

CARE KICKS
CARE KICKS
CARE KICKS

2022 졸업작품 3조 최종 발표

CONTENTS



- 01 개요 및 소개
- 02 개발 아이템
- 03 화면 설계
- 04 작품 시연

매일같이 착용하는 신발 이젠 관리해야 할 때입니다

세균

통기성이 부족한 신발 내부는 변기의 31배의 세균이 증식한다는 연구 결과

악취

세균 증식과 땀 분비는 신발 내부의 악취, 발냄새의 원인

감염

증식한 세균은 무좀과 같은 피부질환의 원인

MZ

MZ 세대

신발을 중요 아이템으로 여기는 MZ 세대의 영향



패션 관심 증가

유튜브 사용량 증가와 패션 유튜버의 영향



스니커헤드

한정판 운동화 수집 스니커헤드 문화

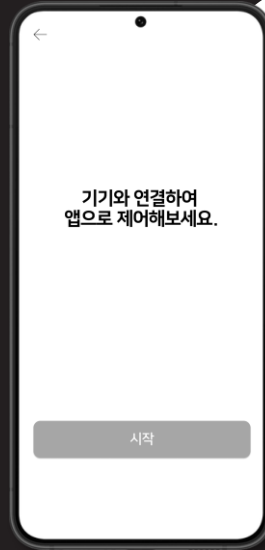
01
작품 소개

신발을 좋아하는 사람들을 위한 신발 관리 앱 CARE KICKS



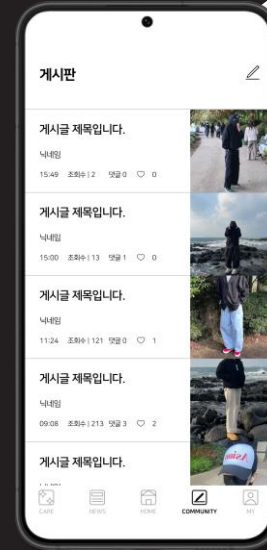
최신소식

스니커 시장의 최신소식을 한 눈에



슈드레서 원격 제어

슈드레서와 앱을 연동하여 원격 제어



커뮤니티 공간

신발을 좋아하는 사람들의 커뮤니티 공간



✦ CARE KICKS의 개발 **아이템** 및 **기술** ✦

Android Studio

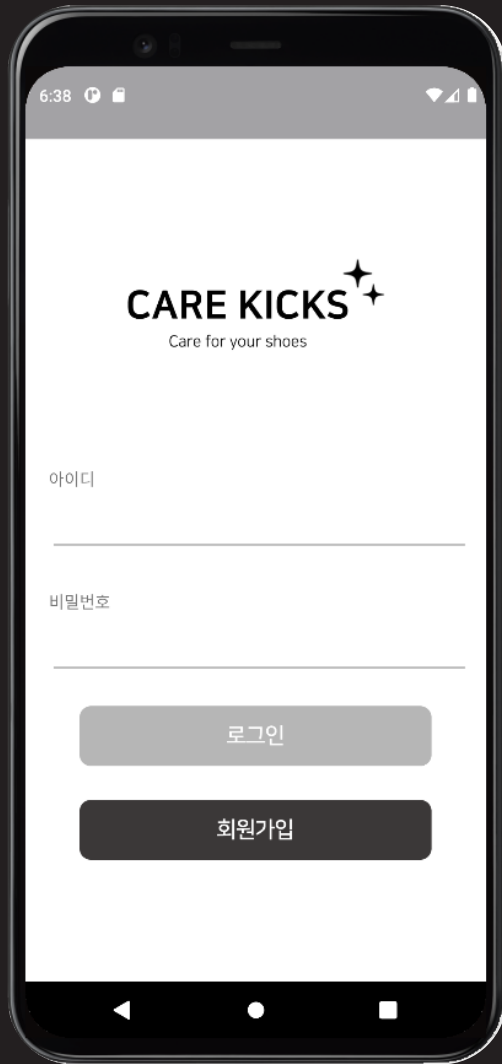
- 앱 개발 도구
- DB 연동
- Arduino 연동

Firebase

- 사용자 데이터베이스 구축
- 게시판 데이터베이스 구축

Arduino

- 살균/건조기 제작 도구
- Bluetooth 연동



```
package com.example.testproject;
```

```
import ...
```

```
public class MainActivity extends AppCompatActivity{
```

```
    private DatabaseReference mDatabase;
    //파이어베이스에 데이터를 추가나 조회하기 위해 사용
    private FirebaseAuth firebaseAuth = null;
```

```
    private SignInButton signInButton;
    private GoogleSignInClient mGoogleSignInClient;
    private int RC_SIGN_IN= 9001;
```

```
    ImageView signup, read, login;
    EditText mEmail, name, age, id, password;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
```

```
    mDatabase = FirebaseDatabase.getInstance().getReference();
    //데이터를 읽거나 쓰기 위해서는 DatabaseReference의 인스턴스가 필요
    firebaseAuth = FirebaseAuth.getInstance();
    signup = findViewById(R.id.buttonSignup); //회원가입 버튼
```

```
    mEmail = findViewById(R.id.editEmail); // 이메일
    login = findViewById(R.id.buttonLogin);
    password = findViewById(R.id.editTextPassword);
```

```
//signInButton = findViewById(R.id.SignIn_button); //추가
```

```
/* if (firebaseAuth.getCurrentUser() != null) {
    Intent intent = new Intent(getApplicationContext(), HomeActivity.class);
    startActivity(intent);
    finish();
}*/
```

```
    GoogleSignInOptions gso = new
GoogleSignInOptions.Builder(GoogleSignInOptions.DEFAULT_SIGN_IN)
    .requestIdToken(getString(R.string.default_web_client_id))
    .requestEmail()
    .build(); ...
```

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
```

```
<LinearLayout
```

```
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:scaleType="fitCenter"
    android:orientation="vertical">
```

```
<ImageView
```

```
    android:id="@+id/login_logo"
    android:layout_width="300dp"
    android:layout_height="80dp"
    android:layout_gravity="center"
    android:layout_margin="100dp"
    android:scaleType="fitCenter"
    app:srcCompat="@drawable/login_logo" />
```

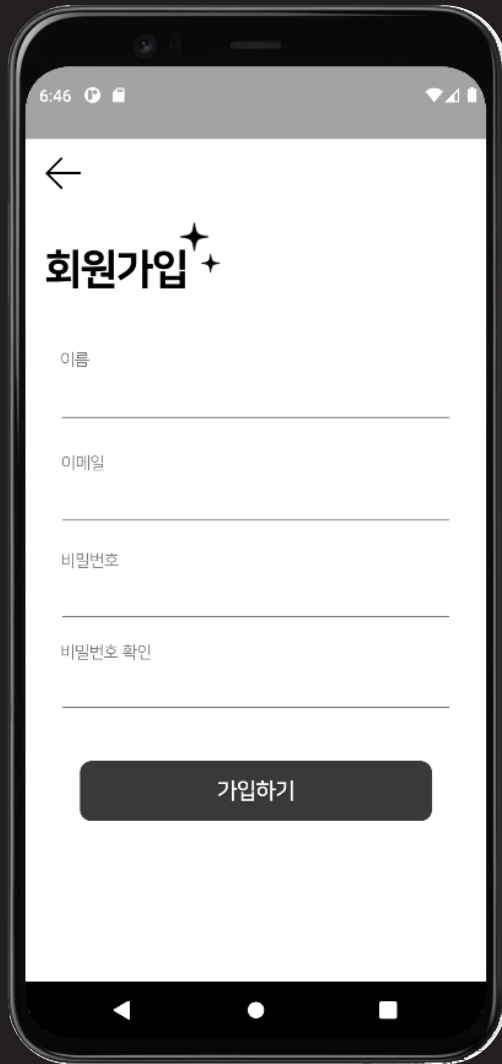
```
<TextView
```

```
    android:id="@+id/id"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginLeft="20dp"
    android:layout_marginBottom="10dp"
    android:scaleType="fitCenter"
    android:text="아이디" />
```

```
<EditText
```

```
    android:id="@+id/editEmail"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginBottom="30dp"
    android:layout_marginLeft="20dp"
    android:ems="17"
    android:scaleType="fitCenter"
    android:inputType="textPersonName" />
```

```
...
```



```
package com.example.testproject;
```

```
import ...
public class SignActivity extends AppCompatActivity {
```

```
    private FirebaseAuth firebaseAuth;
    EditText mEmailText, mPasswdText, mPasswdTextCheck, mName;
    ImageView buttonSignup;
```

```
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_sign);
```

```
        firebaseAuth = FirebaseAuth.getInstance();
```

```
        mEmailText = findViewById(R.id.editid);
        mPasswdText = findViewById(R.id.editpwd);
        mPasswdTextCheck = findViewById(R.id.editpwdc);
        mName = findViewById(R.id.editsname);
        buttonSignup = findViewById(R.id.buttonSign);
```

```
        buttonSignup.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                final String email = mEmailText.getText().toString().trim();
                String pwd = mPasswdText.getText().toString().trim();
                String pwdcheck = mPasswdTextCheck.getText().toString().trim();

                if (pwd.equals(pwdcheck)){
```

```
                    firebaseAuth.createUserWithEmailAndPassword(email, pwd).addOnComple
                        eListener(SignActivity.this, new OnCompleteListener<AuthResult>() {
```

```
                            @Override
                            public void onComplete(@NonNull Task<AuthResult> task) {
```

```
                                if (task.isSuccessful()){
                                    FirebaseUser user = firebaseAuth.getCurrentUser();
                                    String email = user.getEmail();
                                    String uid = user.getUid();
                                    String name = mName.getText().toString().trim();
                                    ...
                                }
                            }
                        }
                    }
                }
            }
        });
    }
}
```

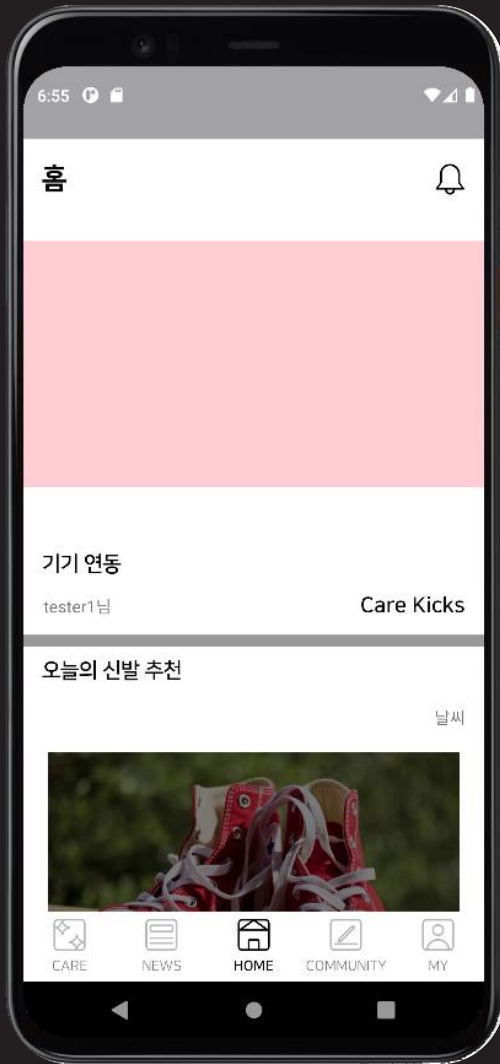
```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".SignActivity">
```

```
    <ImageView
        android:id="@+id/backbtn"
        android:layout_width="30dp"
        android:layout_height="30dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.046"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.02"
        app:srcCompat="@drawable/backbutton" />
```

```
    <ImageView
        android:id="@+id/sign"
        android:layout_width="150dp"
        android:layout_height="70dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.069"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.1"
        app:srcCompat="@drawable/signtitle" />
```

```
    <TextView
        android:id="@+id/sname"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:fontFamily="@font/nanum3"
        android:text="이름"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        ...
    </TextView>
```

03 화면 설계



```
package com.example.testproject;

import ...

public class HomeActivity extends AppCompatActivity {

    private final long finishtimeed = 1000;
    private long presstime = 0;

    private DatabaseReference mDatabase;
    //파이어베이스에 데이터를 추가나 조회하기 위해 사용
    private FirebaseAuth firebaseAuth;
    private ViewPager2 mPager;
    private FragmentStateAdapter pagerAdapter;
    private int num_page = 4;
    private CircleIndicator3 mIndicator;

    private TextView text_out;
    TextView textViewCare, textViewNews, textViewHome, textViewCom, textViewMy, textViewMy;
    ImageView imageViewCare, imageViewNews, imageViewHome, imageViewCom, imageViewMy;

    static RequestQueue requestQueue;

    String uid;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_home);

        textViewName = findViewById(R.id.textViewName);
        mPager = findViewById(R.id.viewpager);
        //Adapter
        pagerAdapter = new MyAdapter(this, num_page);
        mPager.setAdapter(pagerAdapter);
        //Indicator
        mIndicator = findViewById(R.id.indicator);
        mIndicator.setViewPager(mPager);
        mIndicator.createIndicators(num_page, 0);
        //ViewPager Setting
        mPager.setOrientation(ViewPager2.ORIENTATION_HORIZONTAL);

        mPager.setCurrentItem(500); //시작 지점
    }
}
```

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".HomeActivity">

    <RelativeLayout
        android:id="@+id/topbar"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:background="#ffffff"
        android:paddingBottom="20dp">

        <ImageView
            android:id="@+id/bell_icon"
            android:layout_width="26dp"
            android:layout_height="26dp"
            android:layout_alignParentRight="true"
            android:layout_marginTop="21dp"
            android:layout_marginRight="16dp"
            android:src="@drawable/alerticon" />

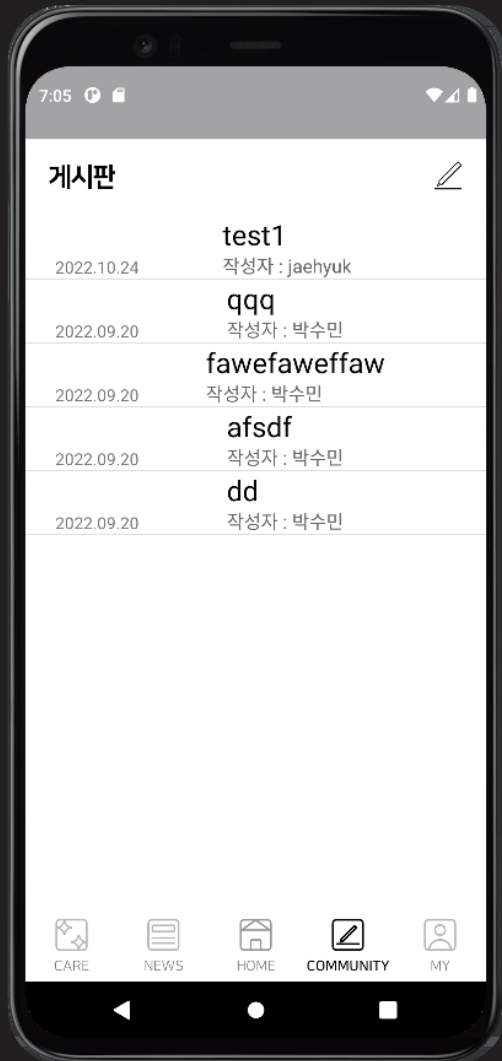
        <TextView
            android:id="@+id/hometext"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="16dp"
            android:layout_marginTop="20dp"
            android:fontFamily="@font/nanum1"
            android:text="홈"
            android:textColor="#000000"
            android:textSize="24sp" />

    </RelativeLayout>

    <ScrollView
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:layout_below="@+id/topbar"
        android:background="#999999">
```


03

화면 설계



```
package com.example.testproject;
```

```
import ...
```

```
public class BoardActivity extends AppCompatActivity {
```

```
    TextView textViewCare, textViewNews, textViewHome, textViewCom, textViewMy;
    ImageView imageViewCare, imageViewNews, imageViewHome, imageViewCom, imageViewMy;
    String uid;
```

```
    private DatabaseReference mDatabase;
    //파이어베이스에 데이터를 추가나 조회하기 위해 사용
    private FirebaseAuth firebaseAuth;
```

```
    ListView mainListView;
    ListAdapter listAdapter = null;
    ImageView buttonWrtie;
```

```
    ArrayList<String> arr_uid = null;
    ArrayList<String> arr_board_key = null;
```

```
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_board);
```

```
    mDatabase = FirebaseDatabase.getInstance().getReference();
    //데이터를 읽거나 쓰기 위해서는 DatabaseReference의 인스턴스가 필요
    firebaseAuth = FirebaseAuth.getInstance();
```

```
    mainListView = (ListView) findViewById(R.id.list_mainListView);
    listAdapter = new ListAdapter();
```

```
    arr_uid = new ArrayList<>();
    arr_board_key = new ArrayList<>();
    ...
```

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".BoardActivity">
```

```
    <RelativeLayout
        android:id="@+id/bd_top"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:paddingBottom="20dp">
```

```
        <ImageView
            android:id="@+id/write_icon"
            android:layout_width="24dp"
            android:layout_height="24dp"
            android:layout_alignParentRight="true"
            android:layout_marginTop="19dp"
            android:layout_marginRight="20dp"
            android:src="@drawable/writeicon" />
```

```
        <TextView
            android:id="@+id/community"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="20dp"
            android:layout_marginTop="20dp"
            android:fontFamily="@font/nanum1"
            android:text="게시판"
            android:textAppearance="@style/TextAppearance.AppCompat.Large"
            android:textColor="#000000" />
```

```
</RelativeLayout>
```

```
<ListView
    android:id="@+id/list_mainListView"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:layout_below="@+id/bd_top"></ListView>
<androidx.constraintlayout.widget.ConstraintLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
```

03

화면 설계



```
package com.example.testproject;
```

```
import ...
```

```
public class ProfileActivity extends AppCompatActivity {
```

```
    private DatabaseReference mDatabase;  
    //파이어베이스에 데이터를 추가나 조회하기 위해 사용  
    private FirebaseAuth firebaseAuth;
```

```
    EditText editTextID, editTextName;
```

```
    ImageView imageViewBack;
```

```
    TextView textViewChange, textViewChangeID, textViewLogout, textViewDel, textViewNameChange;
```

```
    Button buttonNameChange, buttonPassWordChange, buttonChangeId;
```

```
    String uid, email, name;  
    String newEmail, newName;
```

```
@Override
```

```
protected void onCreate(Bundle savedInstanceState) {  
    super.onCreate(savedInstanceState);  
    setContentView(R.layout.activity_profile);
```

```
    firebaseAuth = FirebaseAuth.getInstance();  
    final FirebaseUser user = firebaseAuth.getCurrentUser();
```

```
    mDatabase = FirebaseDatabase.getInstance().getReference();
```

```
    editTextID = findViewById(R.id.editTextTextEmailAddressId);  
    editTextName = findViewById(R.id.editTextTextPersonName);
```

```
    imageViewBack = findViewById(R.id.imageViewBack);
```

```
    buttonPassWordChange = findViewById(R.id.pw_change_btn);  
    buttonChangeId = findViewById(R.id.id_change_btn);
```

```
    textViewLogout = findViewById(R.id.textViewLogout);  
    ...
```

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"  
    xmlns:app="http://schemas.android.com/apk/res-auto"  
    xmlns:tools="http://schemas.android.com/tools"  
    android:layout_width="match_parent"  
    android:layout_height="match_parent">
```

```
    <ImageView  
        android:id="@+id/imageViewBack"  
        android:layout_width="24dp"  
        android:layout_height="24dp"  
        android:layout_marginLeft="16dp"  
        android:layout_marginTop="21dp"  
        app:srcCompat="@drawable/backbutton" />
```

```
    <TextView  
        android:id="@+id/edit_title"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:layout_centerHorizontal="true"  
        android:layout_marginTop="20dp"  
        android:fontFamily="@font/nanum1"  
        android:text="회원정보 수정"  
        android:textAppearance="@style/TextAppearance.AppCompat.Large"  
        android:textColor="@color/black" />
```

```
    <TextView  
        android:id="@+id/profile_info"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:text="계정정보"  
        android:fontFamily="@font/nanum2"  
        android:textColor="#000000"  
        android:textAppearance="@style/TextAppearance.AppCompat.Medium"  
        android:layout_below="@+id/edit_title"  
        android:layout_marginTop="40dp"  
        android:layout_centerHorizontal="true" />
```

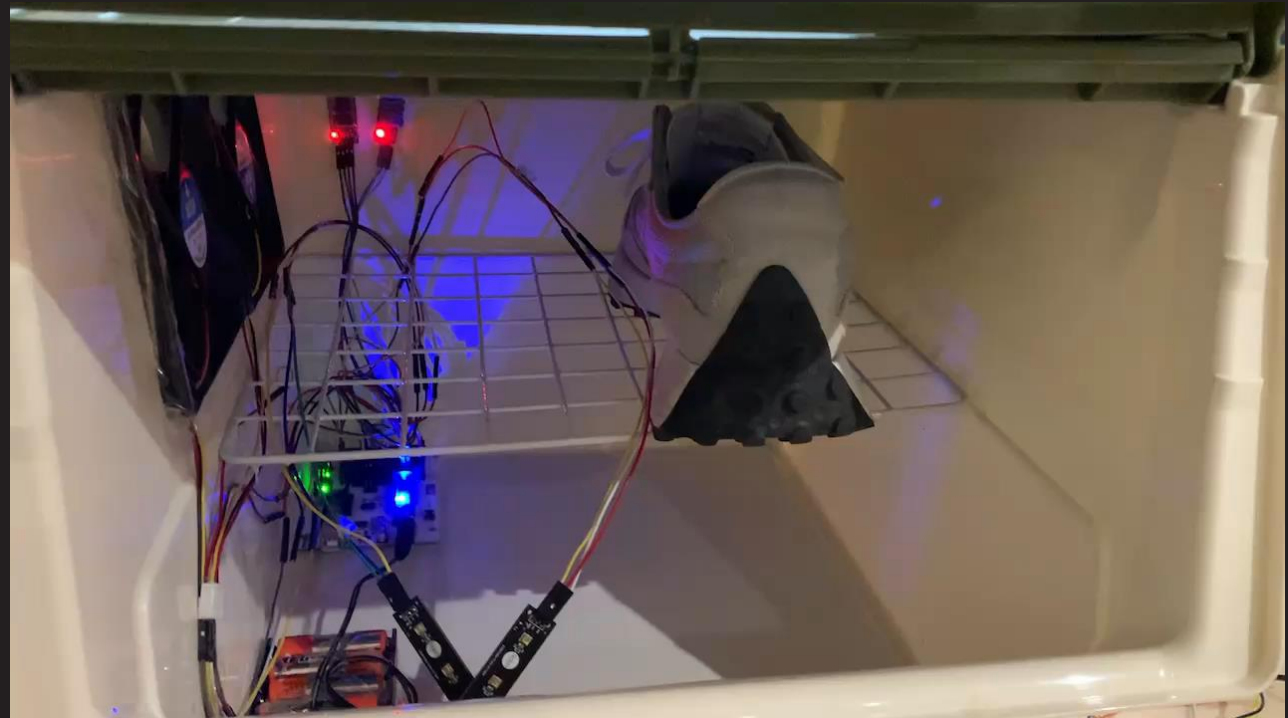
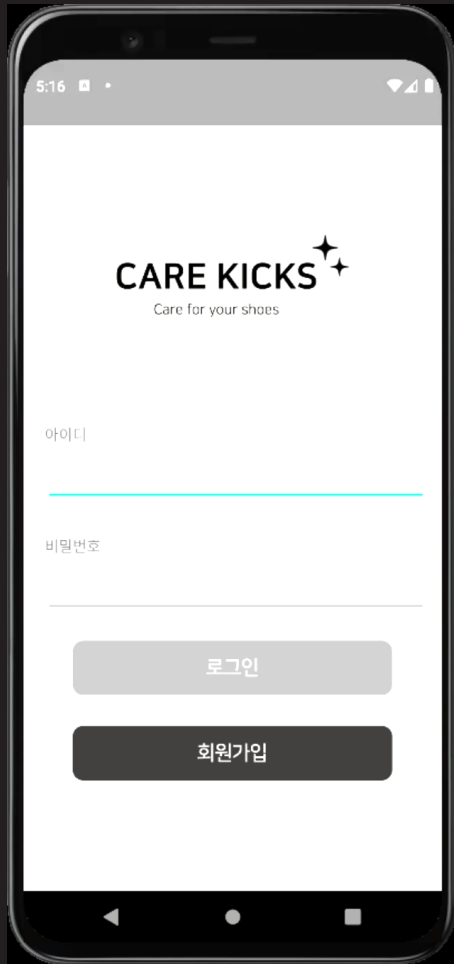
```
    <TextView  
        android:id="@+id/my_nickname"  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"
```

```
    ...
```

05

작품 시연

CARE KICKS 앱과 기기 시연 영상



감사합니다