

LTI FINAL PRESENTATION

Ahmet Yasir Cilvez - Open Zeka

Outline

- The Company: Open Zeka
- Project Description
- Progress
- Conclusion



Open Zeka

- Open Zeka was established in Ankara to develop intelligent systems.

Areas of Working on

- Image analysis with an accuracy close to human perception
- Deep learning-based artificial intelligence algorithms
- Artificial intelligence-based services and algorithms



Project Description

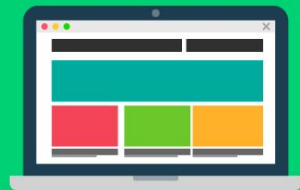
Stock Management System

- Vue.js based front-end
- Node.js based back-end
- PostgreSQL database



Progress - What did I do?

- Full Stack Development - Frontend & Backend



FRONTEND



BACKEND

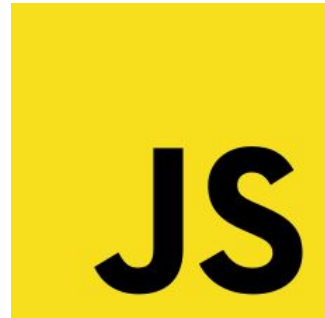
Progress - What did I learn?



Vue.js



Vuetify



HTML



CSS



Progress - What did I learn?



Progress - What did I learn?



Progress - What did I do?

- User Profile Page Design
- Dashboard Design
- New Product Adding Page Design
- Products & Categories Frontend - Backend Designs
- WebRTC Communications



User Profile Page

STOK YÖNETİMİ

ANA SAYFA

DEPOLAR

STOCKS

PRODUCTS



Hoşgeldin, ahmet



Hesap Bilgileri



Parolayı Değiştir



Hesap Ayarları

Hesap Bilgileri



İsim	ahmet
Soyisim	yasir
Kullanıcı adı	ahmet
E-posta	ahmetyasir@mail.com

Dashboard

STOK YÖNETİMİ

ANA SAYFA

DEPOLAR

STOCKS

PRODUCTS



ÜRÜNLER

Toplam
0

DAHA FAZLA BILGI

STOKLAR

Toplam
256

DAHA FAZLA BILGI

DEPOLAR

Toplam
256

DAHA FAZLA BILGI

ID	Status	Logtime	Name	Changes	User
No data available					
Rows per page: 5 - < >					

To show stocks please select a store

New Product Adding Page - 1

Activities Google Chrome Sal 21:40

DuaLipa Gre x MDAemon W x OpenZeka - C x LTI Midprese x stock-manag x WhatsApp x nvidida - Goo x +

localhost:3000/products Update

Files Trendyol Gitti AGU MAIL Canvas Çeviri motor iş Bitirme din ürün faydalı OneD Other bookmarks

STOK YÖNETİMİ ANA SAYFA DEPOLAR STOKLAR ÜRÜNLER

Set Ürün Oluştur

KAPAT KAYDET

ÜRÜN BİLGİLERİ

Marka* nvidia Stok Kodu* 43342341

ÜRÜNLERİ SEÇ

KATEGORİ SEÇ

Gtin Numarası* 321232213 Ürün Fiyatı* 32.132,32 ₺ \$ €

ÜRÜN GÖRSELLERİ

ÜRÜN AÇIKLAMASI

KDV Dahil

GERİ İLERİ

GETMODELS

Nvidia-GeFor....jpg nvidia.jpg Show all

New Product Adding Page - 2

Activities Google Chrome Sal 21:35

DuaLipa Greates x MDaemon Webn x OpenZeka - Goog x LTI Midpresentat x stock-managem x WhatsApp x +

localhost:3000/products

N11 Trendyol Gitti AGU MAIL Canvas Çeviri motor İş Bitirme din ürün faydalı OneD Other bookmarks

STOK YÖNETİMİ

ANA SAYFA DEPOLAR STOKLAR ÜRÜNLER

Tekil Ürün Oluştur SET ÜRÜN

ÜRÜN BİLGİLERİ

KATEGORİ SEÇ

ÜRÜN GÖRSELLERİ

ÜRÜN AÇIKLAMASI

Ürün Adı: NVIDIA RTX

Gtin Numarası*: 74587444511

Stok Kodu*: 214421413521

ÜRÜN FİYATLANDIRMA

Güncel Kur Tablosu

	\$	₺	€
1		14.52	1.05

KDV Oranı: 18

TRY: 9.990,00 KDV'li: 11.788,20

USD: 688,02 KDV'li: 811,86

EUR: 655,25 KDV'li: 773,20

KAPAT KAYDET

New Product Adding Page - 3

Activities Google Chrome Sal 21:41

DuaLipa Gre x MDaemon W x OpenZeka - C x LTI Midpres x stock-manag x WhatsApp x nvidia-Goc x +

localhost:3000/products

N11 Trendyol Gitti AGU MAIL Canvas Çeviri motor İş Bitirme din ürün faydalı OneD Other bookmarks

STOK YÖNETİMİ

ANA SAYFA DEPOLAR STOKLAR ÜRÜNLER

Set Ürün Oluştur KAPAT KAYDET

ÜRÜN BİLGİLERİ

ÜRÜNLERİ SEÇ

KATEGORİ SEÇ



ÜRÜN GÖRSELLERİ

ÜRÜN AÇIKLAMASI

GETMODELS

Ekran Kartı Tasiyici kart

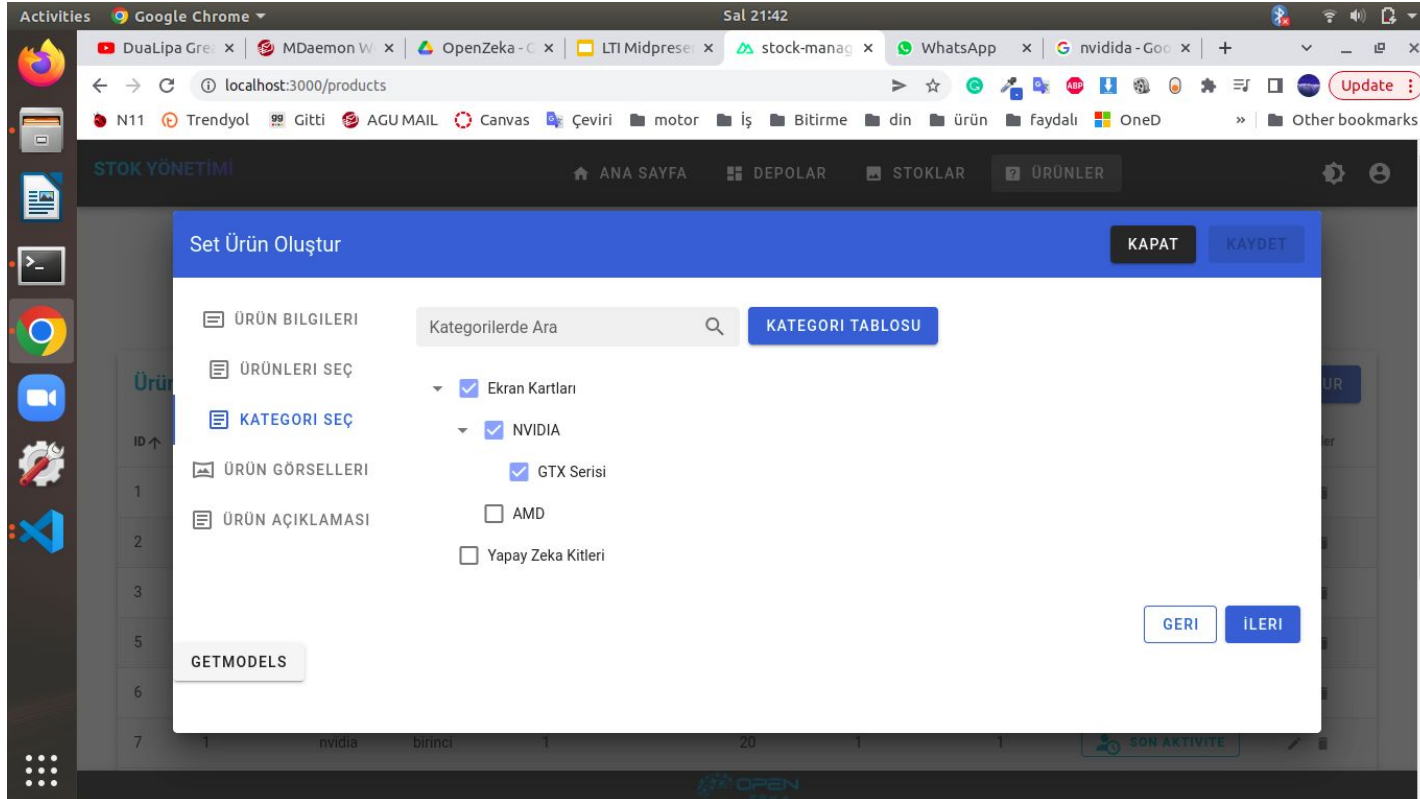
Setteki Ürünler

1	 Ekran Kartı	Adet: 1
2	 Tasiyici kart	Adet: 3

A

GERİ İLERİ

New Product Adding Page - 4



Category Listing Algorithm

```
[
  { id: 0, parent: 0, level: 0, name: 'root' },
  { id: 26, parent: 0, level: 1, name: 'Ekran Kartları' },
  { id: 27, parent: 26, level: 2, name: 'NVIDIA' },
  { id: 28, parent: 27, level: 3, name: 'GTX Serisi' },
  { id: 29, parent: 26, level: 2, name: 'AMD' },
  { id: 30, parent: 0, level: 1, name: 'Yapay Zeka Kitleri' }
]
```

[categoryinfoDialog.vue#8651:224](#)

```
▼ Array(2) ⓘ
  ▼ 0:
    ▼ children: Array(2)
      ► 0: {id: 27, parent: 26, level: 2, ni
      ▼ 1:
        ► children: []
          id: 29
          level: 2
          name: "AMD"
          parent: 26
        ► [[Prototype]]: Object
          length: 2
        ► [[Prototype]]: Array(0)
      id: 26
      level: 1
      name: "Ekran Kartları"
      parent: 0
        ► [[Prototype]]: Object
      ▼ 1:
        ► children: []
          id: 30
          level: 1
          name: "Yapay Zeka Kitleri"
          parent: 0
        ► [[Prototype]]: Object
          length: 2
        ► [[Prototype]]: Array(0)
```


Category Listing Algorithm

```
async create(@Body(ValidationPipe) data: CategoryDto) { //new category
  const create_cat = await this.categoryService.createCategory(data);
  let categoryArray = (await this.categoryService.allCategory()).data
  let newArray = []
  console.log(categoryArray)
  const children = { children: [] }
  for (let i = 0; i < categoryArray.length; i++) {
    categoryArray[i]['children'] = []
    newArray.push(categoryArray[i])
  }

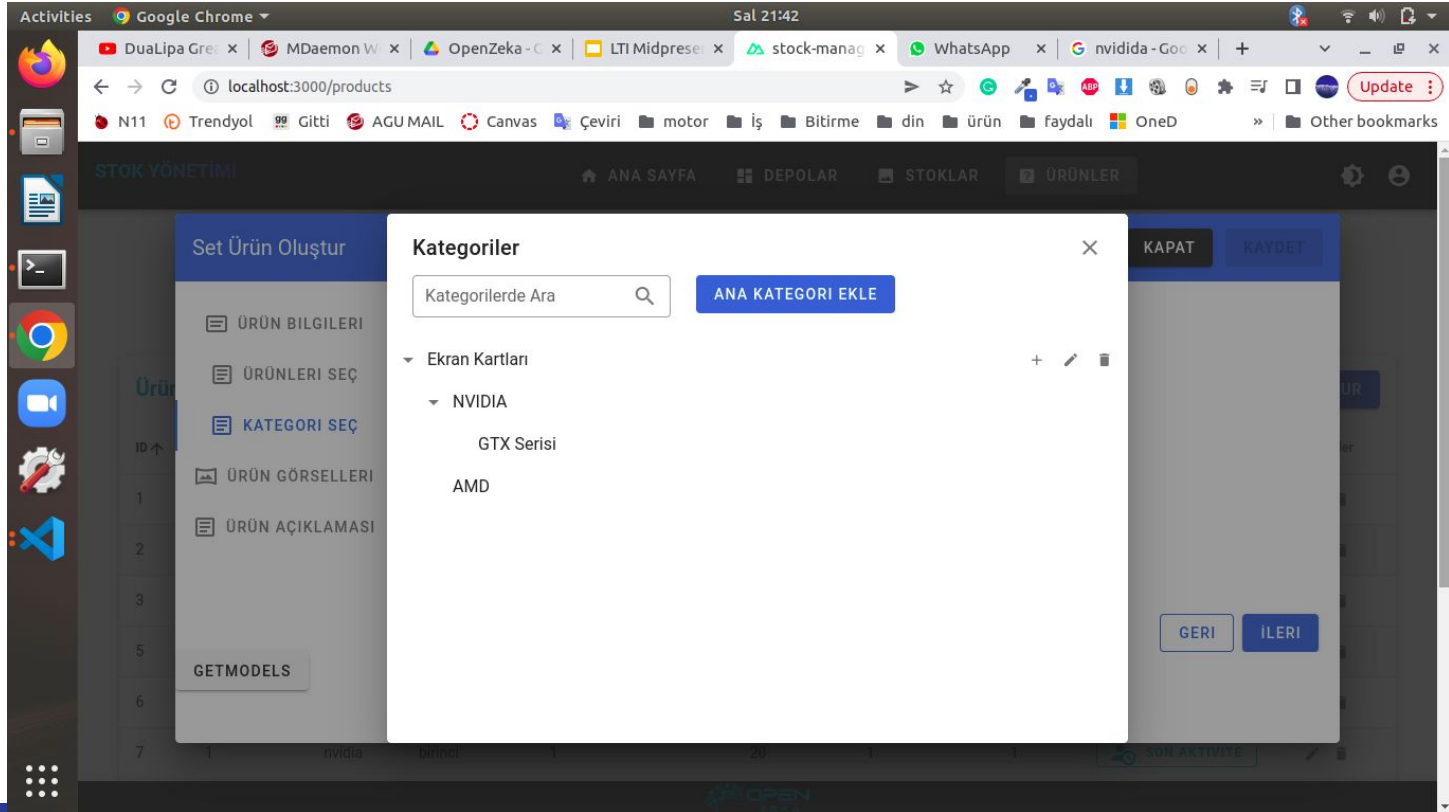
  let parent = {
    id: 0, name: "", parent: 0, level: 0, children: []
  }
  let maxLevel = 0

  for (let i = 1; i < newArray.length; i++) {
    if (maxLevel < newArray[i].level) {
      maxLevel = newArray[i].level
    }
  }
}
```

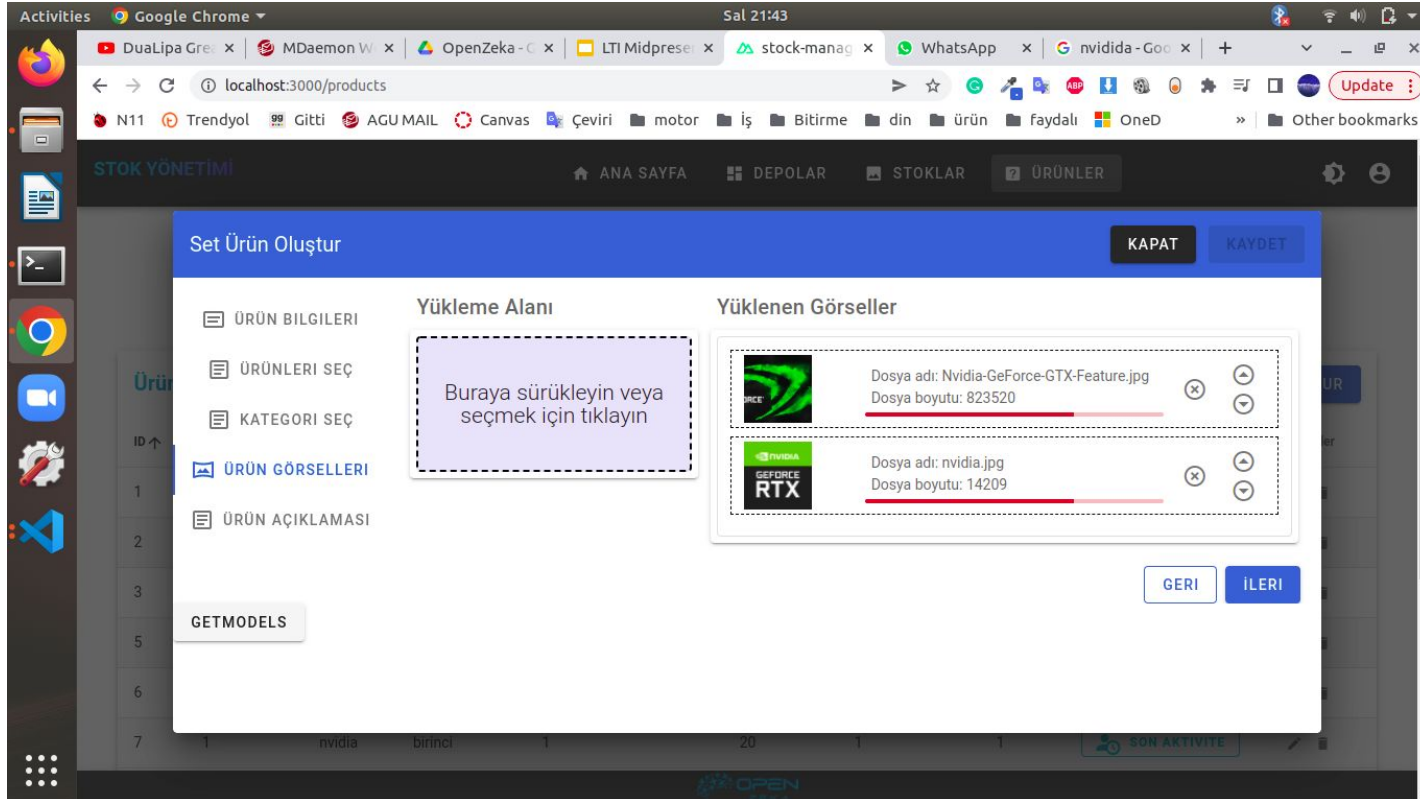
```
for (let levels = maxLevel; levels > 0; levels--) {
  const sameLevels = newArray.filter(element => element.level === levels)
  for (let k = 0; k < sameLevels.length; k++) {
    parent = newArray.find(element => {
      // https://appdividend.com/2022/01/29/javascript-array-find/#:~:text=return element.id === sameLevels\[k\].parent
      return element.id === sameLevels[k].parent
    });
    if (parent) {
      parent.children.push(sameLevels[k])
    }
  }
}

let renderedList = []
renderedList.push(parent)
return renderedList
}
```

New Product Adding Page - 5



New Product Adding Page - 6

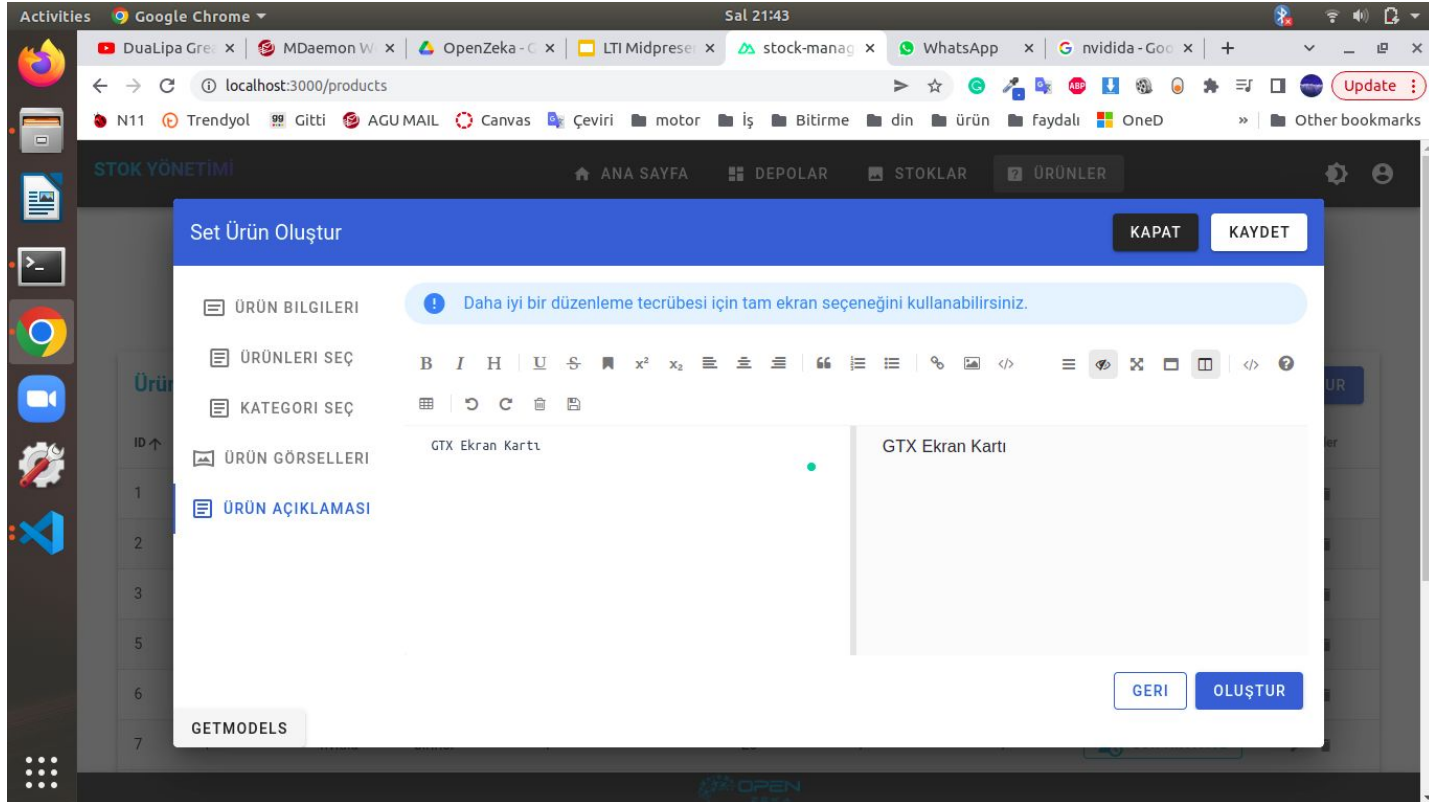


File Saving System

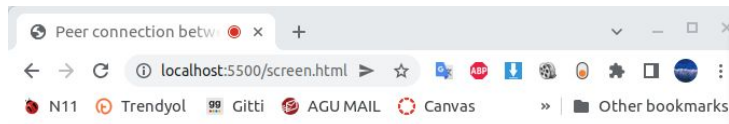
1. Controlling size of the file
2. Controlling type of the file - jpg, jpeg or png
 - a. ffd8ffe0
 - b. ffd8ffe1
 - c. ffd8ffe2
 - d. 89504e47
3. Storing images in a folder at server side
4. Storing path and the name the images in database



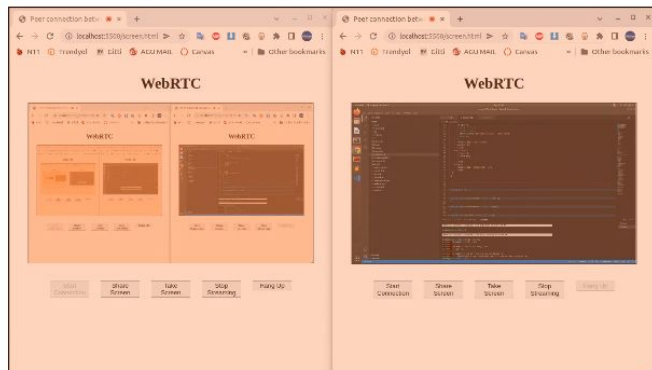
New Product Adding Page - 7



WebRTC



WebRTC



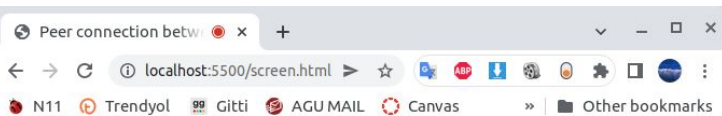
Start
Connection

Share
Screen

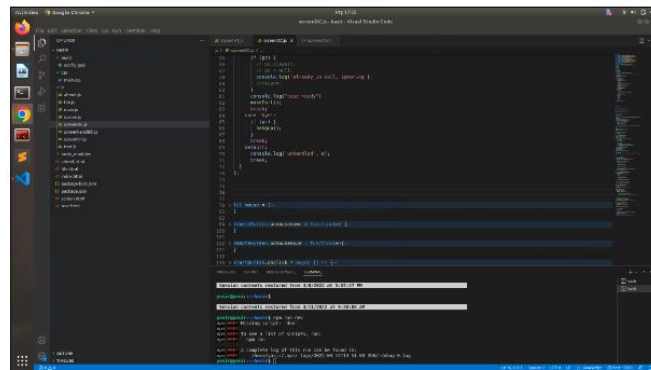
Take
Screen

Stop
Streaming

Hang Up



WebRTC



Start
Connection

Share
Screen

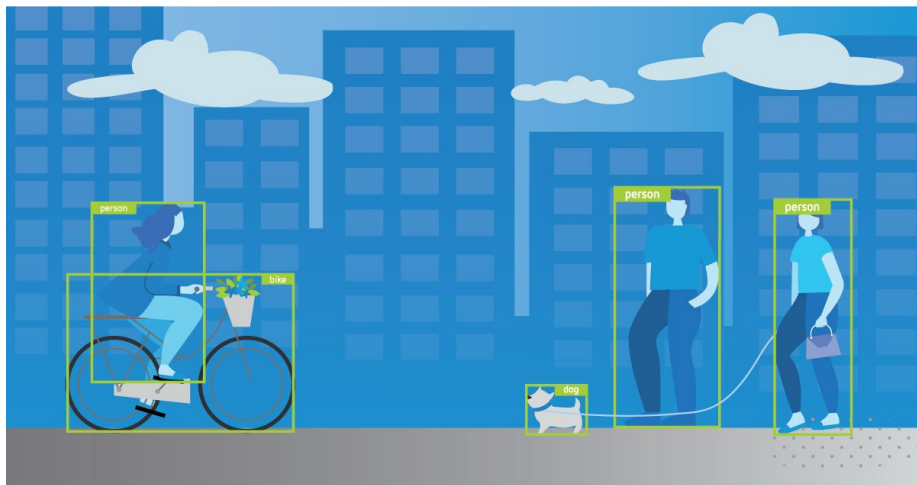
Take
Screen

Stop
Streaming

Hang Up

NVIDIA DLI - AI ON JETSON NANO COURSE


- Run and set up Jetson Nano
- Training with new datasets
- Image classification and regression



What Was Planned and Achieved?

- Finishing Stock Management System Project: Almost finished
- Working on Backend systems: Creating endpoints, using database, security systems
- Starting to another project: Decided to finish first project
- Good experience in Full Stack designs

Additional Works

- Finishing a DLI course
 - Reading articles about AI and watching panels on NVIDIA GTC
- 

Conclusion


How was my internship experience?

- I learned lots of new things used in software and web area.
- I found a change to be in a good environment to develop myself.

What is the point of working on Full Stack?

- Understand how UIs, servers, databases, communication protocols etc are working.
- Understand the whole concept, logic of an application, and make almost everything you think.





Thank You!
Any Question?