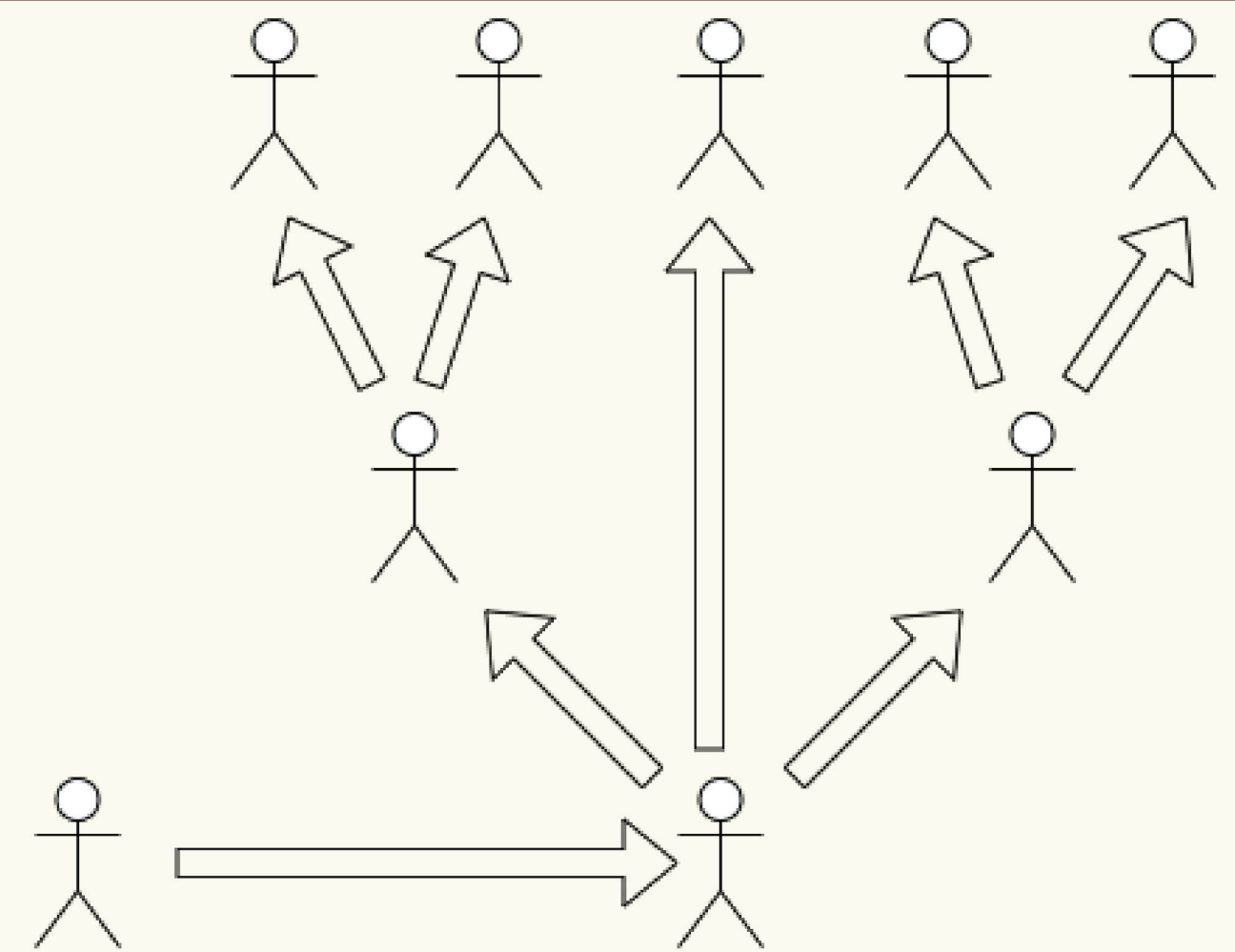# Communication System for the Volunteer Fire Department

Author: Bc. Peter Čajka

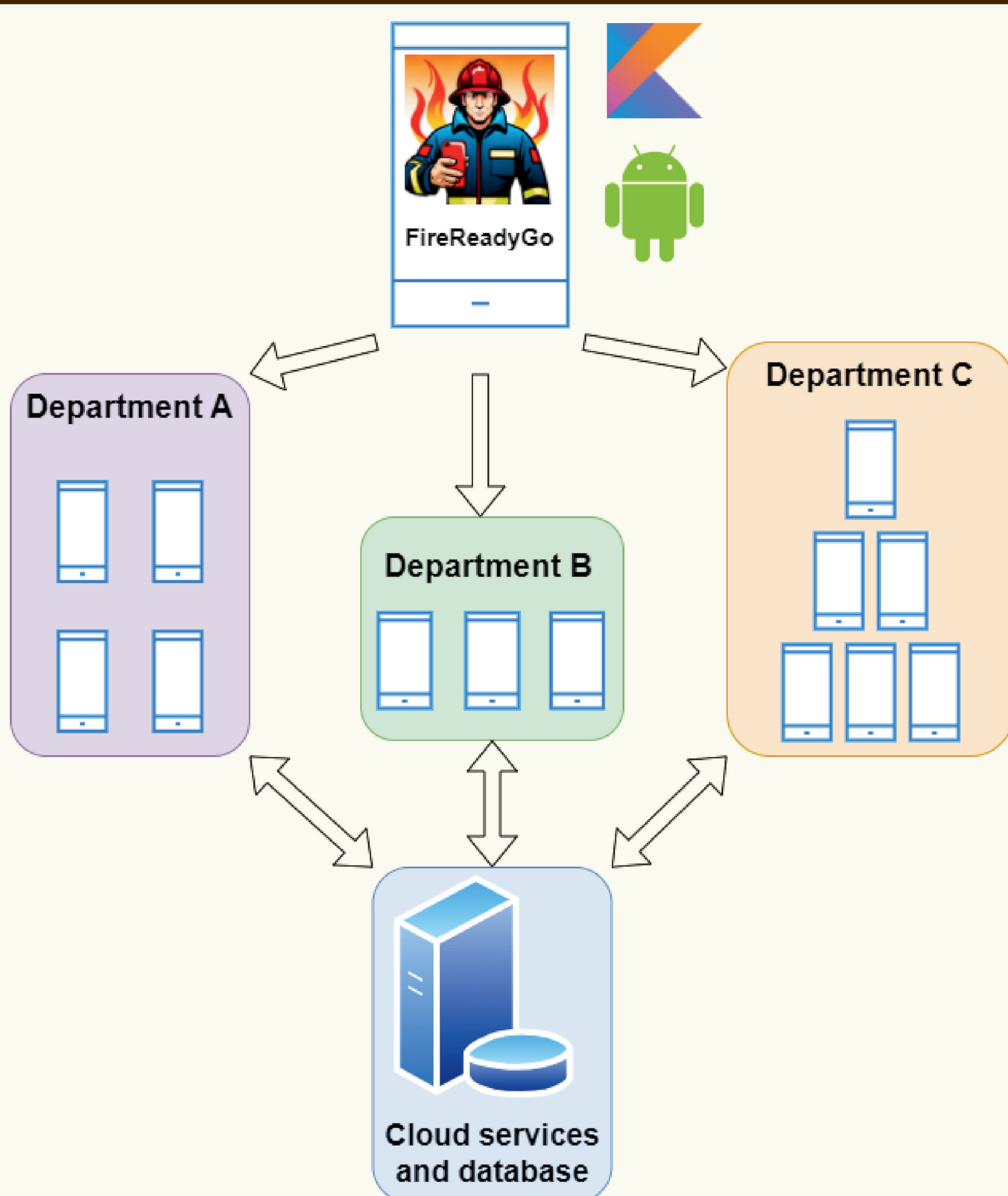Supervisor: Mgr. Kamil Malinka, Ph.D.

MOTIVATION

Volunteer firefighters are not on constant alert at the fire station. In case of an emergency, one or more persons are responsible for calling the entire department. Each call takes a considerable amount of time.
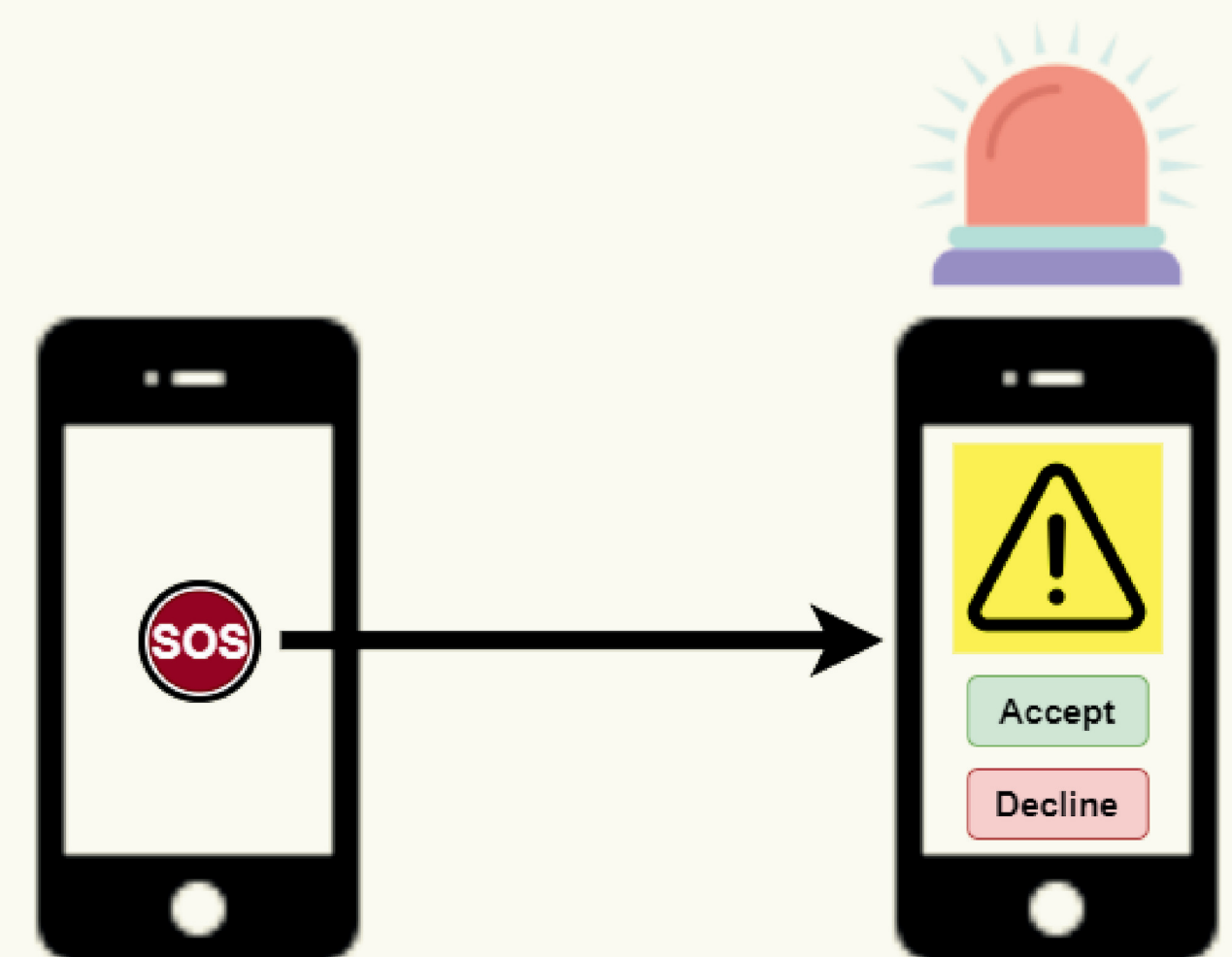

SOLUTION

- distributed mobile application for OS Android
- authentication based on phone numbers
- real-time updates
- online mode with full functionality and offline mode with limited functionality
- custom graphics and avatars
- custom vehicle management with own vehicle pictures
- roles, ranks and different access levels
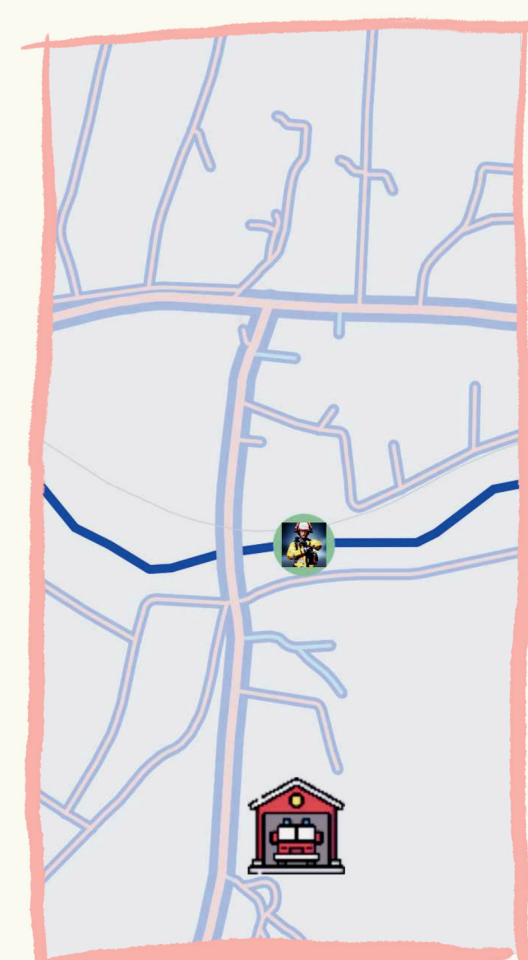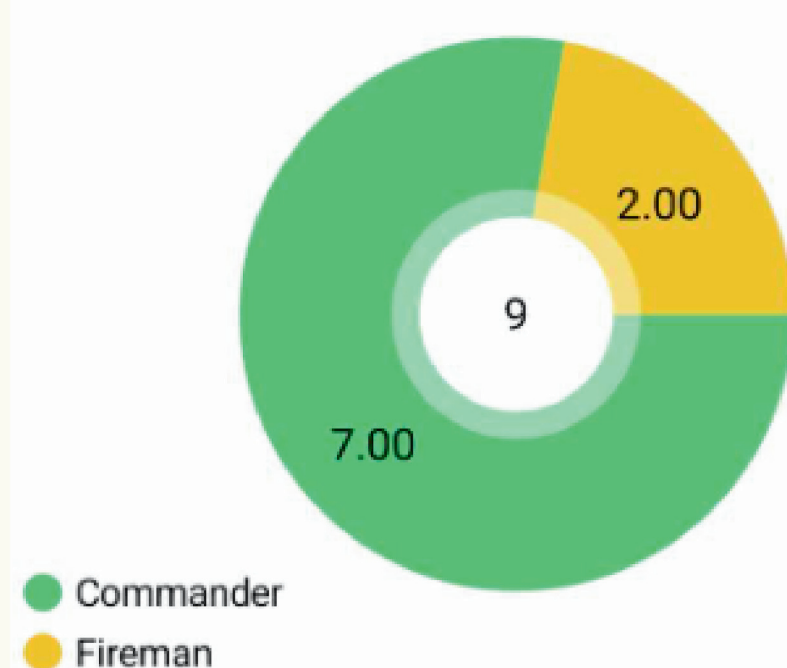- two languages - Slovak and English

URGENT EVENTS

- simple creation in few steps
- selection of events and vehicles
- SMS based - no internet connection is needed
- phones parse incoming SMS and alert the phone owner by starting a loud siren
- notifications with 2 response options

Number of events based on role

OTHER FEATURES

- scheduled non-urgent events with overview of joined members and their positions
- notifications
- location tracking
- gain of experience points after each event
- overall statistics