

Meeting records

Meeting1 Purpose: E-Commerce, Telecoms and IoT three group meetings

Meeting Date: June 26th, 2023

Meeting Time: 15:00-18:00

Meeting Location: Lab, Classroom

Attendees: Yu Qifan, Miao Yunshuo, Hu Jiaxiang, Xin Yixuan, Yang Yuqing, Xing Keyuan, Feng Yiyuan, Wang Zhaoxing, Lin Xuanyu, Liu Guanlong, Yang Ruoxi

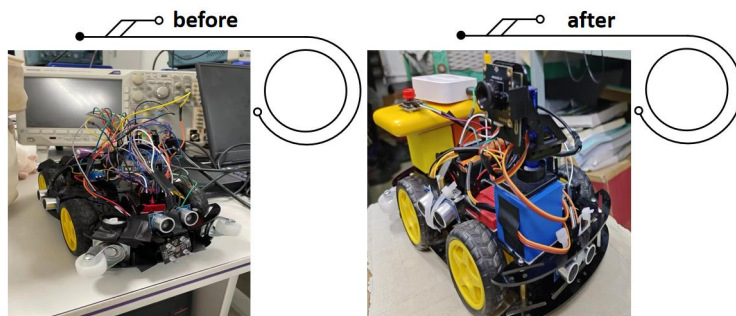


Agenda Item 1: Discussion on how to plan layout about the design of the car and how do I make the component connections secure

Status and Conclusions:

Responsible Persons: Yu Qifan, Miao Yunshuo, Hu Jiaxiang, Xin Yixuan, Yang Yuqing

Deadline: June 29th, 2023



Agenda Item 2: Implementation of Collecting picture samples of 3 chosen objects and Producing a simple GUI to demonstrate the accuracy of the trained algorithm

Conclusions: use python to crawling data from the video of the car design a concise GUI to display frames with detection results and demonstrate algorithmic accuracy.

Responsible Persons: Xing Keyuan, Feng Yiyuan, Wang Zhaoxing

Deadline: June 29th, 2023

```
import requests
import os
import time

# 文件保存目录
download_folder = 'C:/Users/18330/Desktop/103'

# 确保目标文件夹存在
os.makedirs(download_folder, exist_ok=True)

# 指定目标URL
url = 'http://192.168.8.1:8083/action=appshot'

# 初始化图片计数器
image_count = 0

# 循环：抓取帧 - 从网页并下载帧图片
while True:
    # 发送HTTP请求并获取图片内容
    response = requests.get(url)

    # 检查响应状态码
    if response.status_code == 200:
        # 提取文件名并下载
        img_name = f'{image_count + 1}.jpg'

        # 保存图片到本地文件夹
        with open(os.path.join(download_folder, img_name), 'wb') as img_file:
            img_file.write(response.content)

        print(f"第 {image_count + 1} 帧图片下载成功")

        # 增加图片计数器
        image_count += 1

    else:
        print(f"无法下载图片 - 状态码: {response.status_code}")

    # 暂停一秒
    time.sleep(0.5)
```

Agenda Item 3: Implementation of allowing users to login and check their accounts and adding/deleting/modifying information about robot (e.g. name, picture, etc.)

Conclusions:

Responsible Persons: Lin Xuanyu, Liu Guanlong, Yang Ruoxi

Deadline: June 29th, 2023

Welcome to our website!

Please input your username and password!

username

password

Not have a account?

[register](#)

Meeting2 Purpose: E-Commerce, Telecoms and IoT three group meetings

Meeting Date: September 24th, 2023

Meeting Time: 14:00-18:00

Meeting Location: Lab, Classroom

Attendees: Yu Qifan, Miao Yunshuo, Hu Jiaxiang, Xin Yixuan, Yang Yuqing, Xing Keyuan, Feng Yiyuan, Wang Zhaoxing, Lin Xuanyu, Liu Guanlong, Yang Ruoxi



Agenda Item 1: Discussion on how do I make the component connections secure and Discussion on how can software problems at run time be solved through structural improvement

Conclusions: The program execution of Arduino is a loop execution. Assuming the car gets stuck, the sensor data remains almost unchanged for many subsequent cycles, which can be used to determine whether the car is stuck or not.

Responsible Persons: Yu Qifan, Miao Yunshuo, Hu Jiaxiang, Xin Yixuan, Yang Yuqing

Deadline: September 30th, 2023

Agenda Item 2: Implementation of Collecting picture samples of 3 chosen objects and Producing a simple GUI to demonstrate the accuracy of the trained algorithm

Conclusions: design a concise GUI to display frames with detection results and demonstrate algorithmic accuracy.

```
class window(QMainWindow, Ui_window):
    def __init__(self):
        super().__init__()
        self.setupUi(self)
        self.setWindowTitle("YOLOV8 GUI")
        self.char_label.setText('Detection')
        self.undo_button.deleteLater()
        self.lineEdit_4.deleteLater()
        self.lineEdit.deleteLater()
        self.label_6.setText('Resolutions')
        self.label_7.setText('Objects')
        self.lineEdit_2.deleteLater()
        self.lineEdit_3.deleteLater()
        self.label_2 = QLabel('---')
        self.label_2.setAlignment(Qt.AlignHCenter | Qt.AlignVCenter)
        self.label_2.setStyleSheet(
            "color: white; font-weight: bold; font-size: 16px;"
        )
        self.verticalLayout_10.addWidget(self.label_2)
        self.label_3 = QLabel('---')
        self.label_3.setAlignment(Qt.AlignHCenter | Qt.AlignVCenter)
        self.label_3.setStyleSheet(
            "color: white; font-weight: bold; font-size: 16px;"
        )
        self.verticalLayout_12.addWidget(self.label_3)
```



Responsible Persons: Xing Keyuan, Feng Yiyuan, Wang Zhaoxing

Deadline: September 30th, 2023

Agenda Item 3: Implementation of visualising records of explorations

Conclusions: The code is a Java Servlet mainly used to process HTTP requests related to robot information: It determines the specific operation based on the "method" parameter in the request. Obtain the identity (userId) of the current user. Created a Robot DAO instance to access robot information in the database. Perform corresponding operations based on different method parameters, including querying, adding, updating, deleting robot information, etc.

Responsible Persons: Lin Xuanyu, Liu Guanlong, Yang Ruoxi

Deadline: September 30th, 2023



```

1  if (req.getHeader("authorization") != null)
2      doAuthenticationAndAuthorization(req.getHeader("token"));
3
4      req.getHeader("token")
5      Integer passwordId = req.getHeader("passwordId");
6
7  if (req.getHeader("authorization") != null) {
8      req.setHeader("X-Auth-Token", "accessTokenFromAuthentication");
9  } else {
10     req.setHeader("X-Auth-Token", "token");
11 }
12
13 if (req.getHeader("authorization") != null) {
14     String id = req.getHeader("id");
15     doAuthenticationAndAuthorization();
16
17     req.setHeader("X-Auth-Token", "accessTokenFromAuthentication");
18 }
19
20 if (req.getHeader("authorization") != null) {
21     List<Page> list = do.authentication(Integer.parseInt(req.getHeader("id")), "true");
22     return list;
23 }
24
25 req.getHeader("authorization") != null ? do.authentication(id).forward(req, resp);
26 req.setHeader("X-Auth-Token", "accessTokenFromAuthentication");
27 }
28
29 if (req.getHeader("authorization") != null) {
30     req.setHeader("X-Auth-Token", "accessTokenFromAuthentication");
31
32     String id = req.getHeader("id");
33     String login = req.getHeader("login");
34     String loginId = req.getHeader("loginId");
35
36     try {
37         requestBody = do.queryAllAuthenticationPage(list).using(Integer.parseInt(id)).page(Integer.parseInt(list),
38             requestBody, "true");
39         requestBody.put("login", "accessToken");
40         return responseBody;
41     } catch (Exception e) {
42         return new BadRequestException(e);
43     }
44 }
45
46 return do.authentication(req.getHeader("id"), requestBody);

```

Meeting4 Purpose:The connection of three groups

Meeting Date: October 6th, 2023

Meeting Time: 18:00-21:00

Meeting Location: Lab,Classroom

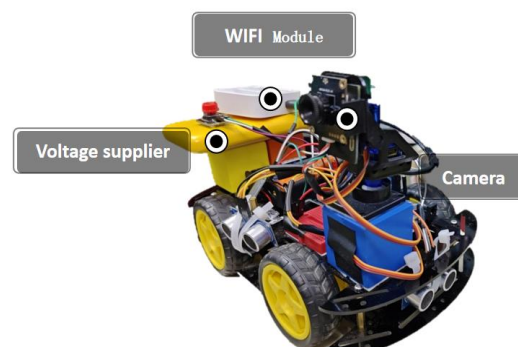
Attendees: Yu Qifan, Miao Yunshuo, Hu Jiaxiang, Xin Yixuan, Yang Yuqing,Xing Keyuan, Feng Yiyuan, Wang Zhaoxing,Lin Xuanyu,Liu Guanlong,Yang Ruoxi



Agenda Item 1: Discussion on WiFi part and Bluetooth Module,connected with IoT and E-Commerce

Conclusions:

- 1.WIFI Module:Core component of WIFI part
- 2.Voltage supplier:From unstable bread board supply to stable voltage source
- 3.Camera:Transfer pictures to the pc via WIFI
- 4.Bluetooth Module:Connect the Bluetooth module to the microcontroller,initialize the Bluetooth module,and edit the serial port



Responsible Persons: Yu Qifan, Miao Yunshuo, Hu Jiaxiang, Xin Yixuan, Yang Yuqing

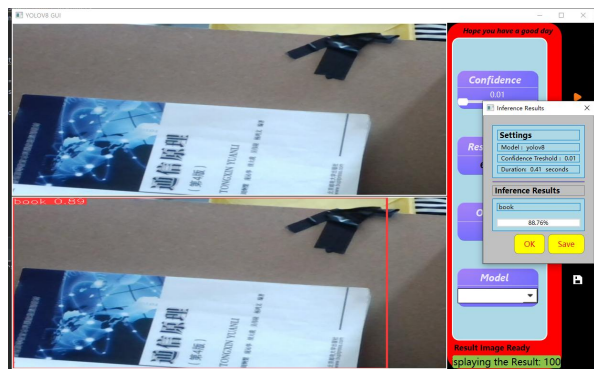
Deadline: October 8th, 2023

Agenda Item 2:The problem about YOLO V8,connected with Telecoms and E-Commerce

Conclusions: If the recognition effect is not ideal, we can also adjust the confidence level at any time to achieve the best effect.

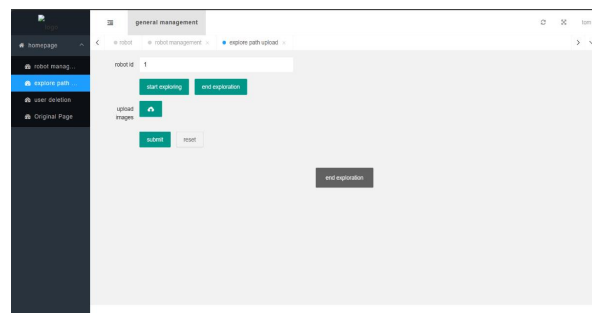
Responsible Persons: Xing Keyuan, Feng Yiyuan, Wang Zhaoxing

Deadline: October 8th, 2023



Agenda Item 3: Intergration of all possible functions and web optimization,connected with Telecoms and IoT

Conclusions: For users to operate the database more easily, after identifying the captured images, users can directly log in to the website locally and input the identified images and required data into the database, Then users can directly browse the data in the database on the website.



Responsible Persons: Lin Xuanyu,Liu Guanlong,Yang Ruoxi

Deadline: October 8th, 2023

Meeting5 Purpose: Preparation of Final Pre and Demo

Meeting Date: October 9th, 2023

Meeting Time: 17:00-20:00

Meeting Location: Lab,Classroom

Attendees: Yu Qifan, Miao Yunshuo, Hu Jiaxiang, Xin Yixuan, Yang Yuqing, Xing Keyuan, Feng Yiyuan, Wang Zhaoxing, Lin Xuanyu, Liu Guanlong, Yang Ruoxi

