

# Meeting Minutes Journal

Meeting Details	
Date:	27th January 2022
Time:	1600-1700
Place:	Zoom
Attendees:	Zeph, Soon Ann, Pearlyn, Livana, Henry
Absentees:	Kelly(Lesson)

Agenda
Update on progress and check on the FYP requirements on project management (required documentations)

Meeting Minutes
<ol style="list-style-type: none"><li>1. Update on the overall deliverables (Dashboard, Machine learning, thermal camera set up) - <b>Zeph</b></li><li>2. Specific updates on dashboard, functionality of the dashboard and how SCDF can tap into the dashboard to manage fire respond - <b>Pearlyn</b></li><li>3. Showcase dashboard on firebase account, explain the different status result (0,0 0,1 1,1), various map views, alert systems and shared the next stage of refining the platform - <b>Pearlyn</b></li><li>4. Update on the arrival of thermal camera, the current design and the initial results from testing. Mentioned the limitations of the setup (temperature decreases as the distance is further) and how we intend to set the qualifying metrics to determine whether it is a fire - <b>Zeph</b></li><li>5. Update on computer vision model using yolo5. Went through the initial test results (0.3 precision) of the computer vision model after running it through 100 epochs. Seek advice from the supervising prof on how we can conduct outdoor and indoor testing, and suggestions to increase accuracy apart from using heat as a way to increase model accuracy and whether we should continue with the current model since precision is not above 0.8. Mentioned that google collab pro requires 7 hours to train 100 models, asked whether school has resources to help us - <b>Soon Ann</b></li><li>6. Feedback the current model will produce a lot of false positive and negative - <b>Prof</b></li><li>7. Suggested to increase epochs and see whether it gives a boost to accuracy (1000 epoch), mentioned the school does not have any other resources to help us with training the model (GPU related). - <b>Prof</b></li><li>8. Suggested to ask SCDF on the possibility of collaborating to test indoor fires -</li></ol>

## **Prof**

9. Timeline and project management requirement - **Prof**
  - a. Refer to Chris's email, (Documentation refers to any evidence that shows we are making weekly progress. Examples are meeting minutes and needs to be uploaded in a regular manner)
  - b. Slack channel or telegram channel for us to do work allocations and documentations
10. Plans to change timeline and timeline expectations - **Prof**
  - a. (Plus to minus one or two weeks is doable as long as we have a valid reason)
  - b. Write an email to either prof to change the timeline
  - c. Week 7 or week 8 we will send an email to the sponsors, need to check back with prof and chris.
  - d. We will not be setting the date of the final presentations for now, Chris finalising the dates for mid term and final presentations

## **Action Plan**

1. Need to find research paper or publications that focus on detecting fire using thermal cameras
2. Prof will check with colleague on other ways to help us with the accuracy