

Team Members and Individual Contributions

ASE Delivery, AngryFish (Team 17)

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Yuhang Hu	Hours Spent
Authentication and authorization - Backend	20
Create JWT token and connection with Frontend	15
Assist in Delivery Management - Backend	10
Help with Raspberry PI logic	5

Table 1 Individual contribution by the first author.

Mariia Cherepnina	Hours Spent
Methods for the hardware controlling and for the communication with the backend for Raspberry	5
MongoDB database entities and repositories for querying MongoDB	5
REST API	20
Connection and authentication in docker containers	2

Table 2 Individual contribution by the second author.

Danya Liu	Hours Spent
Generate QR code, pop-up window and refine UI	5
Frontend UI Management assist	5
Frontend Delivery Management	5
Raspberry PI logic and setup	12
Raspberry PI main loop assist	3

Table 3 Individual contribution by the third author.

Sathwik Amburi	Hours Spent
Assist in setting up Backend skeleton code and connection to Database	5
User Management - Frontend	15
Delivery UI	25
Raspberry PI logic assist	5

Table 4 Individual contribution by the fourth author.

Jonas Fromm	Hours Spent
Raspberry Pi OS setup and wiring (RFID, LEDs, Sensor)	10
Raspberry Pi configuration file and Python main loop plus LED blink function	20
Containerizing frontend, backend, auth-service and MongoDB	10
Dockerfiles and Docker Compose file	5
Email Notification	15
Gmail account, ngrok account(s), docker hub account, contributions.pdf	2
CI/CD and ngrok deployment	30
Helping with authentication	10

Table 5 Individual contribution by the fifth author.