

# Report

## Share Your Skills

October 15th 2023

The Share Your Skills (SYS) project was a collaborative effort by a group of four students at KTH, Stockholm. Our mission was to create an application that would make it easy for people to help each other by sharing their skills and expertise. We aimed to connect individuals based on their skills and interests, making collaboration and assistance more accessible.

### 1. Project Description

The SYS application, named Share Your Skills (SYS), operates through an intuitive and user-friendly app. Users have the freedom to create profiles and select the skills they possess. Once their profiles are set up, they receive a customized feed of posts and requests from other users, tailored to their skills. Users can take various actions based on these posts:

*Assignment:* Users have the option to assign themselves to posts that pique their interest and match their skills.

*Request for Help:* The app also allows users to create posts specifying titles, content, deadlines, locations, and the skills required. This feature empowers users to seek help or find collaborators within the SYS community.

Additionally, users have full control over their profiles. They can modify personal information, change login credentials, and update their skill sets.

## 2. Project Structure and Pages

The SYS app is composed of five primary pages:

*Home*: Users land on the Home page, where they discover recommended posts that align with their skills. There's also a convenient skill filter to help users find posts of specific interest.

*My Events*: In this section, users can view their current events, including the posts they've volunteered for and past events they've participated in.

*My Posts*: Users can create new posts, monitor ongoing posts they've initiated, track posts where they seek help, and review their past posts.

*My Profile*: Here, users access their personal information and make any necessary changes.

*Chat* (Future Enhancement): In a forthcoming update, the app will include a chat feature to facilitate communication between users. This functionality will enable users to coordinate and find common availability, perfect for scenarios where a user wants to help another but needs to align schedules.

## 3. Task Division

We effectively split the responsibilities among our team members to ensure a smooth project development:

Frontend Development: Sergio excelled in frontend development. He initially designed the app's user interface using Figma, ensuring a seamless transition when implementing the design into the application. Omar played a vital role in the project, working alongside Sergio in frontend development. His tasks included:

- Setting up the Flutter development environment.
- Building and refining essential front-end pages, including Registration, Login, Add Event, My Event, and their respective subpages.
- Integrating a state management framework for effective data handling.
- Implementing the MVVM architectural pattern for our front-end structure.

Backend Development: Ivans played a pivotal role in deploying the backend and focusing on the implementation of the chat feature. He also took charge of enabling users to modify their profiles, such as changing names, logins, passwords, and skill management.

User Experience (UX) Design: Omar skillfully handled the UX design and worked directly on the frontend code, ensuring that the functionality perfectly matched the design.

Data Management: Robin concentrated on the backend and was responsible for login capabilities, data models, controllers, and services. His work significantly contributed to data management within the application. Ivan also made contributions to skill management.

#### **4. Technologies Used**

The SYS application leveraged the following technologies:

Flutter: This was instrumental in frontend development and creating an intuitive user interface.

Docker: Docker containerization streamlined the deployment process, making it more efficient.

NodeJS: The backend server was built using NodeJS, facilitating seamless communication with the frontend.

MongoDB: Our chosen database for storing and managing user profiles, posts, and skills.

The Share Your Skills (SYS) project was not only a significant accomplishment but also a valuable opportunity for all four of us to learn and apply new technologies. It has the potential to foster meaningful connections and knowledge sharing among users, promoting collaboration and community engagement. As the project continues to evolve, the addition of the chat feature promises to enhance the user experience and further solidify SYS as a versatile and valuable platform.