LOW-LEVEL DESIGN REPORT

CMPE 492

Senior Design Project II

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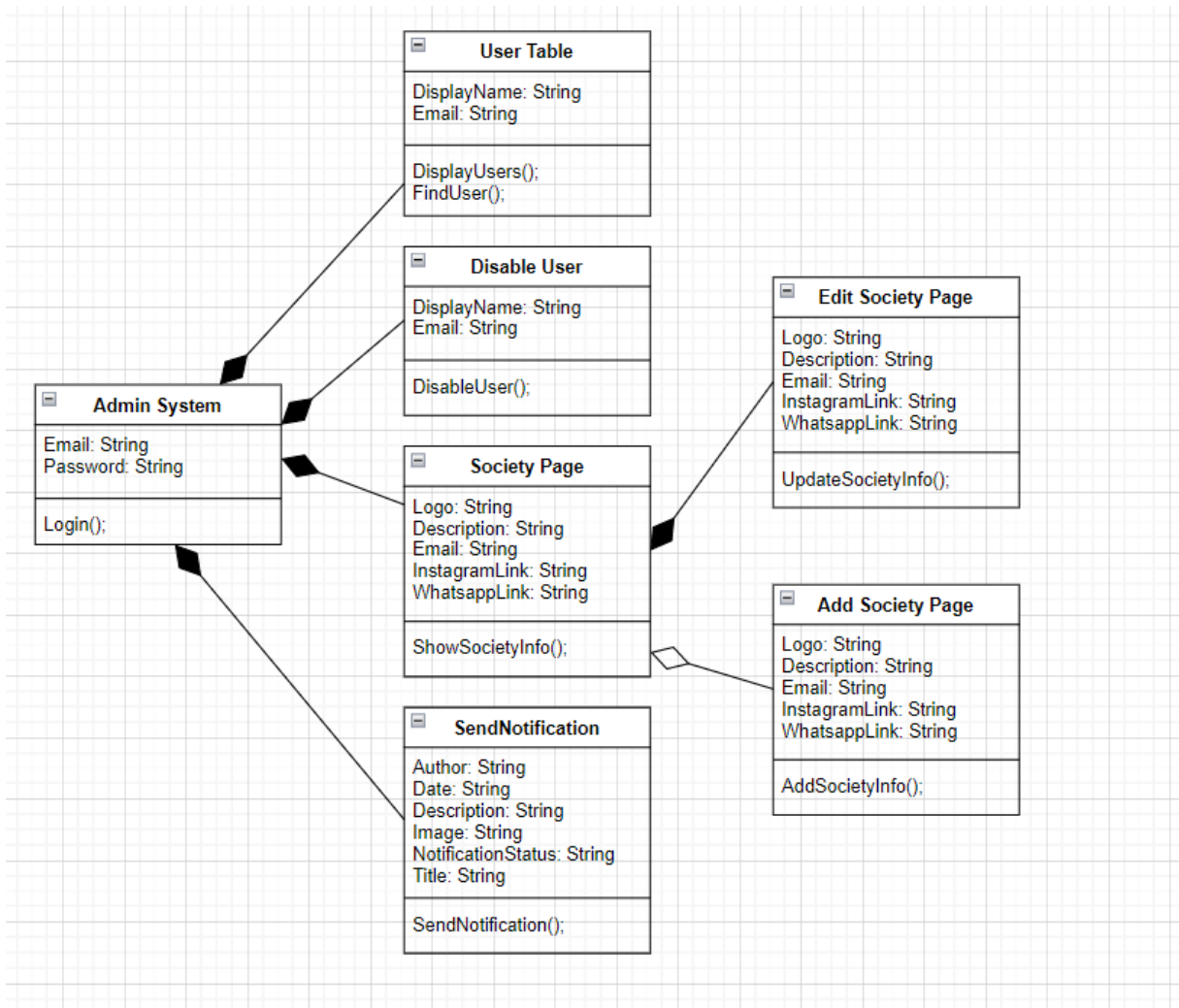# 1. Introduction

1.1. Object design trade-offs

1. **Space vs Time:** In the Tedu App project, the information of the users using the application, the course programs created by each user, the society information within the university, as well as the announcements made by the university will be kept in the database. Unlike the database system where the announcements are kept, we aimed to facilitate the instantaneous change of changes by using the realtime database. Since too much data is collected and used, we need to work efficiently on the allocation of space.

2. **Performance vs Security:** The Tedu App and the admin page will both save data about the users and the university. Therefore, it is essential to work in a highly secure environment. The goal is to offer a safe, dependable, and secure environment for the user without compromising the system's functionality or security in the event of data theft. Unauthorized users should not be able to access the system, according to the system.

3. **Portability vs Useability:** The designed application and admin panel are systems that will be used not only by a specific audience such as students, but also by large audiences such as students, teachers, school staff. Therefore, the interface design and usability of the application should be as simple as possible. There is a micro website called "Step by Step Tedu App" especially for the application to be used. While the Tedu app is available on IOS and Android, the admin page and micro website will only be available on the web. Among these features, usability is more important than portability.

4. **Existing components vs New components:** There will be two useful systems for users. With the changes made from the TEDU Admin system, many features such as sending notifications in the TEDU App application will be affected. Thanks to this connection, we want to create a more reliable, smoother and more systematic operation under the control of certain people.

5. **Reliability vs. Supportability:** Regarding reliability and supportability, reliability is more important in TEDU Admin and TEDU App system. It is an important criterion in ensuring reliability that the control of the admin panel is accessible to restricted people so that information about the school does not go out.

1.2. Interface documentation guidelines

class Name PART (camelCase)	
Class Description PART	
Methods PART	
Name of the Method PART	Description of the Method PART
Name of the Method PART	Description of the Method PART

1.3. Engineering standards (e.g., UML and IEEE)

User Table

DisplayName: String
Email: String

DisplayUsers();
FindUser();

Disable User

DisplayName: String
Email: String

DisableUser();

Edit Society Page

Logo: String
Description: String
Email: String
InstagramLink: String
WhatsappLink: String

UpdateSocietyInfo();

Admin System

Email: String
Password: String

Login();

Society Page

Logo: String
Description: String
Email: String
InstagramLink: String
WhatsappLink: String

ShowSocietyInfo();

Add Society Page

Logo: String
Description: String
Email: String
InstagramLink: String
WhatsappLink: String

AddSocietyInfo();

SendNotification

Author: String
Date: String
Description: String
Image: String
NotificationStatus: String
Title: String

SendNotification();

2. Packages

There are two packages in the TEDUApp Admin Panel. One is 'components' and the other is 'router'. While the Components package contains separate classes for all pages, the router package contains one class.

There are 9 classes in the Components package: AddSociety, DisableUser, EditSociety, LoginPage, MainPage, NotificationPage, SingleSociety, SocietyPage, UserTable. In the AddSociety class, we can add the names, logos, descriptions, whatsapp and instagram links of the societies. TEDUApp users can be blocked from accessing the application in the DisableUser class. In the EditSociety class, the information of the societies added in the AddSociety class can be updated. In the LoginPage class, you can login to the admin panel with the admin username and password. In the MainPage class, logging out can be done from the admin panel. In the NotificationPage class, it can be sent to the application users of the university by entering the detailed information of the announcements they want to send. In the SingleSocity class, it is possible to see and delete the desired societs. In the SocietyPage class, it allows all of the entered societies to appear together on a single page. The UserTable class provides the display of mail and name information of the application users.

The Router package contains the index.js class and this class is used to connect the links of the other classes we wrote in the components package so that their pages can be seen.

2.1 Class Interfaces

class AddSociety	
This class is responsible for adding societies logo, name, description, whatsapp and instagram links to Societies page in TEDUApp.	
Methods	
async addSociety():	Adding new societies information

class DisableUser	
This class is responsible for disable users' access to the TEDUApp.	
Methods	
getUsers():	Allows app users to be listed
closeDelete():	Allows the desired user to be disabled

class EditSociety	
This class is responsible for editing societies logo, name, description, whatsapp and instagram links to Societies page in TEDUApp.	
Methods	
async updatedSocietyName():	Updating societies name
async updateWhatsappLink():	Updating societies WhatsApp link
async updateInstagramLink():	Updating societies Insatgram link
async updatedSocietyDescription():	Updating societies description
async updatedSocietyLogo():	Updating societies logo
async updatedSocietyEmail():	Updating societies e-mail

class LoginPage	
This class is responsible for logging to the TEDU Admin panel with entering users username and password.	
Methods	
async enter(e):	Logging to the TEDU Admin panel

class MainPage	
This class is responsible for accessing the pages in the TEDU Admin panel and logging out of the system.	
Methods	
logout():	Logging out to the system

class NotificationPage	
This class is responsible for allowing the application users to send the announcements that the university wants to send to the TEDU App by adding the author, date, description, image, notification status and title information.	
Methods	
sendNotification():	Sending new notification information

class SingleSociety	
This class is responsible for displaying and deleting societies logo, name, description, whatsapp and instagram links to Societies page in TEDUApp.	
Methods	
async deleteSociety():	deleting societies information

class SocietyPage	
This class is responsible for displaying all societies on a single page.	
Methods	
getSociety():	displaying all societeis information

class UserTable	
This class is responsible for displaying all users' mail and name information as a list in TEDUApp.	
Methods	
getUsers():	Displaying all user's information

4.Glossary

1. Admin Panel: System where admins can manage users and application

2. Add/Remove Societies: Adding or removing societies within the university.

3. Send Notification: The page on the homepage of the application where the notifications that appear to the users can be sent.

4. OTP: It is the authentication code sent for the user to complete the registration process.

5. Disable User: The page where the users in the user list are disabled from accessing the application.

6. Step By Step Tedu App: Step by Step Tedu App, a microsite, explains to users step by step how to use the application and the steps that the user should follow.

7. TEDUScheduler: The user can see the courses to be taken in different combinations. If he/she wants, can create an overlapping program or leave an empty day in his/her program and see the course program alternatives according to this filtering.

8. TEDUClass: The user can add the program he created to a timetable, if s/he wants, can assign a color to each lesson and visualize his program.

9. Edit Courses: The user can see the program alternatives by filtering the courses they want to take (allow conflict, empty day, show classroom).

10. Timetable: Added courses look like a chart on a day and hour basis.

5.References

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