

**SCHOOL OF ENGINEERING AND NATURAL**

**SCIENCES-Computer Engineering**

**Project Part 1**

**The Proposal Form**

University Clubs Website

**Name of The Team:** Team 6

**Name of All Team Members:** Hilal Türkyılmaz (9A190001), Beyza Şahin (63200033), Esmanur Aytaş (63200005)

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**Advisor:** Muhsin Zahid UĞUR

# **Project Description**

## **Project Overview**

University clubs are struggling with low student participation because many students are unaware of upcoming events and opportunities. This project seeks to create a system that keeps students informed about events and simplifies the booking process, thereby encouraging greater involvement in club activities.

## **The Purpose of the Project:**

The purpose of this project is to develop a university clubs’ website that students can search for the upcoming events and book ticket for wanted events. This website will help students to find and book events by listing all upcoming events. Students will find the events and participate them, so they will socialize with others and have fun.

# **Prior Work**

Youthall and Eventbrite are the existing products in the market. A special and more focused platform for university clubs is established to provide more specific solutions to the needs of clubs and event participants. Existing platforms generally target general events, but the goal here is to develop a platform that specifically appeals to university communities and better focus on the specific needs of university students, so students will be aware the club events of their university easily.

# **Functionality**

## **Main Functionality of the Product**

The main functionality of the university clubs' website is to inform students about upcoming events and to simplify the event booking process. This helps bridge the gap between students and university clubs, fostering a stronger campus community.

## **Other Functionalities**

The designed website will provide students with easy access by displaying a simple list of all events. Each event's detail page will include important information such as the date, time, location, and description. This information enables students to obtain all the necessary details before participating in events, helping them make more informed decisions about their attendance.

# **Users**

## **Types of Users**

The potential users of the university clubs' website can come from a wide variety of backgrounds and roles. Students are the main users of the platform. They will use the website to search for upcoming events and book tickets. Also, club members or leaders will manage their club profiles, create event listings, track bookings, and handle attendee interactions. These users will require access to tools for creating and managing events, analyzing participation data, and interacting with students. Administrative staff will use the platform to oversee events and ensure that they align with university policies. They will have access to reports and data about student participation and may approve or monitor events posted by clubs. External sponsors or organizations collaborating with university clubs will use the platform to view event statistics and post advertisements.

## **Anticipated Workplace Environment**

The university clubs' website will be used in various environments that cater to a diverse user base. Understanding these environments is essential for designing a product that meets user needs effectively. The primary environment will be the university campus, where students, staff, and club members frequently interact. This includes libraries, study halls, cafeterias, and common areas. Most campus locations will have Wi-Fi, but signal strength may vary.

# **Technology**

## **Intended Technology**

The university clubs website will be developed using frontend, backend and database technologies so that users can find and book events easily and efficiently.

**Frontend (HTML, CSS, Javascript):**

The frontend of the website will be developed using HTML, supported by CSS and JavaScript. HTML will establish the site’s layout, enabling students to easily find events and book tickets. CSS will enhance the visual design and ensure responsive layouts for various devices, while JavaScript will add interactivity, such as dynamic content updates and real-time ticket availability. Together, these technologies will create an intuitive and user-friendly platform for managing event reservations.

**Database (MySQL):**

MySQL will be utilized as the database platform, with SQL as the query language, to record and manage events and student reservations. The database will store event details and reservation information, enabling users to access real-time updates and maintain accurate records.

**Backend (Python):**

The backend of the website will be managed with Python and will process event reservations and user accounts. Python allows data to be transferred seamlessly between the frontend and the database.

## **Experience of Team Members with the Intended Technology**

**Beyza ŞAHİN:** *” I have knowledge of database management and requirements. Although I haven't had the opportunity to work on a project involving SQL, my theoretical knowledge in this area has equipped me with proficiency in database design and management. I believe that this knowledge allows me to effectively manage data in projects.”*

**Hilal TÜRKYILMAZ:** *" I had the opportunity to work on the frontend design of websites such as food and movie recommendations using languages such as HTML and CSS. HTML helped to create the structure of the web page and organize the content, while CSS was used to achieve aesthetic and visual design. This process not only improved my technical skills but also helped me adopt a user-centered design approach."*

**Esmanur AYTAŞ**: *" I worked on the design of a website that handles hotel reservations and promotes the hotel. In the backend design of the hotel reservation website, we implemented database operations using PHP and retrieved data through MAMP. MAMP provided a local development environment that allowed us to integrate PHP with MySQL database management. In this process, we securely stored user information, reservation details, and payment transactions in the database and performed queries to ensure the system operated correctly and efficiently. This way, while connecting to the database with PHP, all data processing and business logic were executed with Python, thus creating a performant and secure backend infrastructure."*

# **Challenges Foreseen in the Project**

# The frontend design of the project will require attention to create a friendly interface. Creating a user-friendly design that appeals to different user roles can be difficult. Also, integration between the backend (Python) and database (MySQL) and the frontend (HTML, CSS, JavaScript) can present some challenges. Attention will need to be paid to error management to properly manage the data flow. Overlapping events can also be an issue; it is important to develop a system that checks the availability of events to avoid overlapping bookings between events from different clubs.

# **Division of Labor**

* **Team Leader:** A team leader keeps the team focused on the tasks at hand, to deliver work on time and meet the goals of the project. He/she also makes it easy for members to collaborate and communicate with each other.
* **Database Administrator (DBA):** A Database Administrator is a specialist that models, designs and creates the databases and tables used by a software solution.
* **User Interface Designer:** The UI Designer is responsible for creating a user interface that is easy to use and attractive.
* **Frontend Developer:** The Frontend Developer works closely with the User Interface Designer to create a user experience out of HTML, CSS, and JavaScript. This is the code that displays and runs in the Web browser on the user’s machine.
* **Backend Developer:** The Backend Developer writes the bulk of the code. It runs on the server and it ties the User Interface to the database. Succeeding at this role requires a lot more than coding, it requires being able to communicate successfully with the team.
* **Tester:** The Tester ensures that the solution meets the business requirements and that it is free of errors and defects.

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| **Team Member** | **Role(s)** |
| Esmanur AYTAŞ | Team Leader, Backend developer |
| Beyza ŞAHİN | DBA, UI Designer |
| Hilal TÜRKYILMAZ | Frontend developer, Tester |