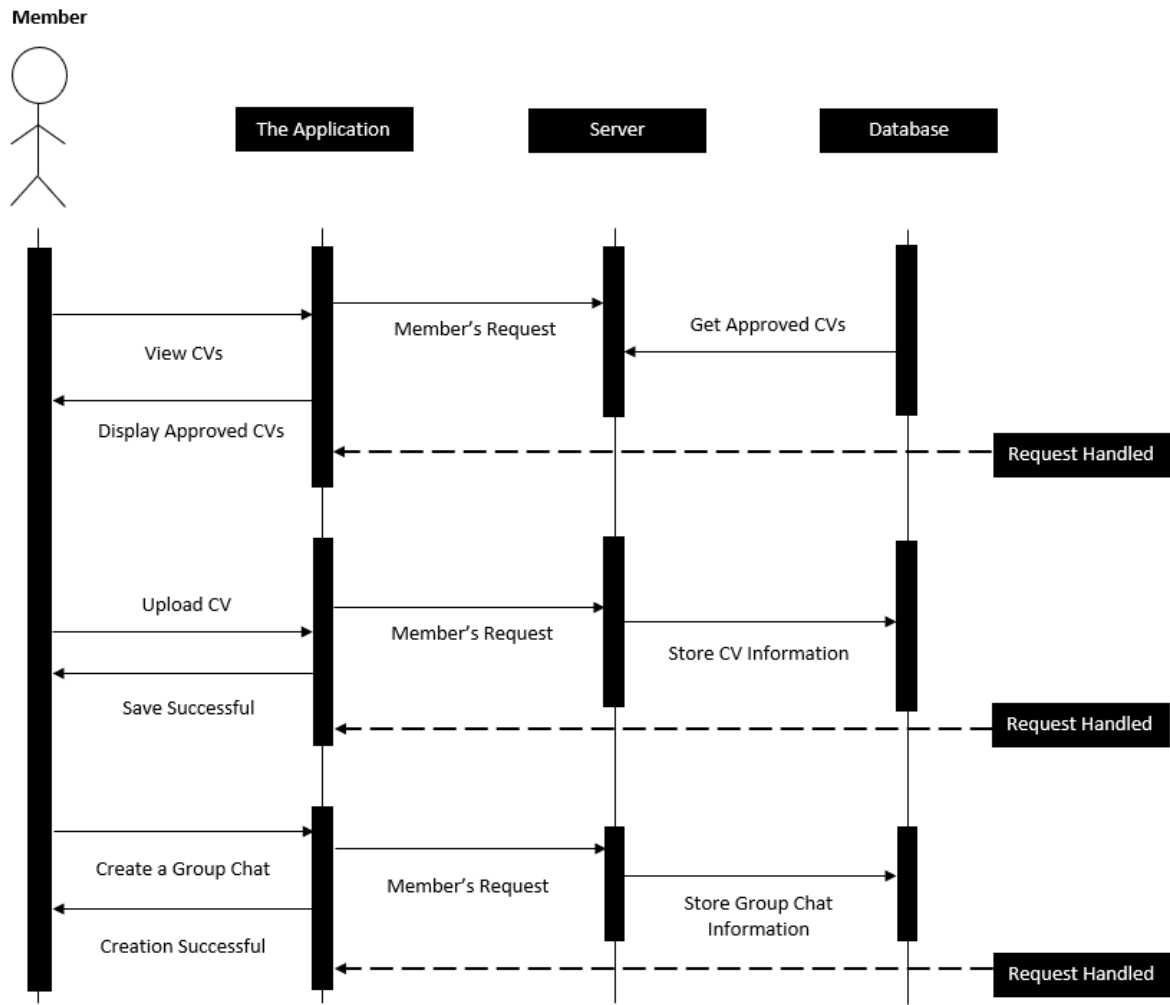


Figure 10.2 Member Sequence Diagram (continued)

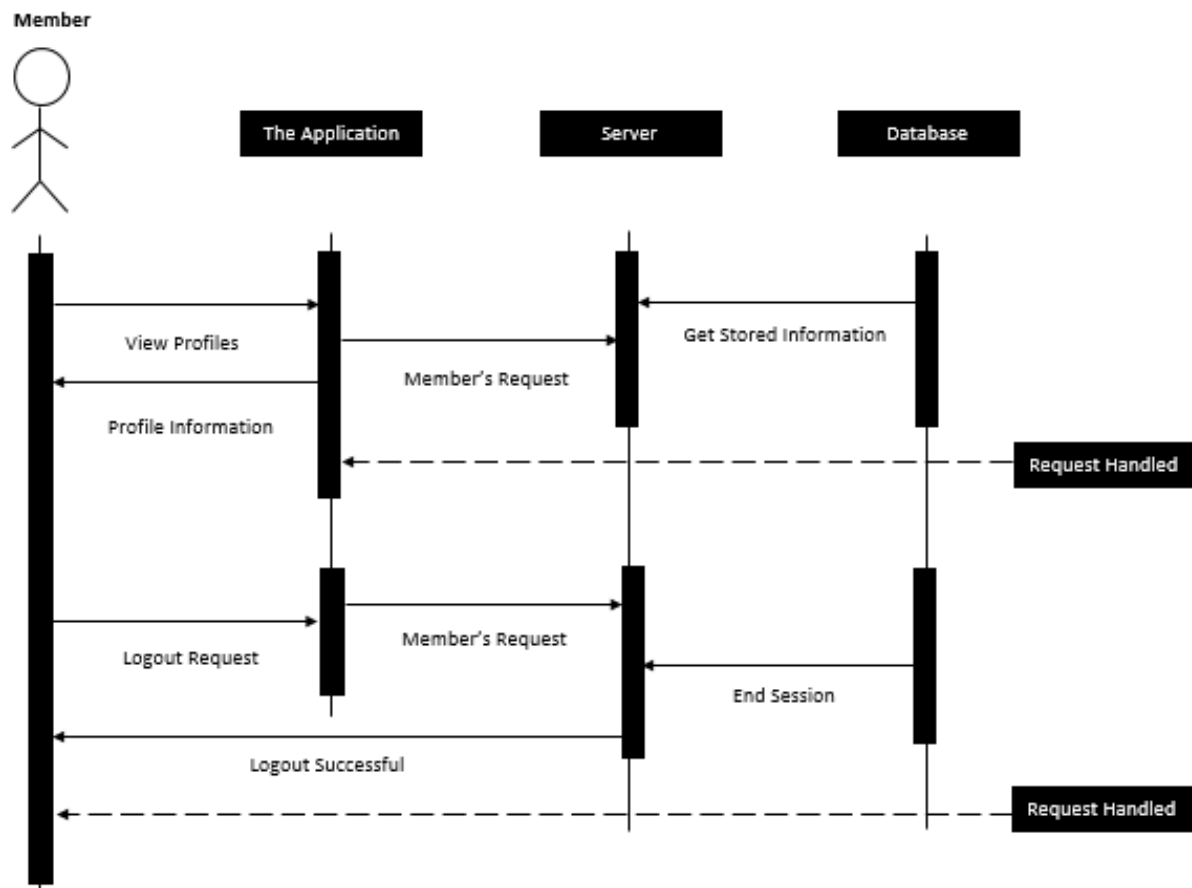


Figure 10.3 Member Sequence Diagram (continued)

5.6.2 Member-To-Be

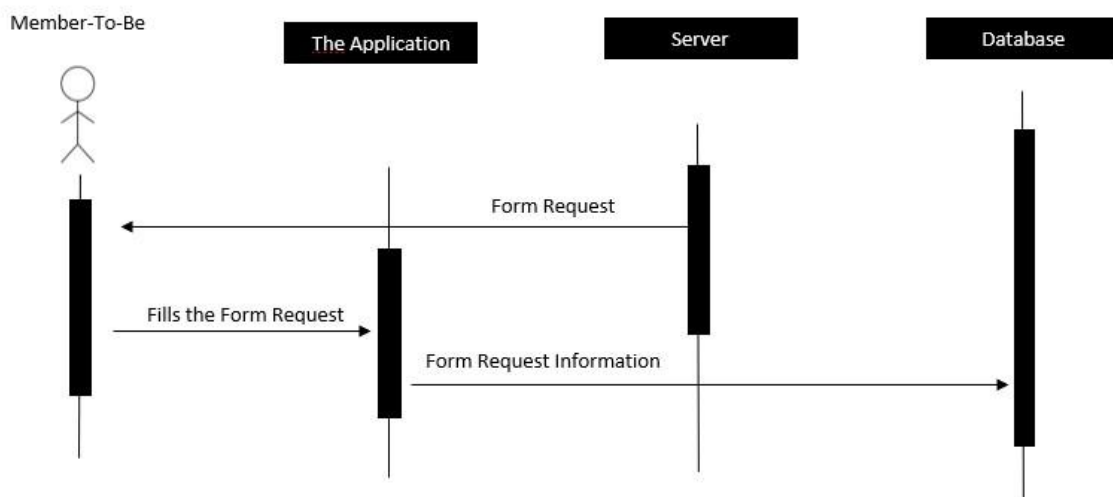


Figure 11 Member-To-Be Sequence Diagram

5.6.3 Membership Administrator

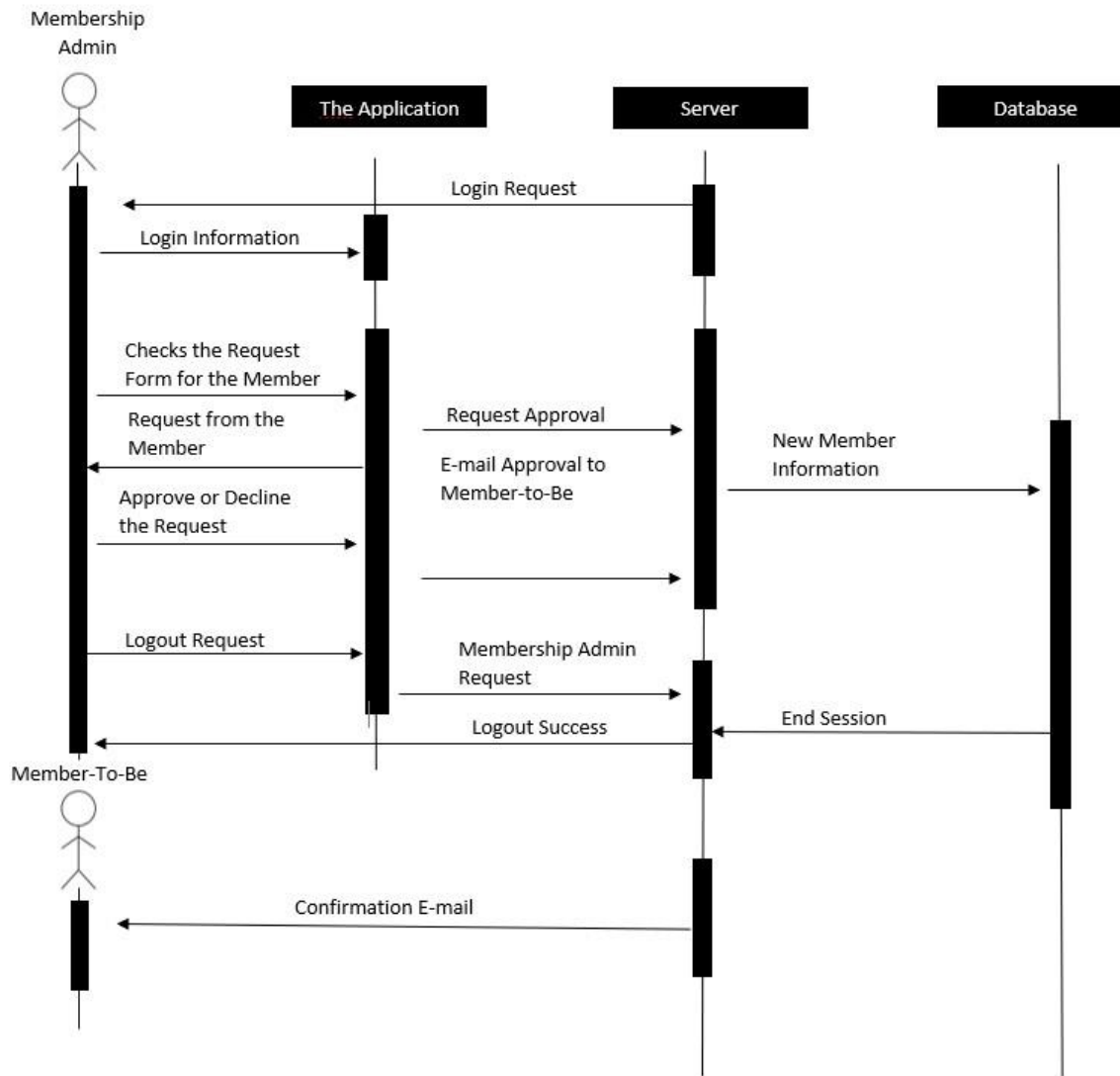


Figure 12 Membership Administrator Sequence Diagram

5.6.6 Permission Administrator

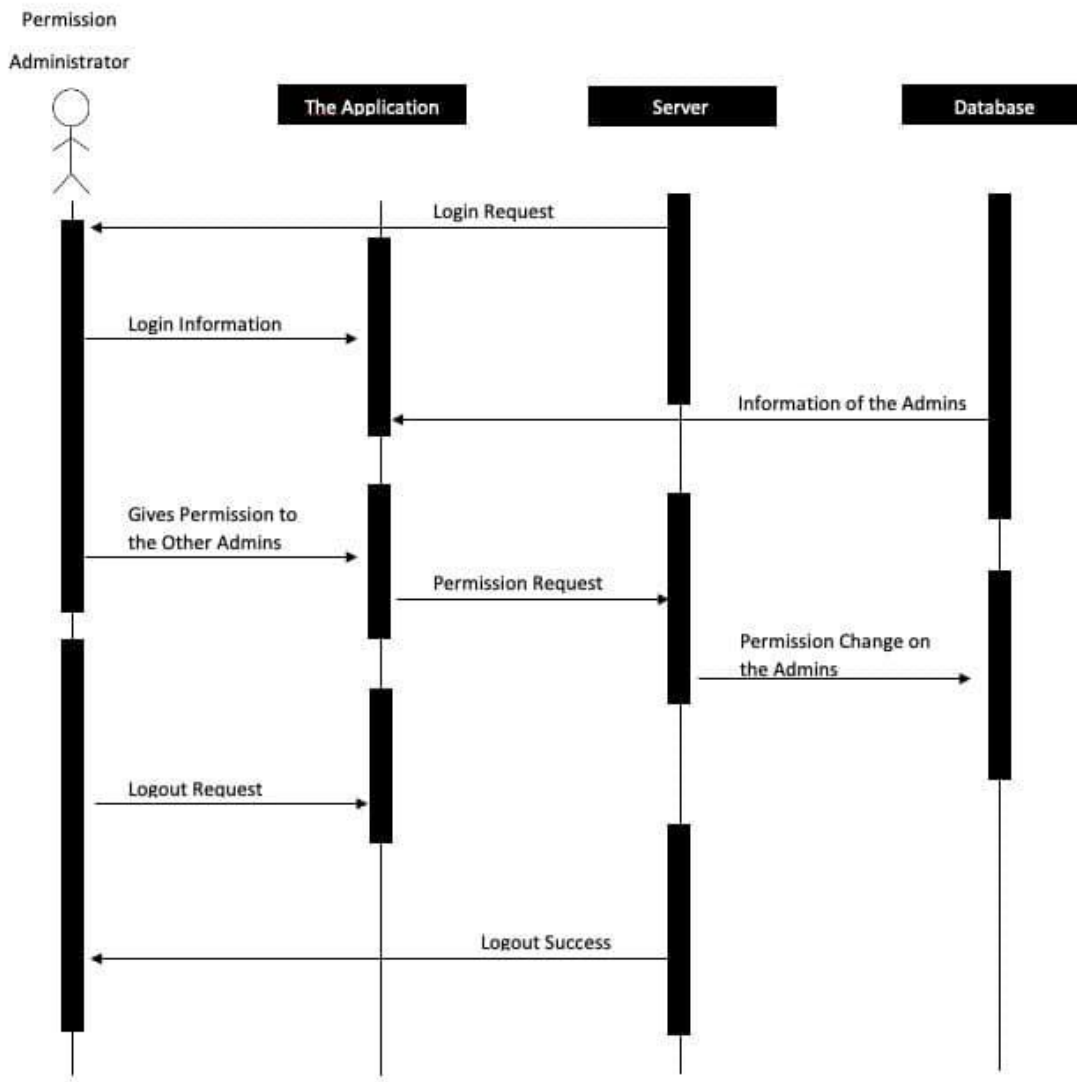


Figure 13 Permission Administrator Sequence Diagram

5.7 User Interface Design

5.7.1 Navigation

The users will access the application by downloading it from either Google Play Store or App Store. The visitor can access the webpage using a browser. The rest of the navigation information can be found in Section 5.2.2 Design Elements.

5.7.2 Screen Definitions

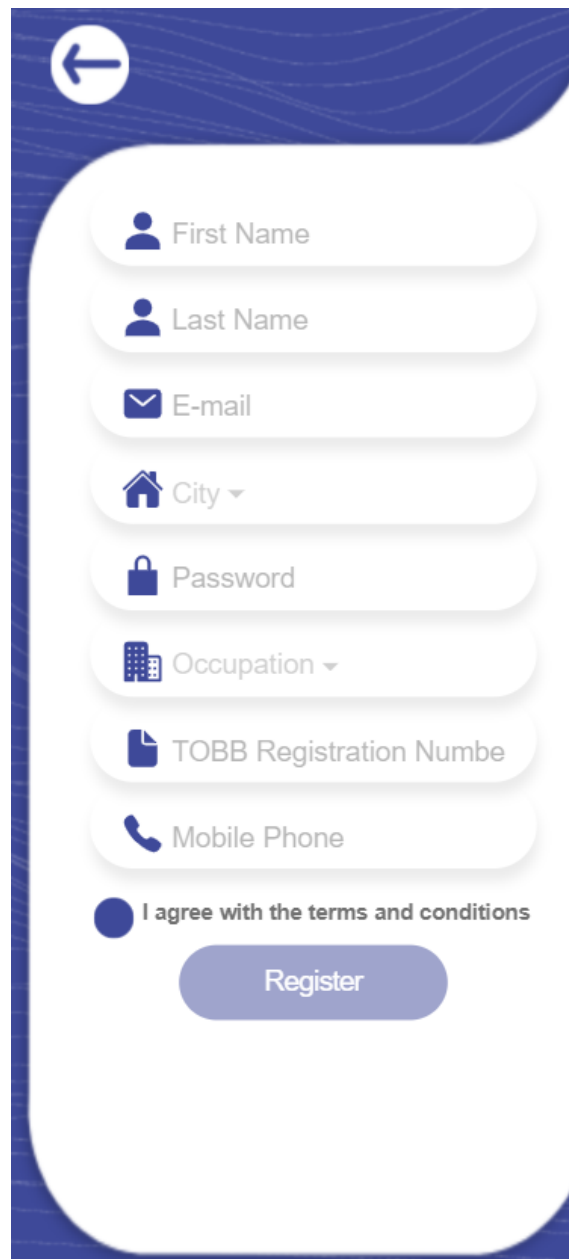
The final version of the main pages of the application is in the section below. Since the application will be a hybrid one, half of the page descriptions are shown on the Android mobile devices, while the other half are shown on the iOS mobile devices.

5.7.2.1 Page Descriptions

5.7.2.1.1 Home Page



Figure 14 Home Page of the Application



The image shows a mobile application registration screen. At the top left, there is a white circular button with a blue back arrow. Below this, the registration form consists of several white rounded rectangular input fields with blue icons and text labels: 'First Name' (person icon), 'Last Name' (person icon), 'E-mail' (envelope icon), 'City' (house icon with a dropdown arrow), 'Password' (lock icon), 'Occupation' (building icon with a dropdown arrow), 'TOBB Registration Numbe' (document icon), and 'Mobile Phone' (phone handset icon). Below the input fields is a blue radio button followed by the text 'I agree with the terms and conditions'. At the bottom of the form is a blue rounded rectangular button with the text 'Register'.

Figure 15 Register Page of the Application

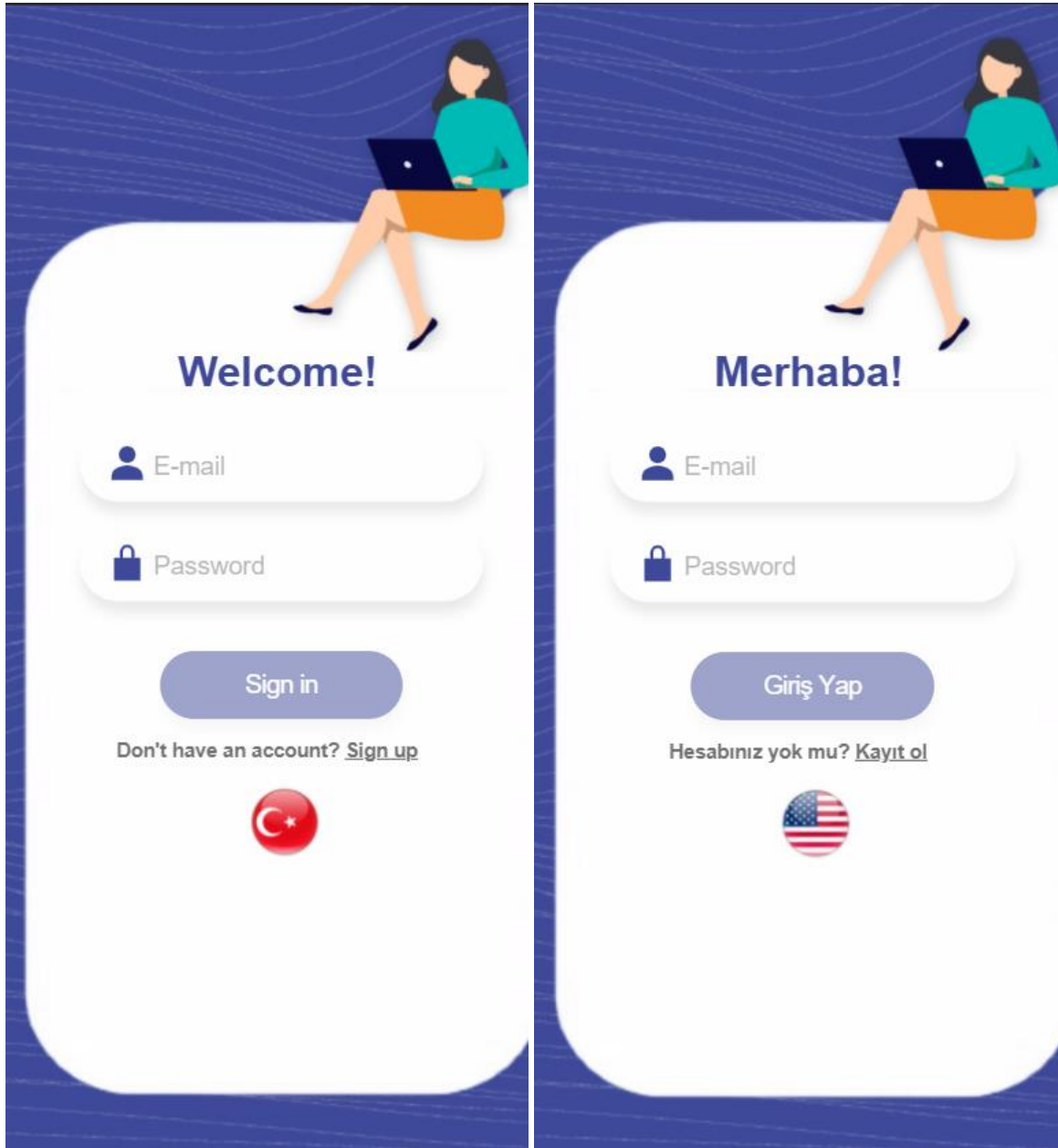


Figure 16 Login Page of the Application

5.7.2.1.4 Profile Page

The image displays two side-by-side screenshots of the application's profile page. Both screenshots feature a dark blue header with a 'Log out' button and a user profile picture. The left screenshot shows the profile information form with the following fields and values:

- Occupation: Bilişim Teknolojileri
- First Name: Zeynep
- Last Name: Çakmak
- E-Mail: zcakmak@gmail.com
- City: Ankara
- TOBB Registration Number: 12254347

The right screenshot shows the same form with the following data entered:

- TOBB Registration Number: 12254347
- Mobile Phone: 12254347
- Birth Date: Jun/07/1986
- Description: Merhaba. TOBB W-COOP kullanıyorum. :)

An 'Edit Profile' button is visible at the bottom of the right screenshot. Both screenshots have a bottom navigation bar with icons for a document, a plus sign, a magnifying glass, a calendar, and a user profile.

Figure 17 Profile Page of the Application

5.7.2.1.6 Edit Profile Page

The image displays two side-by-side screenshots of the 'Edit Profile' page in a mobile application. The interface features a dark blue header with a back arrow and a circular profile picture placeholder. The left screenshot shows the following fields: Occupation (with a building icon), First Name (with a person icon, value: Zeynep), Last Name (with a person icon, value: Çakmak), E-Mail (with an envelope icon, value: zcakmak@gmail.com), City (with a house icon), TOBB Registration Number (with a document icon, value: 12254347), and Mobile Phone. The right screenshot shows: TOBB Registration Number (with a document icon, value: 12254347), Mobile Phone (with a phone icon, value: 12254347), Birth Date (with a calendar icon), Description (with a pencil icon, value: Merhaba. TOBB W-COOP kullanıyorum. :)), and a blue 'Save' button.

Figure 18 Edit Profile Page of the Application

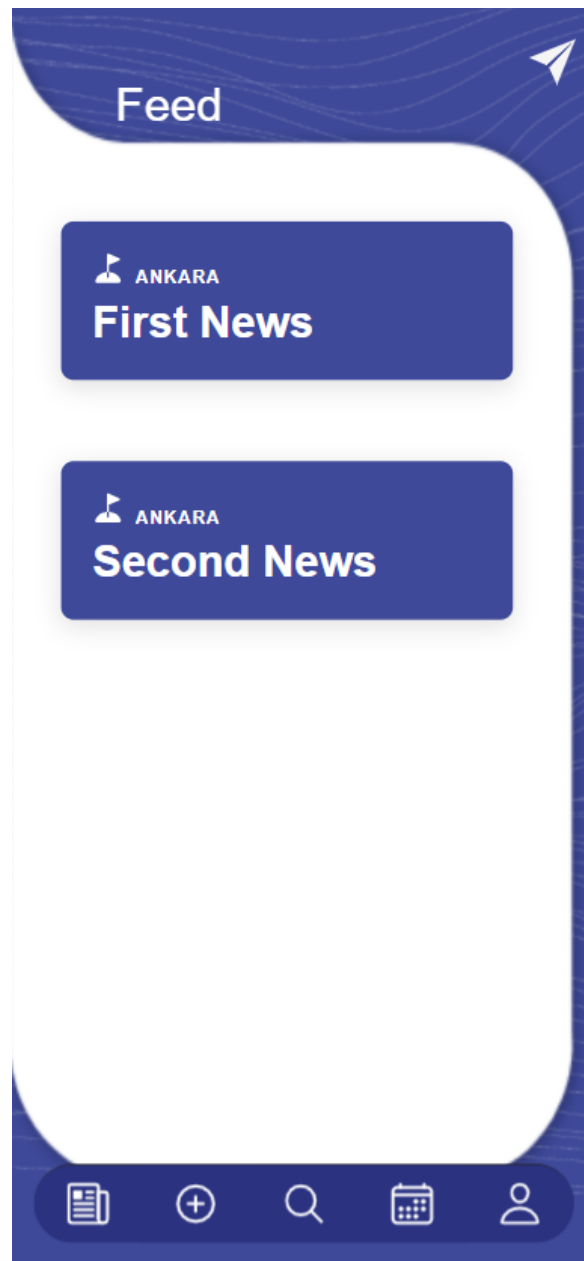
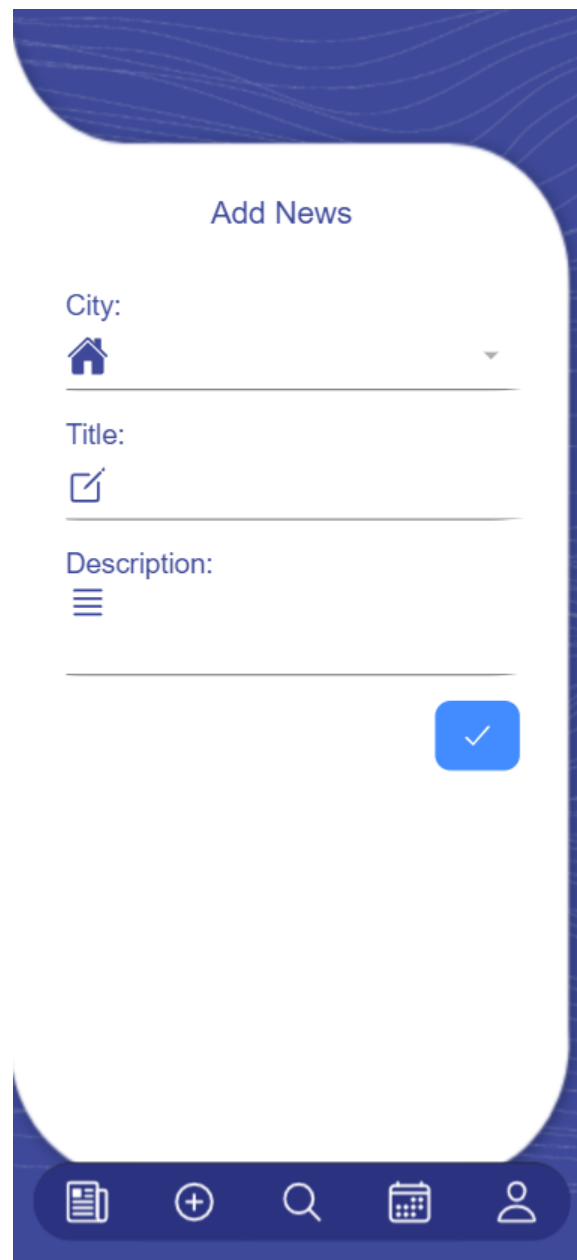


Figure 19 Feed Page of the Application

5.7.2.1.9 Add News Page



The image shows a mobile application screen for adding news. The screen has a white background with rounded corners, set against a dark blue background with a wavy pattern. At the top, the title "Add News" is centered in a dark blue font. Below the title, there are three input fields: "City:" with a house icon, "Title:" with a pencil icon, and "Description:" with a list icon. Each field has a horizontal line for text entry. To the right of the "Description:" field, there is a blue square button with a white checkmark. At the bottom of the screen, there is a dark blue navigation bar with five white icons: a document, a plus sign, a magnifying glass, a calendar, and a person.

Figure 20 Add News Page of the Applicaiton

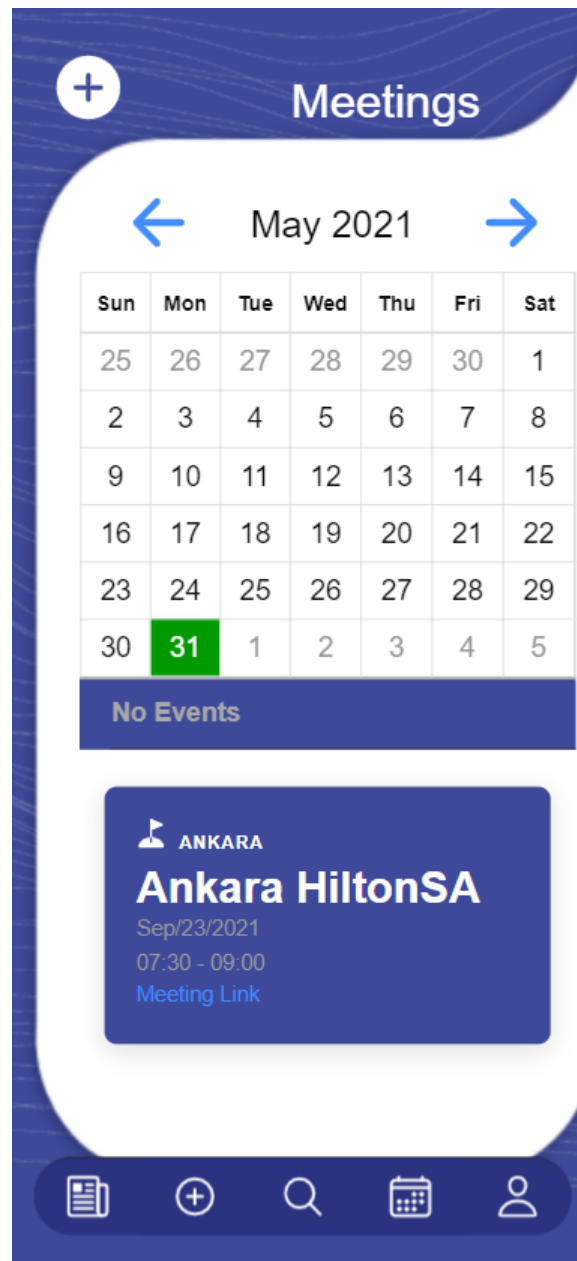


Figure 21 Calendar Page of the Application

5.7.2.1.9 Add Meeting Page

The screenshot shows a mobile application interface for adding a meeting. The background is a dark blue gradient with a subtle pattern. At the top, there is a header bar with a white plus icon in a circle on the left and the word 'Meetings' in white text on the right. Below the header, a white modal form is displayed with a blue header bar containing a white 'X' icon. The form contains the following fields:

- City:** A text input field with a building icon and the placeholder text 'City' followed by a dropdown arrow.
- Meeting Place:** A text input field with a globe icon and the placeholder text 'Meeting Place'.
- Meeting Url:** A text input field with a video camera icon and the placeholder text 'Meeting Url'.
- Meeting Date:** A text input field with a calendar icon.
- Start Time:** A text input field with a clock icon.
- End Time:** A text input field with a clock icon.

At the bottom right of the form, there is a blue button with a white checkmark icon. Below the form, a dark blue navigation bar contains five white icons: a document, a plus sign, a magnifying glass, a calendar, and a person.

Figure 22 Add Meeting Page of the Application

5.7.2.1.11 Chat Room Page

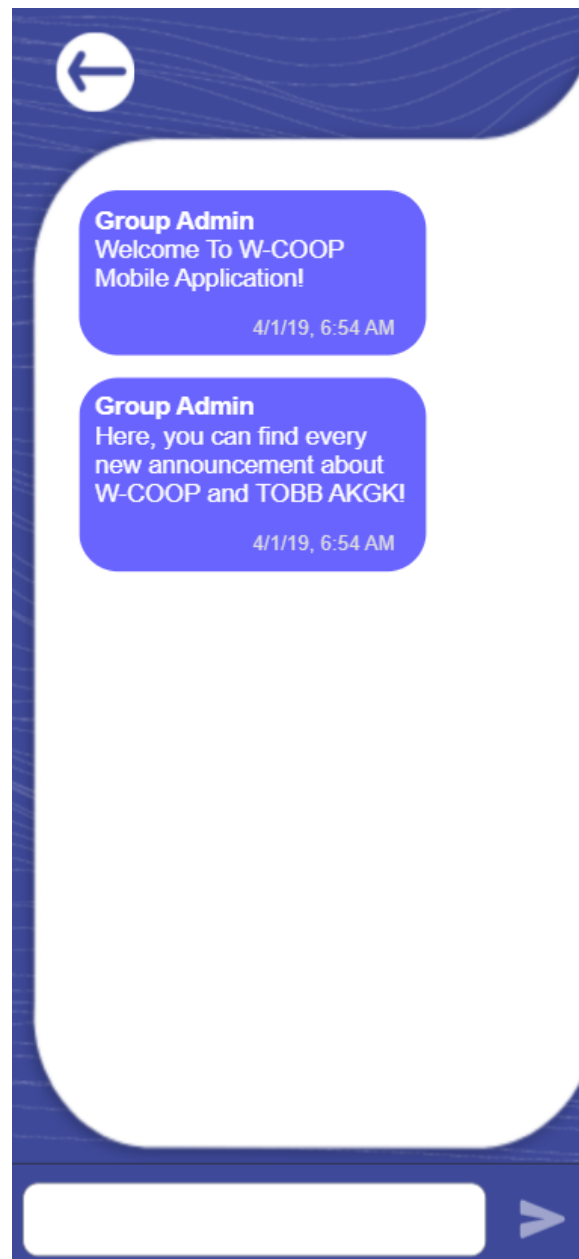


Figure 23 Chat Room Page of the Application

5.7.2.1.21 Search Page

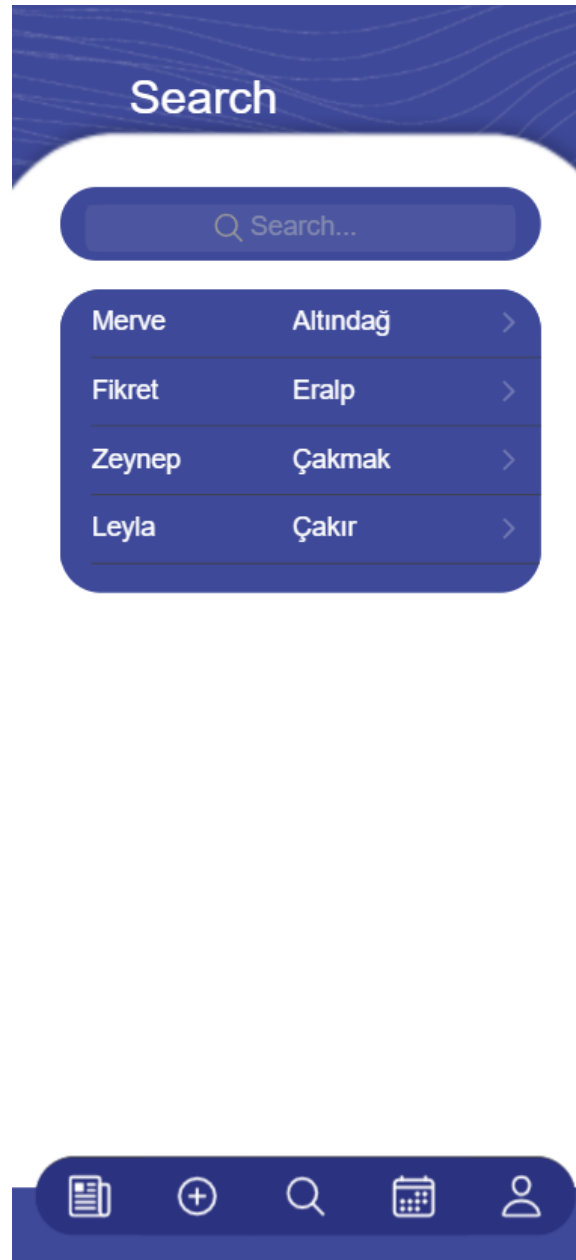




Figure 24 Search Page of the Application


5.7.2.1.20 View the Profile Page

← 


Occupation:

 Bilişim Teknolojileri


First Name:

 Merve


Last Name:

 Altındağ


E-Mail:


 mervealtindag@gmail....

City:


 Ankara

TOBB Registration Number:


 12354347

← 


City:

 Ankara


TOBB Registration Number:

 12354347

Mobile Phone:

 34534453

Birth Date:



Description:

Figure 25 View the Profile Page of the Application

5.7.2.1.22 Give/Take Role Page

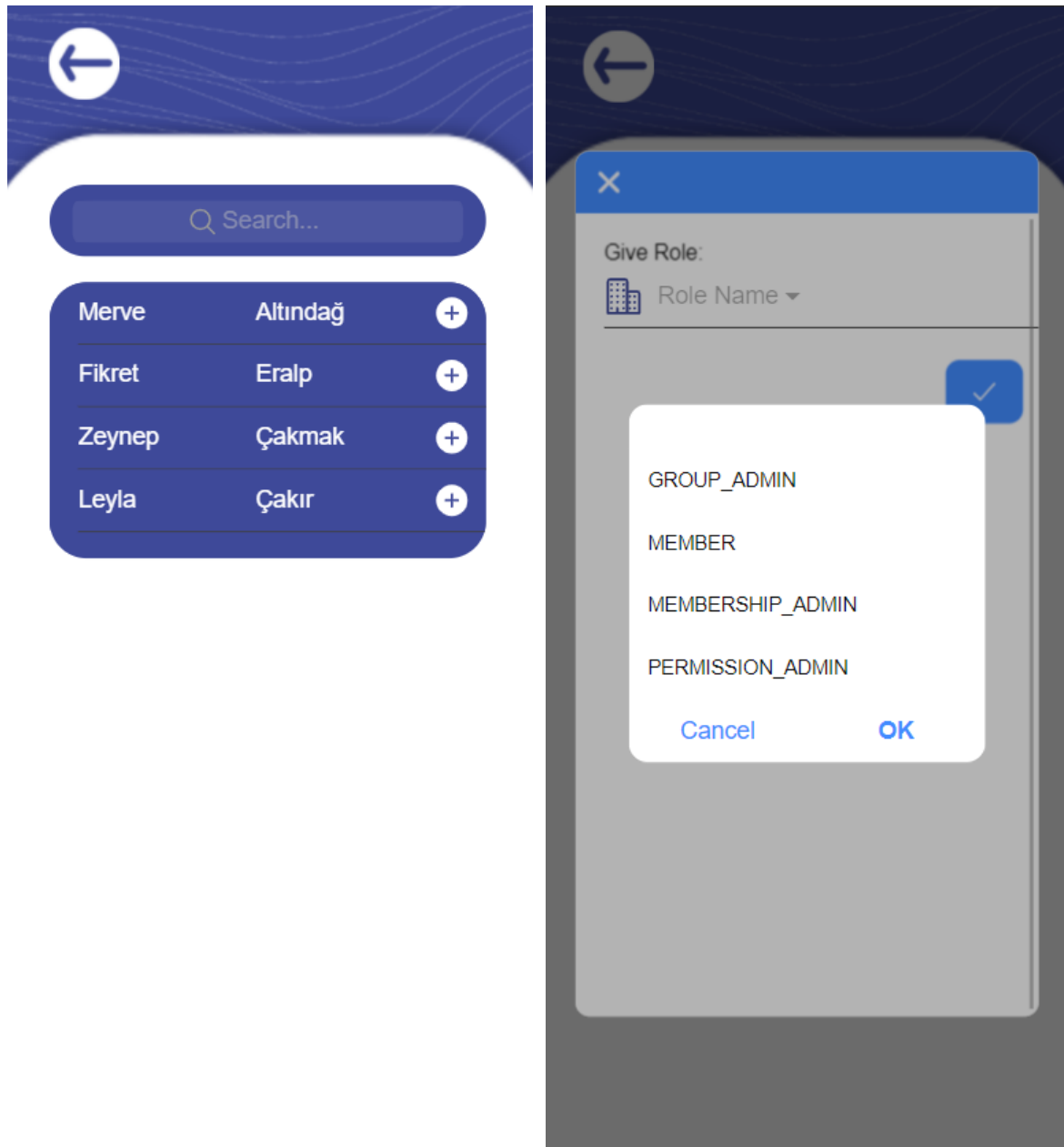


Figure 26 Give/Take Role of the Application

5.8 External Interface Design

There are no external interfaces.

6. Test Plan, Test Design Specifications and Test Cases

6.1 Introduction

6.1.1 Version Control

Version No	Description of Changes	Date
1.0	First Version	8 April, 2021
2.0	Second Version	4 June, 2021

6.1.2 Overview

The use cases of TOBB KGK Mobile Application - W-COOP users namely member and admins, which had been determined in the SRS document will be reviewed and tested. The noticeable errors will be handled.

6.1.3 Scope

Test document will cover the test plan of the design specifications, use cases and the test cases that correspond to test plan. TOBB Ankara Women Entrepreneurs needs will be tested. The requirements that have been pointed out in the SRS document will also be tested.

6.1.4 Terminology

Acronym	Definition
TOBB	Türkiye Odalar Borsalar Birliği
SRS	Software Requirements Specification
SDD	Software Design Descriptions
W-COOP	Women Cooperation

6.2 Features to Be Tested

This section lists and gives a brief description of all the major features to be tested. For each major feature there will be a Test Design Specification added at the end of this document.

6.2.1 User Operations

User operations are the operations that both member and admins allowed to do. These operations include profile creation, updating and sending message to the chat room. Listing, viewing, adding and editing announcements and meetings.

6.2.2 Admin Operations

In TOBB KGK W-COOP Mobile Application, there are different types of admins membership admin and permission admin. Admin operations are the operations that only admins allowed to do. These operations include listing and viewing membership requests and roles, giving roles to users and taking roles from the users.

6.3 Features Not to Be Tested

We will not be able to test the mobile application on the iOS platform because iOS can be tested only with a MacBook.

We are not going to do any test that may overuse the database since mentors from SONO provided us an AWS Student Account and this kind of account has limited access to database.

6.4 Item Pass/Fail Criteria

Exit Criteria

- 80% of the test cases are executed
- 80% of the test cases passed
- All High Priority test cases passed

6.5 References

[1] Team-16-SRS, April 6, 2021

[2] Team-16-SDD, April 6, 2021

6.6 Test Design Specifications

6.6.1 User Operations

6.6.1.1 Sub-features to be tested

6.6.1.1.1 Login (UO.LG)

6.6.1.1.1.1 Member (UO.LG.ME)

Members can log into the application with valid e-mail and password.

6.6.1.1.1.2 Membership Admin (UO.LG.MSAD)

Membership admin can log into the application with valid e-mail and password.

6.6.1.1.1.3 Permission Admin (UO.LG.PEAD)

Permission admin can log into the application with valid e-mail and password.

6.6.1.1.2 Create Profile (UO.CP)

Member and all admins can create a profile after logging in to the application for the first time.

6.6.1.1.3 View Profile (UO.SP)

Members and all admins can view their profile and other member's profile.

6.6.1.1.4 Edit Profile (UO.EP)

Members and all admins can edit their profile.

6.6.1.1.5 List Meetings (UO.LM)

Members and all admins can list the saved meetings.

6.6.1.1.6 View Meeting (UO.VM)

Members and all admins can view the meeting in detail.

6.6.1.1.7 List Group Chats (UO.LGC)

Members and all admins can list the group chats that they are in

6.6.1.1.8 Send Message to Group Chat (UO.SMGC)

Members and all admins can send messages to the group chats that they are in.

6.6.1.1.9 List News (UO.LN)

Members and all admins can list the shared news.

6.6.1.1.10 View News (UO.VN)

Members and all admins can view the news in detail.

6.6.1.1.11 Post Membership Request (UO.PMR)

Member-to-be can post membership request.

6.6.1.1.12 Add Meeting (UO.AM)

Members and all admins can add meetings.

6.6.1.1.13 Edit Meeting (UO.EM)

Members and all admins can edit meetings.

6.6.1.1.14 Add News (UO.AN)

Members and all admins can add news.

6.6.1.1.15 Edit News (UO.EN)

Members and all admins can edit news.

6.6.1.1.16 Set Language to Turkish (UO.SLT)

Members and all admins can set the language of the application to Turkish.

6.6.1.1.17 Set Language to English (UO.SLE)

Members and all admins can set the language of the application to English.

6.6.1.2 Test Cases

TC ID	Requirements		Priority	Scenario Description
UO.LG.ME.01	3.2.1		H	Enter a valid member e-mail and password
UO. LG.ME.02	3.2.1		H	Enter a valid member e-mail and blank password
UO. LG.ME.03	3.2.1		H	Enter blank member e-mail and valid password
UO. LG.ME.04	3.2.1		H	Enter a valid member e-mail and invalid password
UO. LG.ME.05	3.2.1		H	Enter a invalid member e-mail and valid password
UO. LG.ME.06	3.2.1		H	Enter a invalid member e-mail and password

UO. LG.MSAD.01	3.2.4		M	Enter a valid membership admin e-mail and password
UO. LG.MSAD.02	3.2.4		M	Enter a valid membership admin e-mail and blank password
UO. LG.MSAD.03	3.2.4		M	Enter blank membership admin e-mail and valid password
UO. LG.MSAD.04	3.2.4		M	Enter a valid membership admin e-mail and invalid password
UO. LG.MSAD.05	3.2.4		M	Enter a invalid membership admin e-mail and valid password
UO. LG.MSAD.06	3.2.4		M	Enter invalid membership admin e-mail and password
UO. LG.PEAD.01	3.2.5		M	Enter a valid permission admin e-mail and password
UO. LG.PEAD.02	3.2.5		M	Enter a valid permission admin e-mail and blank password
UO. LG.PEAD.03	3.2.5		M	Enter blank permission admin e-mail and valid password
UO. LG.PEAD.04	3.2.5		M	Enter a valid permissionadmin e-mail and invalid password
UO. LG.PEAD.05	3.2.5		M	Enter a invalid permission admin e-mail and valid password
UO. LG.PEAD.06	3.2.5		M	Enter invalid permission admin e-mail and password

TC ID	Requirements	Priority	Scenario Description
UO.CP.01	3.2.1	H	Enter the information with correct format and hit the save button.
UO.CP.02	3.2.1	H	Enter the information with wrong format and hit the save button.

TC ID	Requirements	Priority	Scenario Description
UO.VP.01	3.2.1	H	Hit the profile page icon to see the member's own profile page.
UO.VP.02	3.2.1	H	Hit the profile page icon of a member's to see the their profile page.

TC ID	Requirements	Priority	Scenario Description
UO.EP.01	3.2.1	H	Enter the information with correct format and hit the save button.
UO.EP.02	3.2.1	H	Enter the information with wrong format and hit the save button.

TC ID	Requirements	Priority	Scenario Description
UO.LM.01	3.2.1	H	Hit the calendar page icon.

TC ID	Requirements	Priority	Scenario Description
UO.VM.01	3.2.1	H	Hit the respective meetings.

TC ID	Requirements	Priority	Scenario Description
UO.LGC.01	3.2.1	H	Hit the chat panel page icon.

TC ID	Requirements	Priority	Scenario Description
UO.SMGC.01	3.2.1	H	Enter a message and hit send button.
UO.SGMC.02	3.2.1	H	Do not enter a message and hit send button.

TC ID	Requirements	Priority	Scenario Description
UO.LN.01	3.2.1	H	Hit the feed page icon.

TC ID	Requirements	Priority	Scenario Description
UO.VN.01	3.2.1	H	Hit the respective news.

TC ID	Requirements	Priority	Scenario Description
UO.PMR.01	3.2.1	H	Fill the membership request form and hit send button
UO.PMR.02	3.2.1	H	Do not fill the membership request form and hit send button

TC ID	Requirements	Priority	Scenario Description
UO.AN.01	3.2.1	H	Hit the plus button on the tabs, fill in the blanks and hit share button.

TC ID	Requirements	Priority	Scenario Description
UO.EN.01	3.2.1	H	Hit the respective news' edit button.

TC ID	Requirements	Priority	Scenario Description
UO.AM.01	3.2.1	H	Hit the plus button on the page, fill in the blanks and hit share button.

TC ID	Requirements	Priority	Scenario Description
UO.EM.01	3.2.1	H	Hit the respective meeting's edit button.

TC ID	Requirements	Priority	Scenario Description
UO.SLT.01	3.2.1	H	Hit the Turkish flag symbol on the login page.

TC ID	Requirements	Priority	Scenario Description
UO.SLE.01	3.2.1	H	Hit the English flag symbol on the login page.

6.6.2 Admin Operations

6.6.2.1 Sub features to be tested

6.6.2.1.1 Membership Admin (AO.MSAD)

6.6.2.1.1.1 List membership request (AO.MSAD.LMSR)

Membership Admin can list the membership requests.

6.6.2.1.1.2 View membership requests (AO.MSAD.VMSR)

Membership Admin can view the membership requests.

6.6.2.1.1.3 Approve Membership Request (AO.MSAD.AMSR)

Membership Admin can approve a membership request.

6.6.2.1.1.4 Decline (Delete) Membership Request (AO.MSAD.DMSR)

Membership Admin can decline a membership request.

6.6.2.1.2 Permission Admin (AO.MSAD)

6.6.2.1.2.1 List Roles (AO.PEAD.LR)

Permission Administrator can list the roles given to the users.

6.6.2.1.2.2 View Role (AO.PEAD.VR)

Permission Admin can view a role given to a user.

6.6.2.1.2.3 Give Role (AO.PEAD.GR)

Permission Administrator can give roles to the users.

6.6.2.1.2.4 Take Role (AO.PEAD.TR)

Permission Administrator can take roles from the users.

6.6.2.2 Test Cases

Here list all the related test cases for this feature.

TC ID	Requirements	Priority	Scenario Description
AO.MSAD.LMSR.01	3.2.4	M	Hit the membership requests icon.
AO.MSAD.VMSR.01	3.2.4	M	Hit the respective membership request.
AO.MSAD.AMSR.01	3.2.4	M	Hit approve button.
AO.MSAD.DMSR.01	3.2.4	M	Hit decline button.

TC ID	Requirements	Priority	Scenario Description
AO.PEAD.LR.01	3.2.5	M	Hit the user roles page icon on the feed page.

TC ID	Requirements	Priority	Scenario Description
AO.PEAD.VR.01	3.2.5	M	Hit the respective user role.

TC ID	Requirements	Priority	Scenario Description
AO.PEAD.GR.01	3.2.5	M	Hit role dropdown box of a regular member and select membership admin role.
AO.PEAD.GR.02	3.2.5	M	Hit role dropdown box of a regular member and select permission admin role.

TC ID	Requirements	Priority	Scenario Description
AO.PEAD.TR.01	3.2.5	M	Hit role dropdown box of a membership admin and select member role.
AO.PEAD.TR.02	3.2.5	M	Hit role dropdown box of a permission admin and select member role.

7 Detailed Test Cases

7.1 UO.LG.ME.01

TC_ID	UO.LG.ME.01
Purpose	Enter a valid member e-mail and password
Requirements	3.2.1
Priority	High.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid e-mail.
	[A03] Enter the valid password for this member.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is successful, and the feed page appears.
Clean up	Logout

7.2 UO.LG.ME.02

TC_ID	UO.LG.ME.02
Purpose	Enter a valid member e-mail and blank password
Requirements	3.2.1
Priority	High.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid e-mail.
	[A03] Leave the password space blank.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.3 UO.LG.ME.03

TC_ID	UO.LG.ME.03
Purpose	Enter blank member e-mail and valid password.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Go to login page.
	[A02] Leave the e-mail space blank.
	[A03] Enter the valid password for this member.
	[A04] Click on the "Login" button.
	[V01] Observe that the login is unsuccessful, an "Invalid" message will be shown.
Clean up	Page refreshes

7.4 UO.LG.ME.04

TC_ID	UO.LG.ME.04
Purpose	Enter a valid member e-mail and invalid password.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid e-mail.
	[A03] Enter an invalid password for this member.
	[A04] Click on the "Login" button.
	[V01] Observe that the login is unsuccessful, an "Invalid" message will be shown.
Clean up	Page refreshes

7.5 UO.LG.ME.05

TC_ID	UO.LG.ME.05
Purpose	Enter a invalid member e-mail and valid password.
Requirements	3.2.1
Priority	High.

Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Go to login page.
	[A02] Enter an invalid e-mail.
	[A03] Enter the valid password for this member.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.6 UO.LG.ME.06

TC_ID	UO.LG.ME.06
Purpose	Enter a invalid member e-mail and password.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Go to login page.
	[A02] Enter an invalid e-mail.
	[A03] Enter an invalid password for this member.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.7 UO.LG.MSAD.01

TC_ID	UO.LG.MSAD.01
Purpose	Enter a valid membership admin e-mail and password.
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A membership admin should be created.

Procedure	[A01] Go to login page.
	[A02] Enter a valid membership admin e-mail.
	[A03] Enter the valid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is successful, and the feed page appears.
Clean up	Logout

7.8 UO.LG.MSAD.02

TC_ID	UO.LG.MSAD.02
Purpose	Enter a valid membership admin e-mail and blank password.
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A membership admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid membership admin e-mail.
	[A03] Leave the password space blank.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.9 UO.LG.MSAD.03

TC_ID	UO.LG.MSAD.03
Purpose	Enter blank membership admin e-mail and valid password.
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A membership admin should be created.
Procedure	[A01] Go to login page.
	[A02] Leave the e-mail space blank.
	[A03] Enter the valid password for this admin.
	[A04] Click on the “Login” button.

	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.10 UO.LG.MSAD.04

TC_ID	UO.LG.MSAD.04
Purpose	Enter a valid membership admin e-mail and invalid password.
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A membership admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid membership admin e-mail.
	[A03] Enter an invalid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.11 UO.LG.MSAD.05

TC_ID	UO.LG.MSAD.05
Purpose	Enter a invalid membership admin e-mail and valid password.
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A membership admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter an invalid e-mail.
	[A03] Enter the valid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.12 UO.LG.MSAD.06

TC_ID	UO.LG.MSAD.06
Purpose	Enter invalid membership admin e-mail and password.
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A membership admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter an invalid e-mail.
	[A03] Enter an invalid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.13 UO.LG.PEAD.01

TC_ID	UO.LG.PEAD.01
Purpose	Enter a valid permission admin e-mail and password.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. An permission admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid permission admin e-mail.
	[A03] Enter the valid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is successful and the feed page appears.
Clean up	Logout

7.14 UO.LG.PEAD.02

TC_ID	UO.LG.PEAD.02
Purpose	Enter a valid permission admin e-mail and blank password.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid permission admin e-mail.
	[A03] Leave the password space blank.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.15 UO.LG.PEAD.03

TC_ID	UO.LG.PEAD.03
Purpose	Enter blank permission admin e-mail and valid password.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] Go to login page.
	[A02] Leave the e-mail space blank.
	[A03] Enter the valid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.16 UO.LG.PEAD.04

TC_ID	UO.LG.PEAD.04
Purpose	Enter a valid permission admin e-mail and invalid password.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter a valid permission admin e-mail.
	[A03] Enter an invalid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.17 UO.LG.PEAD.05

TC_ID	UO.LG.PEAD.05
Purpose	Enter a invalid permission admin e-mail and valid password.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter an invalid e-mail.
	[A03] Enter the valid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.18 UO.LG.PEAD.06

TC_ID	UO.LG.PEAD.06
Purpose	Enter invalid permission admin e-mail and password.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	3 Minutes
Dependency	Register test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] Go to login page.
	[A02] Enter an invalid e-mail.
	[A03] Enter an invalid password for this admin.
	[A04] Click on the “Login” button.
	[V01] Observe that the login is unsuccessful, an “Invalid” message will be shown.
Clean up	Page refreshes

7.19 UO.CP.01

TC_ID	UO.CP.01
Purpose	Enter the information with correct format and hit the save button.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Login test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] After logging in for the first time, Create A Profile will be opened.
	[A02] Fill in the blanks with correct format.
	[A03] Hit the save button.
	[V01] Observe that creating a profile is successful, profile page opens.
Clean up	-

7.20 UO.CP.02

TC_ID	UO.CP.02
Purpose	Enter the information with wrong format and hit the save button.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Login test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] After logging in for the first time, Create A Profile will be opened.
	[A02] Fill in the blanks with wrong format.
	[A03] Hit the save button.
	[V01] Observe that creating a profile is unsuccessful, a “Wrong format” message will be shown.
Clean up	Page refreshes.

7.21 UO.VP.01

TC_ID	UO.VP.01
Purpose	Hit the profile page icon to see the member’s own profile page.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 seconds
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the profile page icon on right bottom.
	[V01] Observe that members’ own profile page opens.
Clean up	-

7.22 UO.VP.02

TC_ID	UO.VP.02
Purpose	Hit the profile page icon of a member’s to see the their profile page.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 seconds
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the profile picture icon of a member.

	[V01] Observe that members' profile page opens.
Clean up	-

7.23 UO.EP.01

TC_ID	UO.EP.01
Purpose	Enter the information with correct format and hit the save button.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the profile page icon on right bottom.
	[A02] Hit the edit profile button.
	[A03] Fill in the blanks with correct format.
	[A04] Hit the save button.
	[V01] Observe that editing the profile is successful, member's own profile page opens.
Clean up	-

7.24 UO.EP.02

TC_ID	UO.EP.02
Purpose	Enter the information with wrong format and hit the save button.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the profile page icon on right bottom.
	[A02] Hit the edit profile button.
	[A03] Fill in the blanks with wrong format.
	[A04] Hit the save button.
	[V01] Observe that editing the profile is unsuccessful, a "Wrong format" message will be shown.
Clean up	Page refreshes.

7.25 UO.LM.01

TC_ID	UO.LM.01
Purpose	Hit the calendar page icon.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 Seconds
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the calendar page icon.
	[V01] Observe that calendar page opens, meetings will be listed.
Clean up	-

7.26 UO.VM.01

TC_ID	UO.VM.01
Purpose	Hit the respective meeting.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 seconds
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the feed page icon on left bottom.
	[A02] Hit on one of the meeting.
	[V01] Observe that respective meeting opens.
Clean up	Hit the go back icon.

7.27 UO.LGC.01

TC_ID	UO.LGC.01
Purpose	Hit the chat panel icon.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 Seconds
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the chat panel icon.
	[V01] Observe that chat panel opens, groups that the member's in will be listed.

Clean up	-
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7.28 UO.SMGC.01

TC_ID	UO.SGMC.01
Purpose	Enter a message and hit send button.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Login, Create a Profile Page and Create a Group test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Enter a message on the blank space at the bottom of the screen.
	[A02] Hit the send button
	[V01] Observe that sending the message is successful, other members in the group will be able to see the sent message.
Clean up	-

7.29 UO.SMGC.02

C_ID	UO.SGMC.02
Purpose	Do not enter a message and hit send button.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	5 Minutes
Dependency	Login, Create a Profile Page and Create a Group test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Do not enter a message on the blank space at the bottom of the screen.
	[A02] Hit the send button.
	[V01] Observe that sending the message is unsuccessful.
Clean up	-

7.30 UO.LN.01

TC_ID	UO.LNA.01
Purpose	Hit the feed page icon.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 Seconds
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the feed page icon.
	[V01] Observe that feed page opens, news will be listed.
Clean up	-

7.31 UO.VN.01

TC_ID	UO.VN.01
Purpose	Hit the respective news.
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 seconds
Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the feed page icon on left bottom.
	[A02] Hit one of the news.
	[V01] Observe that respective news opens.
Clean up	Hit the go back icon.

7.32 UO.PMR.01

TC_ID	UO.PMR.01
Purpose	Fill the membership request form and hit send button
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 seconds
Dependency	There is no dependency.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the signup page icon on the bottom.
	[A02] Fill the membership request form.

	[A03] Hit the send button
	[V01] Observe that the membership request sends successfully.
Clean up	Hit the go back icon.

7.33 UO.PMR.02

TC_ID	UO.PMR.02
Purpose	Do not fill the membership request form and hit send button
Requirements	3.2.1
Priority	High.
Estimated Time Needed	10 seconds
Dependency	There is no dependency.
Setup	Database connection should be setup. A member should be created.
Procedure	[A01] Hit the signup page icon on the bottom.
	[A02] Do not fill the membership request form.
	[A03] Hit the send button
	[V01] Observe that the membership request does not send successfully.
Clean up	Hit the go back icon.

7.34 UO.AM.01

TC_ID	UO.AM.01
Purpose	Hit Plus button.
Requirements	3.2.1
Priority	Medium.
Estimated Time Needed	30 Seconds.
Dependency	Open the Calendar Page.
Setup	Member login test cases should be passed.
	[A01] Click on the Calendar Page.
	[V01] Meeting is added.
Clean up	Refresh

7.35 UO.EM.01

TC_ID	UO.EM.01
Purpose	Hit Edit button.
Requirements	3.2.1
Priority	Medium.
Estimated Time Needed	30 Seconds.
Dependency	Open the Calendar Page.
Setup	Member login test cases should be passed.
	[A01] Click on the Calendar Page, hit the respective meeting and hit edit button.
	[V01] Meeting is edited.
Clean up	Refresh

7.36 UO.AN.01

TC_ID	UO.AN.01
Purpose	Hit Plus button.
Requirements	3.2.1
Priority	Medium.
Estimated Time Needed	30 Seconds.
Dependency	Open the Feed Page.
Setup	Member login test cases should be passed.
	[A01] Click on the Plus button, enter valid info.
	[V01] News is added.
Clean up	Refresh

7.37 UO.EN.01

TC_ID	UO.EN.01
Purpose	Hit Edit button.

Requirements	3.2.1
Priority	Medium.
Estimated Time Needed	30 Seconds.
Dependency	Open the Feed Page.
Setup	Member login test cases should be passed.
	[A01] Click on the Feed Page, hit the respective news and hit edit button.
	[V01] News is edited.
Clean up	Refresh

7.38 UO.SLT.01

TC_ID	UO.SLT.01
Purpose	Change the language of the application
Requirements	3.2.1
Priority	Medium.
Estimated Time Needed	2 Seconds.
Dependency	Open the Login Page.
Setup	Application must be opened.
	[A01] Hit the Turkish flag symbol.
	[V01] Observe that the language of the app is set to Turkish.
Clean up	-

7.39 UO.SLE.01

TC_ID	UO.SLE.01
Purpose	Change the language of the application.
Requirements	3.2.1
Priority	Medium.

Estimated Time Needed	2 Seconds.
Dependency	Open the Login Page.
Setup	Application must be opened.
	[A01] Hit the English flag symbol.
	[V01] Observe that the language of the app is set to English.
Clean up	-

7.40 AO.MSAD.LMSR.01

TC_ID	AO.MSAD.LMSR.01
Purpose	Listing membership request forms
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	1 minute
Dependency	Membership admin login test cases should be passed.
Setup	Database connection should be setup.
Procedure	[A01] Go to membership requests page.
	[A02] List request forms.
	[V01] If there are requests start checking the filled forms.
Clean up	Approve or decline a request.

7.41 AO.MSAD.VMSR.01

TC_ID	AO.MSAD.VMSR.01
Purpose	Viewing a request form
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	1 minute
Dependency	Membership admin login test cases should be passed.
Setup	Database connection should be setup.
Procedure	[A01] Go to Membership Admin's page.
	[A02] List the request forms.
	[A03] Select a user's form and view it.
	[V01] After reviewing approve or decline.

Clean up	Logout
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7.42 AO.MSAD.AMSR.01

TC_ID	AO.MSAD.AMSR.01
Purpose	Approve request form
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	30 seconds
Dependency	Membership admin login test cases should be passed.
Setup	Database connection should be setup.
Procedure	[A01] Go to Membership Admin's page.
	[A02] View the request forms.
	[V01] If the request form is filled correctly and member is qualified for a role, approve the request.
Clean up	Logout

7.43 AO.MSAD.DMSR.01

TC_ID	AO.MSAD.DMSR.01
Purpose	Declining a request form
Requirements	3.2.4
Priority	Medium.
Estimated Time Needed	30 seconds
Dependency	Membership admin login test cases should be passed.
Setup	Database connection should be setup.
Procedure	[A01] Go to Membership Admin's page
	[A02] View the request forms.
	[V01] If the request form is not filled correctly, decline it.
Clean up	Logout

7.44 AO.PEAD.LR.01

TC_ID	AO.PEAD.LR.01
Purpose	Hit the user roles page icon.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	10 Seconds

Dependency	Login and Create a Profile Page test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] Hit the user roles page icon.
	[V01] Observe that user roles page opens, all roles given to users will be listed.
Clean up	-

7.45 AO.PEAD.VR.01

TC_ID	AO.PEAD.VR.01
Purpose	Hit the respective user role.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	10 Seconds
Dependency	Login, Create a Profile Page and List Roles test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] Hit the respective user role.
	[V01] Observe that respective user role will be shown.
Clean up	Hit the go back button.

7.46 AO.PEAD.GR.01

TC_ID	AO.PEAD.GR.03
Purpose	Hit role dropdown box of a regular member and select membership admin role.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	2 Minutes
Dependency	Login, Create a Profile Page and View Role test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] View the user role of a regular member and hit change role button.
	[A02] Hit the role dropdown box.
	[A03] Hit the membership admin role.
	[A04] Hit save button.

	[V01] Observe that changing role is successful, role of the user will be changed.
Clean up	Page refreshes

7.47 AO.PEAD.GR.02

TC_ID	AO.PEAD.GR.04
Purpose	Hit role dropdown box of a regular member and select permission admin role.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	2 Minutes
Dependency	Login, Create a Profile Page and View Role test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] View the user role of a regular member and hit change role button.
	[A02] Hit the role dropdown box.
	[A03] Hit the permission admin role.
	[A04] Hit save button.
	[V01] Observe that changing role is successful, role of the user will be changed.
Clean up	Page refreshes

7.48 AO.PEAD.TR.01

TC_ID	AO.PEAD.TR.03
Purpose	Hit Role dropdown box of a membership admin and select member role.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	2 Minutes
Dependency	Login, Create a Profile Page and Give Role test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] View the user role of a membership admin and hit change role button.
	[A02] Hit the role dropdown box.
	[A03] Hit the member role.

	[A04] Hit save button.
	[V01] Observe that changing role is successful, role of the user will be changed.
Clean up	Page refreshes

7.49 AO.PEAD.TR.02

TC_ID	AO.PEAD.TR.04
Purpose	Hit Role dropdown box of a permission admin and select member role.
Requirements	3.2.5
Priority	Medium.
Estimated Time Needed	2 Minutes
Dependency	Login, Create a Profile Page and Give Role test cases should pass.
Setup	Database connection should be setup. A permission admin should be created.
Procedure	[A01] View the user role of a permission admin and hit change role button.
	[A02] Hit the role dropdown box.
	[A03] Hit the member role.
	[A04] Hit save button.
	[V01] Observe that changing role is successful, role of the user will be changed.
Clean up	Page refreshes

8 Test Results

8.1 Individual Test Results for User Operations

TC ID	Priori ty	Date Run	Run By	Result	Explanation
UO.LG.ME.01	H	25.05.2021	Rana ÇAKMAK	Pass	Login operation was successful.
UO. LG.ME.02	H	25.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.ME.03	H	25.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.ME.04	H	25.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.ME.05	H	25.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.ME.06	H	25.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.MSAD. 01	M	26.05.2021	-	Not executed	-
UO. LG.MSAD. 02	M	26.05.2021	-	Not executed	-
UO. LG.MSAD. 03	M	26.05.2021	-	Not executed	-
UO. LG.MSAD. 04	M	26.05.2021	-	Not executed	-
UO. LG.MSAD. 05	M	26.05.2021	-	Not executed	-
UO. LG.MSAD. 06	M	26.05.2021	-	Not executed	-
UO. LG.PEAD. 01	M	27.05.2021	Rana ÇAKMAK	Pass	Login operation was successful.
UO. LG.PEAD. 02	M	27.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.PEAD. 03	M	27.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.PEAD. 04	M	27.05.2021	Rana ÇAKMAK	Pass	Observed a warning message.
UO. LG.PEAD. 05	M	27.05.2021	Mert BAYRAMUSTA	Pass	Observed a warning message.
UO. LG.PEAD. 06	M	27.05.2021	Mert BAYRAMUSTA	Pass	Observed a warning message.
UO.CP.01	H	27.05.2021	Mert BAYRAMUSTA	Pass	Profile creation is successful.
UO.CP.02	H	27.05.2021	Mert BAYRAMUSTA	Pass	Observed a warning message.
UO.VP.01	H	27.05.2021	Mert BAYRAMUSTA	Pass	User's own profile page opened.

UO.VP.02	H	27.05.2021	Mert BAYRAMUSTA	Pass	Other user's profile page opened.
UO.EP.01	H	27.05.2021	Mert BAYRAMUSTA	Pass	Profile edited successfully.
UO.EP.02	H	27.05.2021	Mert BAYRAMUSTA	Pass	Observed a warning message
UO.LM.01	H	25.05.2021	Mert BAYRAMUSTA	Pass	Calendar page opened.
UO.VM.01	H	25.05.2021	Mert BAYRAMUSTA	Pass	Respective meeting opened.
UO.LGC.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Chat panel page opened.
UO.SMGC.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Sending the message was successful.
UO.SMGC.02	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Could not send the message.
UO.LN.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Feed page opened.
UO.VN.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Respective news opened.
UO.AN.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	News saved.
UO.EN.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Respective news updated.
UO.AM.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Meeting saved.
UO.EM.01	H	25.05.2021	Zeynep ÖZDOĞAN	Pass	Respective meeting updated.
UO.PMR.01	H	25.05.2021	İrem ÖZTÜRK	Pass	Membership request sent successfully.
UO.PMR.02	H	25.05.2021	İrem ÖZTÜRK	Pass	Membership request did not send.
UO.SLT.01	H	25.05.2021	İrem ÖZTÜRK	Pass	Language of the app set to Turkish.
UO.SLE.01	H	25.05.2021	İrem ÖZTÜRK	Pass	Language of the app set to English.

8.2 Individual Test Results for Admin Operations

TC ID	Priority	Date Run	Run By	Result	Explanation
AO.MSAD.LM SR.01	M	26.05.2021	-	Not executed	-
AO.MSAD.VM SR.01	M	26.05.2021	-	Not executed	-
AO.MSAD.AM SR.01	M	26.05.2021	-	Not executed	-
AO.MSAD.DM SR.01	M	26.05.2021	-	Not executed	-
AO.PEAD.LR.0 1	M	26.05.2021	İrem ÖZTÜRK	Pass	User Roles page opened.
AO.PEAD.VR.0 1	M	26.05.2021	İrem ÖZTÜRK	Pass	Respective user role viewed.
AO.PEAD.GR.0 1	M	26.05.2021	İrem ÖZTÜRK	Pass	User role changed.
AO.PEAD.GR.0 2	M	26.05.2021	İrem ÖZTÜRK	Pass	User role changed.
AO.PEAD.TR.0 1	M	26.05.2021	İrem ÖZTÜRK	Pass	User role changed.
AO.PEAD.TR.0 2	M	26.05.2021	İrem ÖZTÜRK	Pass	User role changed.

8.3 Summary Of Test Results

Priority	Number of TCs	Executed	Passed
H	27	27	27
M	22	12	12
Total	49	39	39

We have executed 39 test cases and 38 test cases are passed. Also, all of the high and 12 medium test cases are passed. Exit criteria is met.

8.4 Exit Criteria

Criteria	Met or Not
80% of the test cases are executed	M
80% of the test cases passed	M
All High Priority test cases passed	M

We have executed 39 test cases and 100% of test cases are passed. Also, all of the high and 12 medium priority test cases are passed. Exit criteria is met.

9 Conclusions

This report provides information about the “TOBB Ankara Women Entrepreneurs Board Mobile Application”. With this project, we aim to create a network for women to expand their business network. Women who are members of the TOBB AWEB will be able to communicate and exchange their ideas, save their appointments, share their projects and CVs, view the other members’ news and announcements on their feed.

We learned how to prepare project documents, draw required diagrams, and to make research about useful information.

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