Meeting Minutes Journal

Meeting Details	
Date:	17th February 2022
Time:	1600-1700
Place:	Zoom
Attendees:	Zeph, Soon Ann, Pearlyn, Henry, Mr Yeo, Livana
Absentees:	Kelly(Lesson)

Agenda
Meeting with SCDF to get feedbacks

Meeting Minutes

1. Finding out other needs from SCDF - **Henry**
    a. Mr Yeo is not the direct user since he focuses on data analytics and does not have experience with deployments to fire emergencies. Shared about our current persona and needs and moved on to the introduction

2. Raspberry Pi Introduction - **Zeph**
    a. User won't be able to see visual feed, meant for the algo to confirm whether it is a fire
    b. 1 frame/ 3-4 seconds
    c. We will only see the value of the database change and on the dashboard we will see the pin changing colour
    d. Did a live demo with a lighter, and showed the results
3. Dashboard Introduction - **Zeph and Pearlyn**
    a. Pins are all green (Green means there is no sign of fire)
    b. If one of them detects a fire, it will update the database. If the computer vision model or the thermal camera detects fire, it will show a yellow status but if both sends confirmation, the pin status will change to red
    c. Showed a live demo of how the status changed from yellow to red once we do a two step confirmation
    d. The users can confirm it is a fire once the status is red
    e. Is there software for the thermal camera detection solution? Our threshold is 60 degree celsius using IR. We use 60 because it is hard to meet 100 and rarely people will carry things above 60 degree celsius. Our model just

needed to ensure that there is heat emitting and we wrote the codes ourselves.

4. Concerns raised by SCDF - **Mr Yeo**
    a. Thought that the solution was angled at SCDF and SCDF will need to have cameras everywhere to ensure there will be no blind spots around Singapore since SCDF will be responsible to ensure they detect all kinds of fires. (Clarified that the solution was leaning more towards stakeholders like schools to invest and SCDF can tap into the network to have access to data that will allow them to decide with better precision whether it is a real or false alarm.)
    b. Asked who will take responsibility if our solution is aimed at removing DECAM (Push the responsibility to the building managers at the command and control centre)
    c. Mentioned there are a few stakeholders in the market working on this, instead of thinking about cameras across Singapore can we have a visual feed of the situation. An example will be to have a visual feed of the current fire to understand how big or what kind of fire it is which will guide the call centres on how to react and decide on the amount of resources required to be sent to the current emergency.
    d. Suggest for us to include crucial information of the buildings which will allow SCDF to have a better understanding of the kind of fire. For example, fire from a server room or fire from an industrial estate with combustible dry agents or hazardous materials. (We can include in future works)
    e. Mentioned that despite having an algorithm to decide the best route for deployment to emergencies now, we can consider including another function using ArcGIS to use live data and determine a more optimised route based on the current traffic flow. (Future works or we can think about using google map data to incorporate the route)
    f. Suggest to position our solution for high risk installation only, do not need to address whole of Singapore but just buildings with high risk
    g. SCDF does not wait for two minutes, they will activate right away but they need to contact SCDF in two minutes. Our rate of false alarms is quite high and they need to turn their forces back after receiving the call or when they get a false alarm.
    h. A group of companies offer the DECAM services and they will be fine if the rate of false alarm is too high.

5. Project timeline introduction - **Zeph**
    a. Priority will be place on the transition to flask, setting up accounts and improving the computer vision model
    b. Do not need SCDF to help us with UAT unless they have spare resources to do it. We are currently engaging SMU OSS to do the second round of UAT and if SCDF is interested they can help us with the testing as well
    c. Invited SCDF to our mid-term presentation on 1st of March

Action Plan
1. Discuss internally on the feedbacks and suggestions for extra functions. 2.