

Minutes of the Project Pyro: Internal Minutes

Date : Tuesday, 25th January 2022

Time : 2000 Hrs

Location : Zoom (Online)

Present:

Zeph Ng , Backend Developer & IoT Engineer, Project Pyro

Chua Soon Ann, Computer Vision Developer, Project Pyro

Pearlyn Low, Frontend Developer, Project Pyro

Livana Ho, Project Manager, Project Pyro

Kelly Tay, UI/UX, Project Pyro

Henry Wee, Quality Assurance, Project Pyro

Late with Apologies:

Absent with Apologies:

Item	Discussion	Action(s)) by
1	<i>Computer Vision Model</i>	Chua Soon Ann
1.1	Soon Ann gave a brief introduction on how his computer vision model works (detects both fire and smoke). Talked about the current progress and accuracy of the model.	
1.2	Current precision and recall remains at 0.3 accuracy because fire has no fixed shape, mentioned the need for a thermal camera to increase overall accuracy.	
1.3	To continue working on the model and seek Professor Thiyva for feedbacks	

<p>2</p> <p>2.1</p> <p>2.2</p> <p>2.3</p>	<p>Hardware - Raspberry Pi, Thermal camera</p> <p>Zeph gave an introduction to the hardware used, explain how the thermal camera picks up heat signature and how the results look like</p> <p>Zeph continued to explain the thermal camera has 16 grids, we isolate each cell and see if any cell goes above 60 degree celsius to determine if the heat source is a fire.</p> <p>Zeph then raised the secondary function we talked about previously and tasked Henry to source for a compatible pan tilt hardware</p>	<p>Zeph Ng ,Henry Wee</p>
<p>3</p> <p>3.1</p> <p>3.2</p>	<p>Dashboard</p> <p>Pearlyn gave us a breakdown of her dashboard and how it works. Currently, there are three different status (0,0)[Green] for no fire, (0.1)[Yellow] possibility of a fire and (1,1)[Red] confirmation of a fire.</p> <p>Pearlyn also shared about refining the outlook and adding options such as satellite maps and basic information of the location when we hover our cursor over a particular location.</p>	<p>Pearlyn Low</p>
<p>4</p> <p>4.1</p> <p>4.2</p> <p>4.3</p>	<p>Admin matters</p> <p>Zeph called for a physical meeting with Soon Ann and Pearlyn to integrate the hardware and software</p> <p>Livana suggested changing the Tuesday weekly internal meeting to 31st January to avoid having the meeting during Chinese New year. Next meeting will be on the 31st of January at 2pm.</p> <p>We discussed internally and had Kelly to liaise with OSS and schedule a meeting with SCDF. Zeph also mentioned for Henry and Kelly to start on the wiki page and slides and checked whether a media article is necessary.</p>	<p>Zeph Ng, Chua Soon Ann, Pearlyn Low</p>
<p>With no further items, the meeting adjourned at 2045Hrs</p>		

Prepared by/date

: Henry Wee / 25th January 2022