



# Prime Air

Essential Air Service Provider!

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# Problem Statement

- Airways are widely regarded as the quickest means of delivering services to various organizations.
- Specific organizations pay highly for the upkeep of air facilities, such as technicians, stations, and drivers.
- There is a need for a single point of contact where various organizations can obtain fast air services at affordable prices.

# Our Solution:



- To solve this problem, we came up with a solution which involves quadcopters and drones to assist the organisations in need.
- As a result, a diverse range of organizations receive urgent and cost-effective air coverage at the most opportune times.
- Our quadcopters are efficient enough to capture images, videos and even live video recording thus enabling an aid for different fields such as SWAT, Medical Organization, Fire Brigades or even private organizations.

# Our system consists

## Enterprises:



Drone



Hospital



Police



Ecommerce



Private




# Organizations and Roles

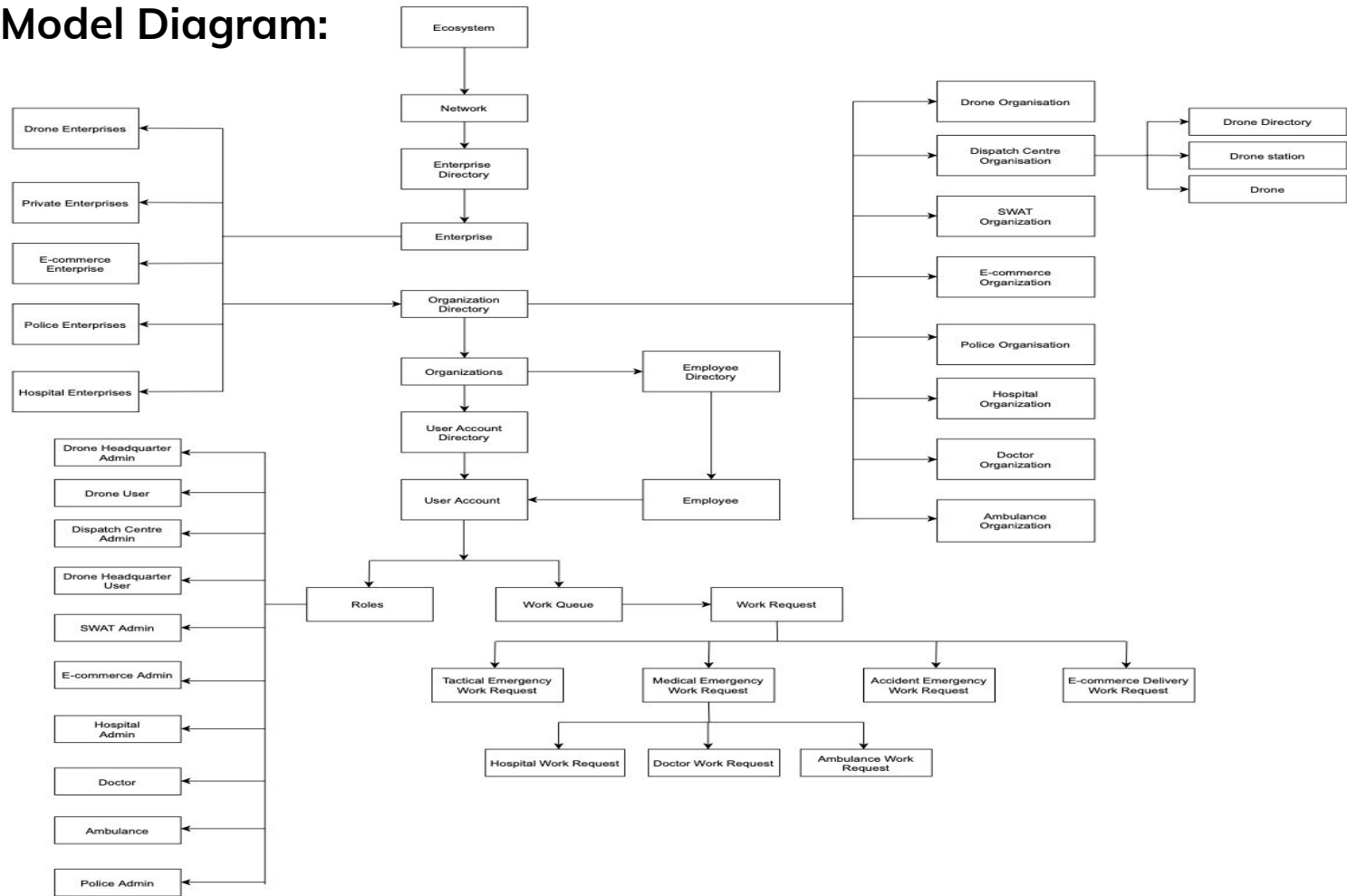
## Organizations:

1. SWAT
2. Drone
3. Dispatch Center
4. Ecommerce
5. Hospital
6. Doctor
7. Ambulance
8. Police

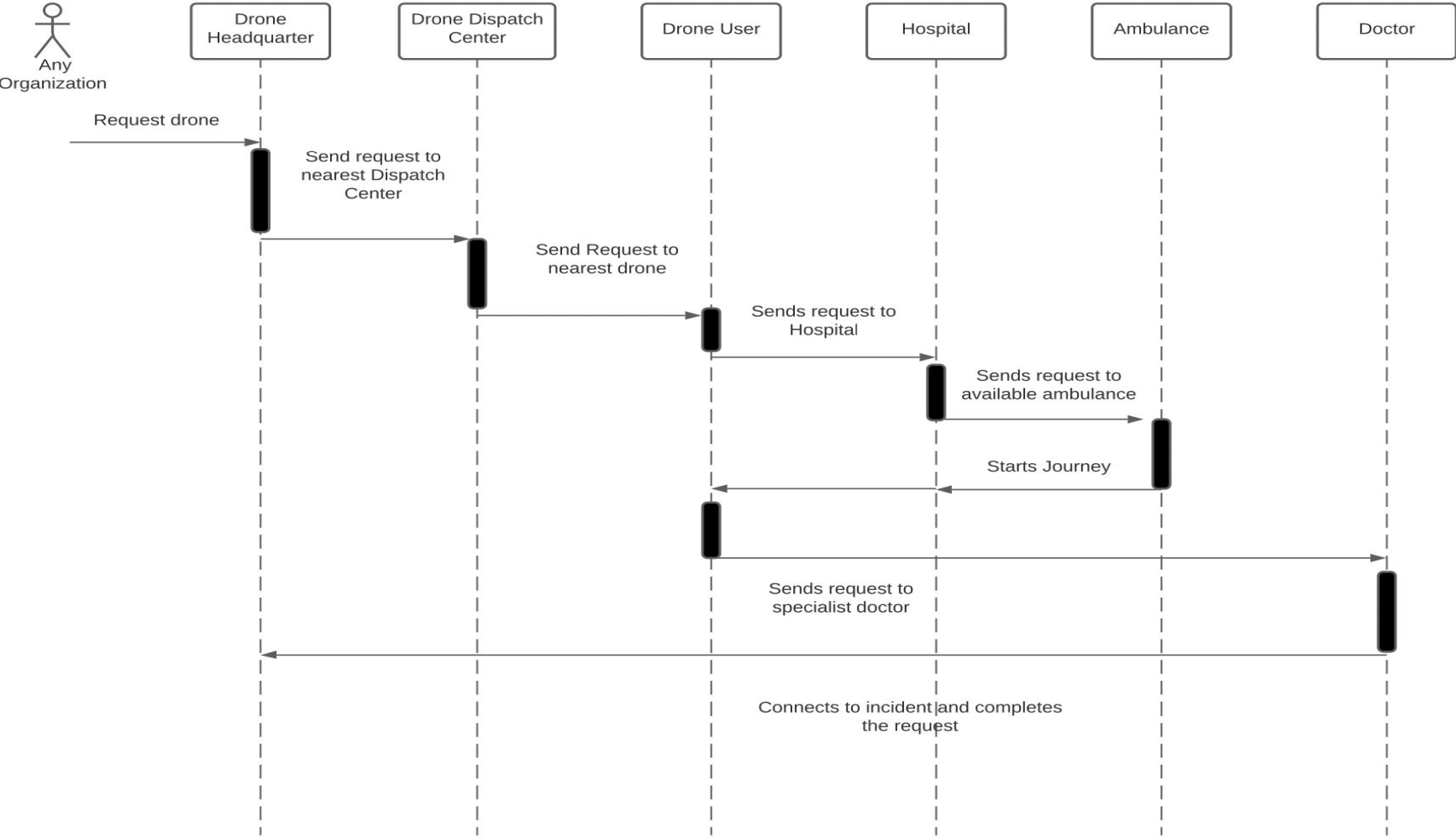
## Roles:

1. SWAT Admin
  2. Drone Admin
  3. Drone User
  4. Drone Headquarter
  5. Drone Headquarter User
  6. Dispatch Center
  7. Ecommerce Admin
  8. Hospital Admin
  9. Doctor
  10. Ambulance
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# Object Model Diagram:



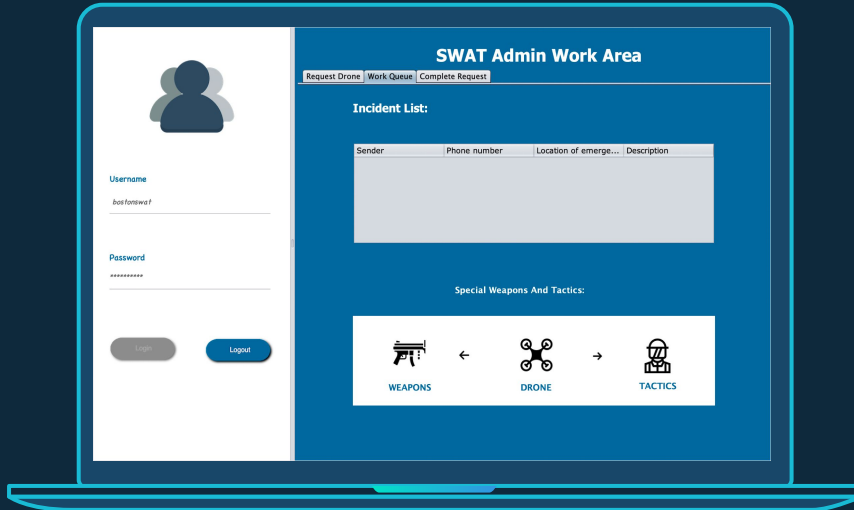
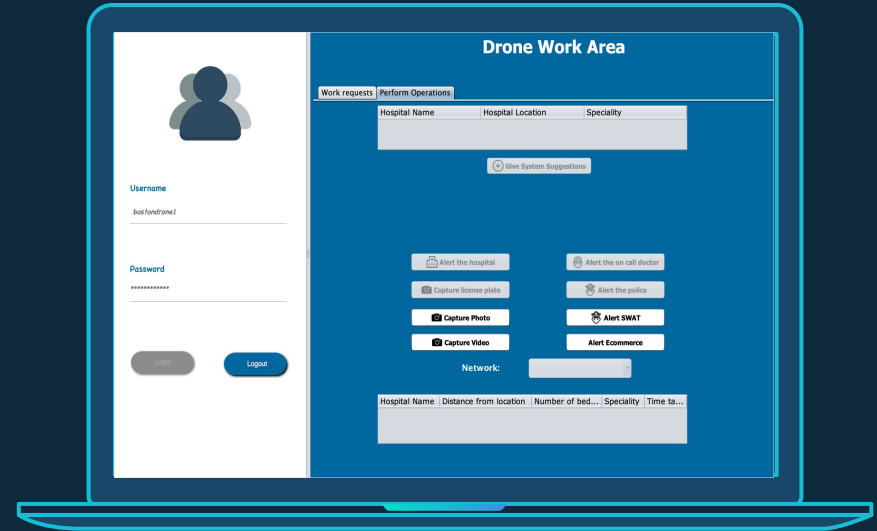
# Sequence Diagram



# Advance Features:

- OpenCV high GUI used to capture video call, images and live stream by opening the web camera
- Google Maps distance matrix API used to calculate distance between hospital and incident/request location
- Google Maps Geocoding API used to convert street addresses to lat, long in google maps
- Recommends hospitals based on high or low priority respectively, based on the density of the incident.
- Recommends hospitals based on the specialist doctors available at the moment.






## Global Scope:

- Currently, our system works at state level - i.e For Massachusetts as a network
- It can be further expanded to national and international level

## Intra Network Communication:

- Intra network work request can be sent from drone in one network to organizations of another network
  - Eg. If a medical request from a city in Massachusetts network is raised, and it requires a specialised treatment from a doctor in California, then required help can be provided via our system.
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# Thanks!

## Any questions?

