

查询结果

郦城果岭

海淀区，四季青

65k

郦城工作区

海淀区，四季青

36k

北坞嘉园北里

海淀区，颐和园

70k

骚子营

海淀区，颐和园

75k

# 小区房价可视化平台

《GIS设计与应用》课程作业

田雨沛



# DEMO

[house.xiaotianxt.cn](http://house.xiaotianxt.cn)

# 模块介绍

## 地图部分

- 使用openstreet map瓦片栅格数据(OSM tile)
- 基本的交互功能

# 模块介绍

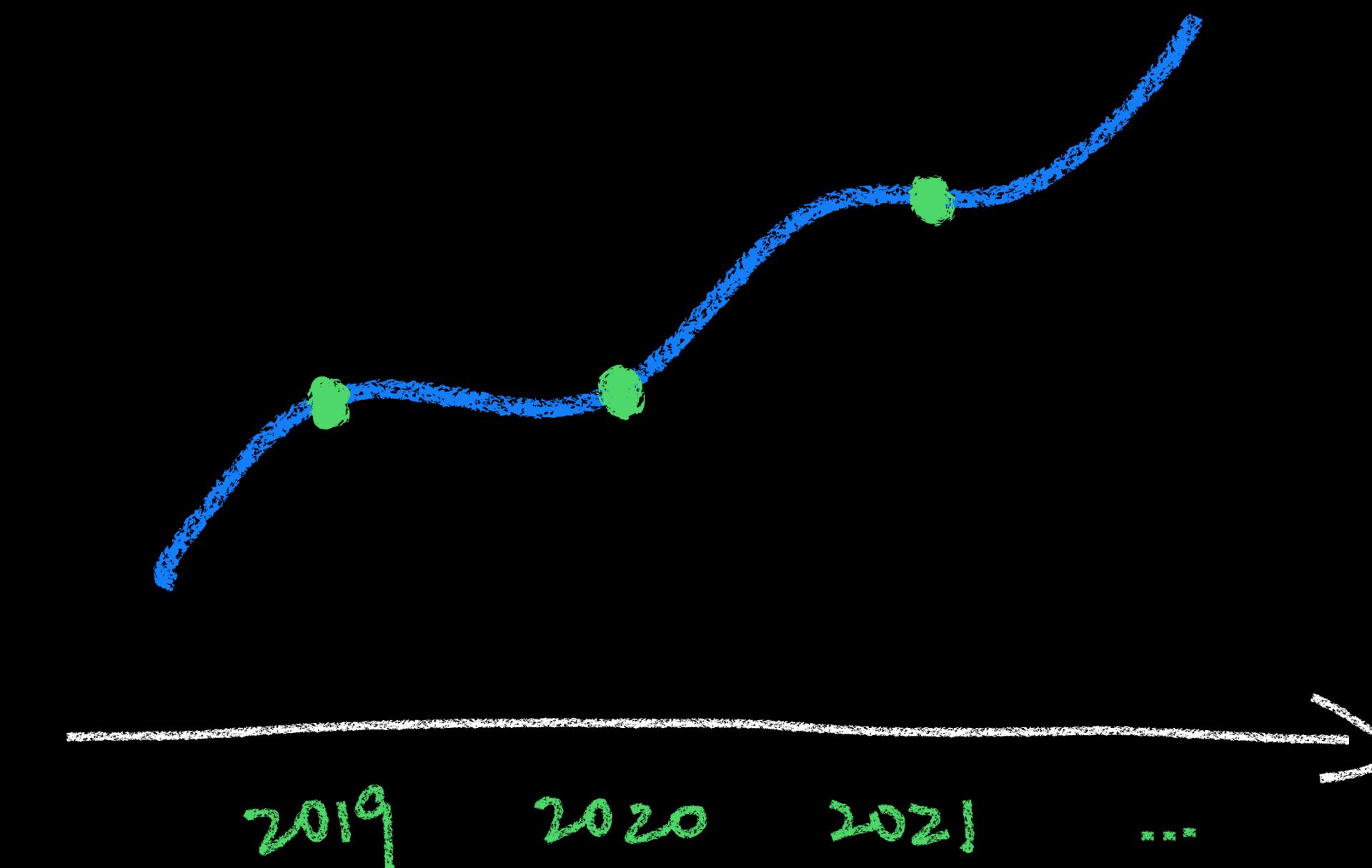
## 搜索部分

- 普通检索
  - 按小区名称模糊匹配
- 高级搜索
  - 多边形范围查询
  - 价格范围查询
  - 通行时间查询
  - 组合查询

# 模块介绍

## 信息展示

- 匹配结果列表预览
- 房价趋势图



# 技术架构

## 数据库开发

- mongoDB
- ...小插曲

“

```
{  
  "_id" : ObjectId("60b399704a9f0ba01e1d4b62") ,  
  "properties" : {  
    "city" : "北京" ,  
    "date" : "20210521" ,  
    "district" : "亦庄开发区" ,  
    "area" : "马驹桥" ,  
    "xiaoqu" : "珠江逸景" ,  
    "price" : 27736 ,  
    "sale" : 98  
  } ,  
  "geometry" : {  
    "type" : "Point" ,  
    "coordinates" : [  
      116.543077 ,  
      39.740606  
    ]  
  }  
}
```

”

```
mongo xiaotianxt.cn
mongod (mongo)  #1 ~ (-zsh)  #2 +
> show dbs
READ_ME_TO_RECOVER_YOUR_DATA 0.000GB
admin 0.000GB
config 0.000GB
> use READ_ME_TO_RECOVER_YOUR_DATA
switched to db READ_ME_TO_RECOVER_YOUR_DATA
> show tables
README
> db README.find()
{ "_id" : ObjectId("60a4a8ea0b998b0ff2e51c28"), "content" :
  "All your data is backed up. You must pay 0.02 BTC to 16jE
  6yZiZnX8enpnsdwUcxuV4NDY1NAUtL 48 hours for recover it. After
  48 hours expiration we will leaked and exposed all your data.
  In case of refusal to pay, we will contact the General Data
  Protection Regulation, GDPR and notify them that you store user
  data in an open form and is not safe. Under the rules of the law,
  you face a heavy fine or arrest and your base dump will be dropped
  from our server! You can buy bitcoin here, does not take much time to buy https://localbitcoins.com
  with this guide https://localbitcoins.com/guides/how-to-buy-bitcoins After paying write to me in the mail with your DB
  IP: mydataback@mailnesia.com and you will receive a link to
  download your database dump." }
```

# 技术架构

## 后端开发

- Python Flask: 动态web服务响应
- pymongo: 数据库连接

```
self.client = pymongo.MongoClient("mongodb://xiaotianxt.cn")
```

# 技术架构

## 前端开发

- Bootstrap: 响应式框架、弹性布局
- Font Awesome + Chart.js: 人性化的交互按钮、图表展示
- openlayers: 图层管理、矢量编辑、投影转换
- npm: 包管理工具

# 应用部署

## 前端部署

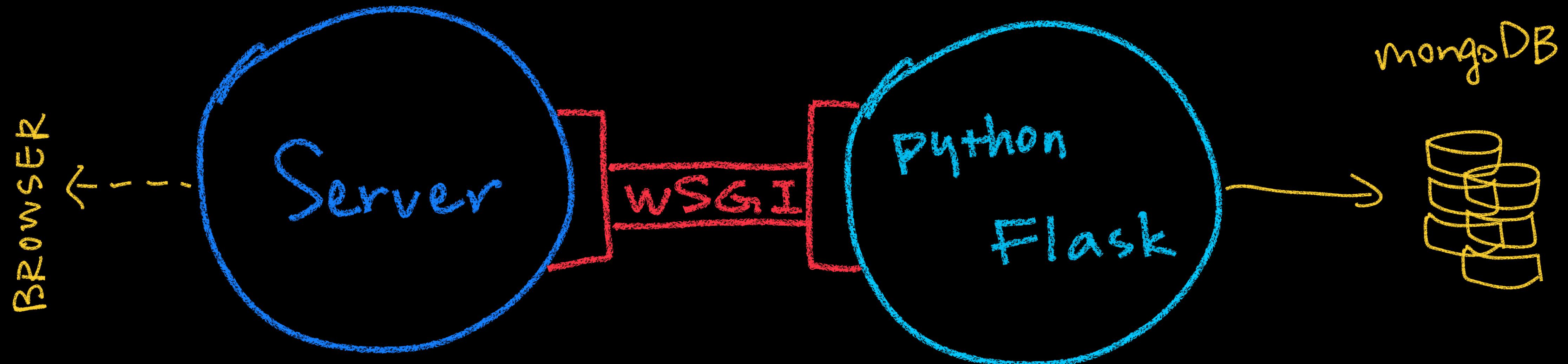
- parcel-bundler: 打包网页并压缩



# 应用部署

## 后端部署

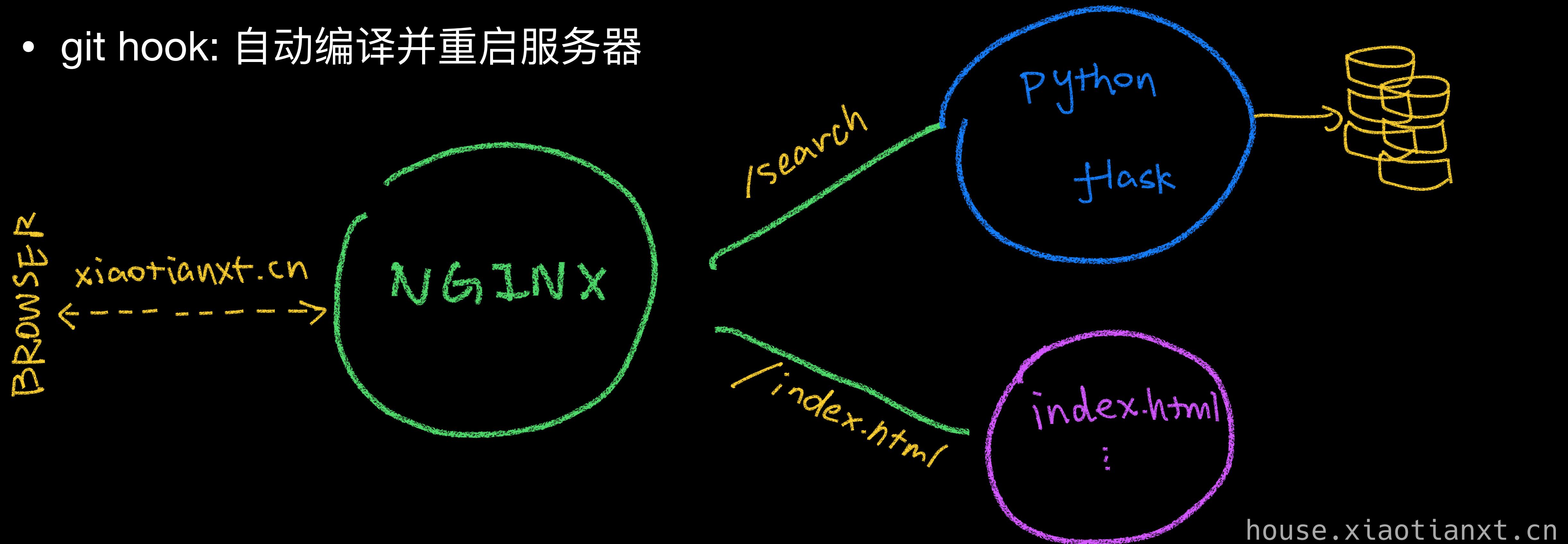
- uWSGI:



# 应用部署

## Web服务部署

- Nginx: 反向代理
- git hook: 自动编译并重启服务器



# 应用部署

## Web服务部署

- Nginx: 反向代理
- git hook: 自动编译并重启服务器

# 用户交互

- 资源加载等待界面
- 合理的动画过渡
- 响应式网页设计
- HTTPS加密通讯

# 期待改进.....

- 优化数据库爬虫
- 列表翻页...

Results ...

xx 小区	72k
xx 小区	72k
xx 小区	72k

[1] 2 3 ... 20

谢谢！