**Yaşar University**

**Department of Computer Engineering**

**COMP 4920 Graduation Design Project II, Spring 2023**

**Graduation Project Summary Form**

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| **Project Code and Title:** | WEBREM  A Remembrances or Condolences Web Service |
| **Project Team:** | Alican Daşdemir tralican35@gmail.com  Atakan Aktakka atakanaktakka@gmail.com  Doğukan Tez dogukantez7@gmail.com  Kadir Ülge kadirulge7@gmail.com |
| **Project Advisors:** | Prof. Doc. Mehmet Ufuk Çağlayan |
| **Project Deliverables:** | 1. Final Report 2. Requirements Specifications Document 3. Design Specifications Document 4. Product Manual 5. Product-Software Subsystem |
| **Project Web Address:** |  |
| **Project Summary**   * The most important points in the Project Final Report, the project poster and/or project slide presentation * The whole form max 5 pages * You can structure the summary in this form as 1. Introduction, 2. Requirements, 3. Design, 4. Implementation and Testing, 5. Conclusions, if you like. | |

# 1. INTRODUCTION

In today's digital age, many individuals find it challenging to share their invaluable memories or convey heartfelt condolences, primarily due to a lack of comprehension and support. The prevailing concern arises from apprehension surrounding the communication of personal experiences and emotions, fueled by uncertainty regarding the reactions they might receive from their audience. Consequently, they navigate through life burdened by a profound sense of isolation, impeding their access to the necessary help and understanding during difficult times. Hence, there exists an inherent necessity for a compassionate and inclusive platform that fosters a safe and nurturing space, where individuals can freely express their experiences and emotions without the fear of judgment, while also receiving the empathy and solace they rightfully deserve.

# 2. REQUIREMENTS

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| No. | Requirements | Use Case |
| 1 | To enter the system and share my memories of famous people or institutions, I need to be registered. After entering my e-mail, I can set my password and register. Identity verification by e-mail is required for all registered users. Users need to accept personal data protection authority article via checkbox to create an account. | Create an account |
| 2 | After registration, the user can activate their account and start using the application with the activation link sent to their registered mail account as a result of mail verification. | Activate account |
| 3 | All WEBREM Users will be able to view all pages opened in the WEBREM service through shared links. However, non-registered WEBREM users will only be able to preview the memories on the opened page. To see the entire shared memory, it is necessary to be a WEBREM registered user. | Surf in the site and make queries within the site |
| 4 | The registered user will fill out a form to sign in fill the email and password boxes and push the sign in button | Sign in to WEBREM |
| 5 | Button I FORGOT MY PASSWORD should mail the password of the user to his/her first entered email address (not the address entered on update screen). If user has forgotten his/her initial email address, there is no chance that he/she will retrieve the password | Update registration information |
| 6 | Registered user can upload memories about a particular person/institution. Registered user will be able to share memories by pressing the SHARE button. | Share memories |
| 7 | Registered WEBREM users will be able to update their memories on request by using the UPDATE button. WEBREM The registered user will be able to delete the shared memory during the update with the DELETE button | Update shared memories |
| 8 | All WEBREM Users will be able to browse through the memories stored in the WEBREM service, make searches about who has written/uploaded what or who has written/uploaded what, and will be able to download the memories in the form of text, photo, sound recording, video recording to their own computer by pressing download button | Download the memories |
| 9 | Admin in order to create memorial page about a particular person/institution, in his admin screen selects add memorial page and types memorial page name then creates memorial page by clicking add new memorial page. | Create a memorial page |
| 10 | Admin has the ability to ban users based on posts with inappropriate content. | Ban users |

# 3.DESIGN

Based on the project requirements and the chosen development environment, an MVC (Model-View-Controller) design model was the best suitable design for the project. RegisteredUser, NonRegisteredUser and Admin classes play key roles in different aspects of the system. These classes and their respective methods provide the necessary functionality for users to interact with the WEBREM Software System effectively. They enable users to navigate the site, manage their accounts and information, share memories, report issues, and administer the system.

# 4. IMPLEMENTATION, TESTS and TEST DISCUSSIONS

# 4.1. Implementation of the Product

The WEBREM web application, built with NodeJS, allows users to collect and share memories of significant individuals or organizations. Users can upload memories in various formats, and the application has a user-friendly design.

The model layer manages data using a MongoDB database, ensuring data integrity and persistence.

The view layer serves as the interface, enabling communication and integration. It is developed using HTML, CSS, and ReactJS.

Testing methodologies, including unit testing, integration testing, and system testing, are employed using tools like Jest and Puppeteer to ensure reliability and functionality at various levels of the system.

# 4.2. Tests and Results of Tests

The testing phase of the WEBREM software system consists of unit testing, integration testing, and end-to-end testing. Unit testing ensures the proper functioning of individual components, while integration testing focuses on the correct interaction between different components. End-to-end testing evaluates the overall performance of the system from a user's perspective by simulating user actions and assessing the service's response. The goal of these tests is to ensure the accurate functioning and integration of components, as well as the overall functionality of the service.

# 5. CONCLUSIONS

The WEBREM service is a cutting-edge web platform that aims to facilitate the sharing of cherished memories and heartfelt condolences related to significant individuals or institutions. Users will have the seamless ability to upload various types of content, such as texts, photos, audio recordings, and videos, which will be carefully stored and moderated in a comprehensive database. Accessible through a user-friendly web interface, the service empowers users to effortlessly search for and retrieve shared memories. The High-Level Design of the WEBREM service includes a detailed diagram illustrating the key components of the system and their interconnectedness. To successfully develop the WEBREM service, the project team must diligently address technical challenges and prerequisites, considering realistic constraints and contextual factors that may influence the system's design.