



جامعة النجاح الوطنية

An-Najah National University

كلية الهندسة | Faculty of Engineering

وحدة الجودة والاعتماد - مركز ABET

Quality and Accreditation Unit - ABET Center



Project Title: **UniServe**

Academic Year: 2025/2026

Department Name: Computer Engineering

Group Members: Yasmine Ahmad Saad, Shahd Mohammed Alawneh.

Supervisor Name: Dr. Anas Toma

Project Abstract

UniServe is a digital platform created to help university students complete their Community Service course requirements easily and efficiently.

The course encourages students to take part in different social and volunteering activities such as helping in community centers, donating blood, or supporting charitable initiatives each activity contributing a specific number of service hours.

With UniServe, students can explore available activities, register for them, submit proof of participation, and track their progress anytime and anywhere. On the other hand, administrators and service centers can manage activities, review submissions, and generate detailed reports through a dedicated web portal.

Main Features:

For Students

- Browse and join activities: Easily explore available community service opportunities.
- Personalized recommendations: Receive smart suggestions for activities that match individual interests and skills.
- Upload participation proof: Submit certificates or photos to verify completed service work.
- Track progress: View completed and remaining hours in real time.
- Access from anywhere: Use either the mobile app or the web portal with a seamless experience.

For Administrators and Service Centers

- **Automated Hour Tracking Alerts** - Service centers automatically notify students of: Completed service hours, Hours remaining to meet requirements, Activity completion confirmations, Submission status updates (approved/rejected)
- **Real-time Notifications** include: "Congratulations! You've completed 15/50 required hours", "Your submission for 'Blood Donation' has been approved - 5 hours added", "Reminder: 5 hours remaining to complete course requirements".

Chat & Communication System

- Direct Messaging between: Students ↔ Service Centers, Students ↔ Administrators, Service Centers ↔ University Administrators



What Makes UniServe Unique

One of the standout features of UniServe is its intelligent recommendation system. It helps students find activities that best fit their personalities, interests, and past experiences making community service more meaningful and enjoyable, rather than just a course requirement.

Project Objectives

- Digitize and simplify the Community Service course process.
- Encourage student participation by providing an engaging, modern digital experience.
- Offer an efficient management system for administrators to track and evaluate student progress.
- Build a local, integrated platform that connects universities, students, and community service centers in one place.

Development Approach

The development of UniServe followed a clear and structured methodology that included:

1. Requirement Analysis: Understanding user needs and project goals.
2. User Interface Design: Creating intuitive and attractive designs for both web and mobile.
3. Database Design: Building a reliable and well-structured database for all users and activities.
4. Implementation: Developing both the mobile and web applications along with the backend system.
5. Testing and Quality Assurance: Verifying that every feature works correctly and provides a smooth user experience.

Technologies and Tools

The UniServe system was developed using Flutter and Dart for building the mobile application, while the backend was implemented with Node.js and Express.js to handle API requests and system logic. The data is stored and managed through a MySQL database using phpMyAdmin. Tools like Postman were used for API testing, and GitHub with Git ensured version control and teamwork efficiency. All development was done within Visual Studio Code (VS Code) as the main coding environment.