MENUS   CONFIGURATION

CREATE MENU   ASSIGN PRICELIST

Menu: Prudential GH (updated)

- Breakfast
  - ☑ Continental
  - ☑ Healthy
  - ▬ English
  - ☑ Weekend

- Lunch

- Dinner

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The Art of Software Development

Software system for reducing food waste in restaurants

Key Information

Industry:
HORECA

Project duration:
4 years

Team Size:
8 specialists

Technologies:
- Android SDK, AngularJS, NodeJS
- MySQL, Keycloak, Mocha, Chai

Services:
- Architecture and software design
- Software development
- Software testing
- Deployment
- Maintenance

Highlights

- Platform used in the hospitality industry to help restaurants reduce their food waste.

- The kitchen team uses a specialized scale connected to a touch screen tablet to measure and identify what is the quantity and type of disposed leftovers. An electronic scale records the weight and sends a message to the user, indicating the cost of the food they've put in the bin.

- The meter is connected to cloud software which records and analyses the day's waste. This gives chefs the information necessary to drive improvements in their production processes to cut food waste, saving money and reducing their environmental footprint at the same time.

- The company goal is to link commercial kitchens, cultivate a community of chefs, and motivate others to recognize the value of food and avoid wastage.

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Product Overview

The system is built using special scales connected to smartphones, tablets and application server. All food waste is categorized and weighted and periodically a report is sent to the restaurant.
The project includes applications which run on multiple platforms, such as Android enabled tablets connected to scales, web-based clients, and multiple APIs which serve the web clients and Android applications.

Requirements

The client aimed to develop a solution to minimize food waste in restaurants and institutional kitchens. This solution would involve the integration of specialized scales with mobile devices to track and manage food waste effectively.

Challenges

Our responsibilities encompassed various aspects, including managing the interactions between Android applications and the scales, handling large volumes of data generated by numerous transactions across thousands of tablets, ensuring the reliability and responsiveness of data interactions, maintaining usability and speed for web clients, executing database and infrastructure migrations, and preserving the reliability of automated tests throughout these processes.

Key Product Features

- Log food waste by type, weight, and quantity.

- Manage customer information, generate reports, and track food waste data.

- Administer and control aspects such as application versioning for each Android app release.

- Track real-time data and statistics regarding tablet connectivity status.

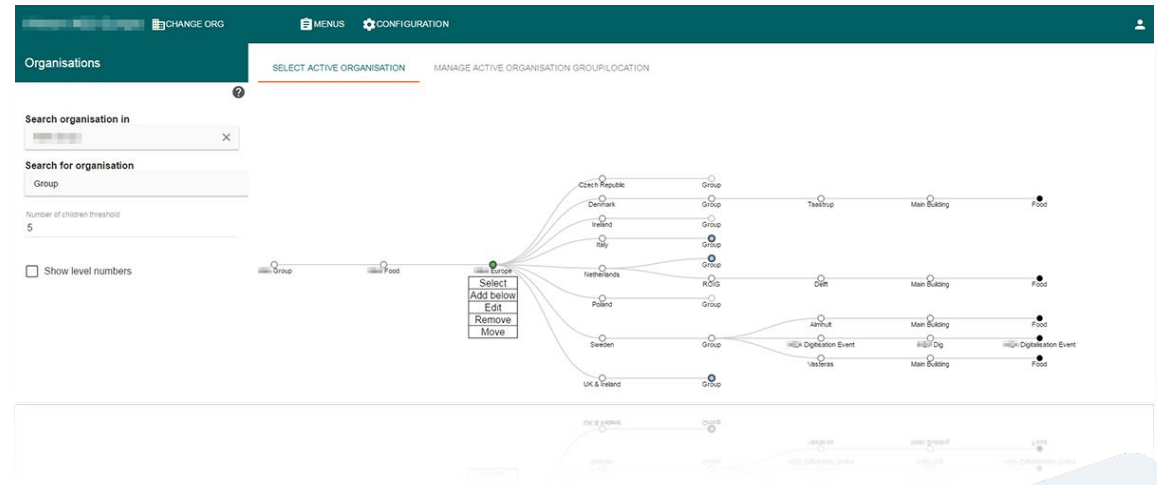- Generate accurate reports and statistics concerning food waste.

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Provided Solutions

The solution entails developing and managing various versions of Android applications tailored to different devices. These apps were built using Android SDK and required integration with a Node.js server. The server, structured around a **microservice architecture**, communicates with Android apps and with web clients developed using AngularJS.

Consistency in authentication across all components is crucial. To achieve this, reusable handlers were implemented to seamlessly connect with multiple external APIs throughout the architecture.

Various web clients were developed to oversee and manage essential data concerning reports, food waste, and external customer details.

Additionally, a series of back-end APIs, structured within a microservice architecture, were created to facilitate interaction with all other system components, including Android applications, web clients, and reporting tools.

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Let's get in touch

ArtSoft Consult is a trusted partner in the IT industry, providing tailored solutions to address your unique business challenges.

With our proven expertise our team delivers innovative solutions and development services.

Drawing from years of experience and industry insights, we deeply understand this industry and we look forward to working with your business.

For more details on our services and team, please **contact us**.

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