**Back End (django) (127.0.0.1:8000)**

**Proj->Proj->settings.py**

INSTALLED\_APPS = [

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.

'rest\_framework',

'corsheaders'

]

CORS\_ORIGIN\_WHITELIST=["http://localhost:4200"]

MIDDLEWARE = [

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.

'corsheaders.middleware.CorsMiddleware',

'django.middleware.common.CommonMiddleware'

]

**Proj->app->models.py**

from django.db import models

# Create your models here.

class OnlineUsers(models.Model):

name = models.CharField(max\_length=100)

phone\_num = models.CharField(max\_length=10)

pw = models.CharField(max\_length=100) # IntegerField

retype\_pw = models.CharField(max\_length=100)

**Proj->app->serializers.py**

from rest\_framework import serializers

from .models import OnlineUsers

class OnlineUsersSerializer(serializers.ModelSerializer):

class Meta:

model=OnlineUsers

fields=['id','name','phone\_num','pw','retype\_pw']

**Proj->app->views.py**

from django.db import models

from .models import OnlineUsers

from .serializers import OnlineUsersSerializer

from rest\_framework import viewsets

class OnlineUsersViewSet(viewsets.ModelViewSet):

queryset=OnlineUsers.objects.all()

serializer\_class=OnlineUsersSerializer

**Proj->Proj->urls.py**

from django.conf.urls import url,include

from rest\_framework import routers

from voiz\_app import views

router=routers.DefaultRouter()

router.register(r'onlineusers',views.OnlineUsersViewSet)

urlpatterns = [

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.

.

url(r'^',include(router.urls)),

url(r'^api-auth/',include('rest\_framework.urls',namespace='rest\_framework'))

]

Run server and check :

* http://127.0.0.1:8000/onlineusers/
* http://127.0.0.1:8000/onlineusers/1/ (1 must be a valid id/pk)

**Front End (angular) (localhost:4200)**

>ng generate service api

**app.module.ts**

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import { HttpClientModule } from '@angular/common/http';

import { ApiService } from './api.service';

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imports: [

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HttpClientModule

],

providers: [ApiService],

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**api.service.ts**

import { HttpHeaders,HttpClient } from '@angular/common/http';

import { Observable } from 'rxjs';

export class ApiService {

private baseUrl='http://localhost:8000/';

httpHeaders=new HttpHeaders({'content-type':'application/json'});

constructor(private http:HttpClient) { }

getOnlineUsers():Observable<any>

{

return this.http.get<any>(this.baseUrl+'onlineusers/',

{headers:this.httpHeaders}

);

}

getOnlineUserDetails(id):Observable<any>

{

return this.http.get<any>(this.baseUrl+'onlineusers/'+id+'/',

{headers:this.httpHeaders}

);

}

createOnlineUser(ou):Observable<any>

{

const details={name:ou.name,phone\_num:ou.phone\_num,pw:ou.pw,retype\_pw:ou.retype\_pw};

return this.http.post<any>(this.baseUrl+'onlineusers/',details,

{headers:this.httpHeaders}

);

}

updateOnlineUser(ou):Observable<any>

{

const details={name:ou.name,phone\_num:ou.phone\_num,pw:ou.pw,retype\_pw:ou.retype\_pw};

return this.http.put<any>(this.baseUrl+'onlineusers/'+ou.id+'/',details,

{headers:this.httpHeaders}

);

}

deleteOnlineUser(id):Observable<any>

{

return this.http.delete<any>(this.baseUrl+'onlineusers/'+id+'/',

{headers:this.httpHeaders}

);

}

}

**form.component.ts**

import { ApiService } from '../api.service';

export class CreateaccountComponent implements OnInit {

onlineusers =[];

selected\_ou={name:'',phone\_num:'',pw:'',retype\_pw:''};

constructor(private apiService:ApiService) {}

ngOnInit() {

this.apiService.getOnlineUsers().subscribe(data=>(this.onlineusers=data));

}

select(id) {

this.apiService.getOnlineUserDetails(id).subscribe(data=>(this.selected\_ou=data));

}

create(ou) {

this.apiService.createOnlineUser(ou).subscribe(data=>(this.onlineusers.push(data),this.selected\_ou=data));

}

update(ou) {

this.apiService.updateOnlineUser(ou).subscribe(data=>(this.onlineusers[this.onlineusers.map(function(x){return x.id;}).indexOf(data.id)]=data));

// It is easier to create a getOnlineUsers() function in this file and call it.

}

delete(id) {

this.apiService.deleteOnlineUser(id).subscribe(data=>(this.onlineusers.splice(this.onlineusers.map(function(x){return x.id;}).indexOf(id),1),this.selected\_ou={name:'',phone\_num:'',pw:'',retype\_pw:''}));

}

}

**form.component.html**

<ul>

  <li \*ngFor="let ou of onlineusers" (click)="select(ou.id)">

    {{ou.name}}|{{ou.phone\_num}}

  </li>

</ul>

<input type="text" [(ngModel)]="selected\_ou.name"/>

<input type="text" [(ngModel)]="selected\_ou.phone\_num"/>

<input type="text" [(ngModel)]="selected\_ou.pw"/>

<input type="text" [(ngModel)]="selected\_ou.retype\_pw"/>

<input type="button" value="Create" (click)="create(selected\_ou)">

<input type="button" value="Update" (click)="update(selected\_ou)">

<input type="button" value="Delete" (click)="delete(selected\_ou.id)">