

WEB ICP8

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GitHub : https://github.com/VenubabuLinga/WebDevCourse/tree/main/Moblie_dev/ICP8

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GitHub link: <https://github.com/kunisettrysarath/WebMobileProgramming-Spring22/tree/main/WebDevelopment/ICP's/ICP8>

In this ICP, we are going create android page which consists simple sign in with userid and password, which directs to welcome page. And redirecting out to the home from the welcome page on click.

1.res/layout

This is a directory for files that define our app's user interface. Here we created two activity files activity_main.xml and activity_welcomepage.xml file.

An activity file, like a window or frame in Java, represents a single screen with a user interface. ContextThemeWrapper is a subclass of Android activity.

i.Activity_main.xml

In this activity file we have added the text view, edit text and material button with corresponding id values to them in the relative layout.

We do make the background of activity file to image tdp_2 from drawable folder. We have inserted the drawableLeft="@drawable/ic_baseline_account_circle_24" in the user id edit text and also the forward arrow in the password edit text.

The material button click will have the functionality of checking the user id and password and will redirect to the welcomepage.

```

<?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"
    android:background="@drawable/tdp_2"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/signin"
        android:text="Sign In"
        android:textColor="@color/black"
        android:textSize="35dp"
        android:textStyle="bold"
        android:layout_margin="50dp"
        android:gravity="center_horizontal"
        />
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/username"
        android:layout_below="@id/signin"
        android:background="@color/white"
        android:drawableLeft="@drawable/ic_baseline_account_circle_24"
        android:drawablePadding="20dp"
        android:hint="username"
        android:textColorHint="@color/black"
        android:textColor="@color/black"
        android:layout_margin="10dp"
        android:padding="20dp"
        />
    <EditText
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/password"
        android:layout_below="@id/username"
        android:inputType="textPassword"
        android:ems="10"
        android:background="@color/white"
        android:drawableLeft="@drawable/ic_baseline_arrow_right_24"
        android:drawablePadding="1dp"
        android:hint="password"
        android:textColorHint="@color/black"
        android:textColor="@color/black"
        android:layout_margin="10dp"
        android:padding="20dp"
        />
    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/login"
        android:layout_margin="10dp"
        android:padding="10dp"
        android:text="LOGIN"
        />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/forgot_password"
        android:layout_margin="10dp"
        android:padding="10dp"
        android:text="Forgot Password"
        />
    </RelativeLayout>

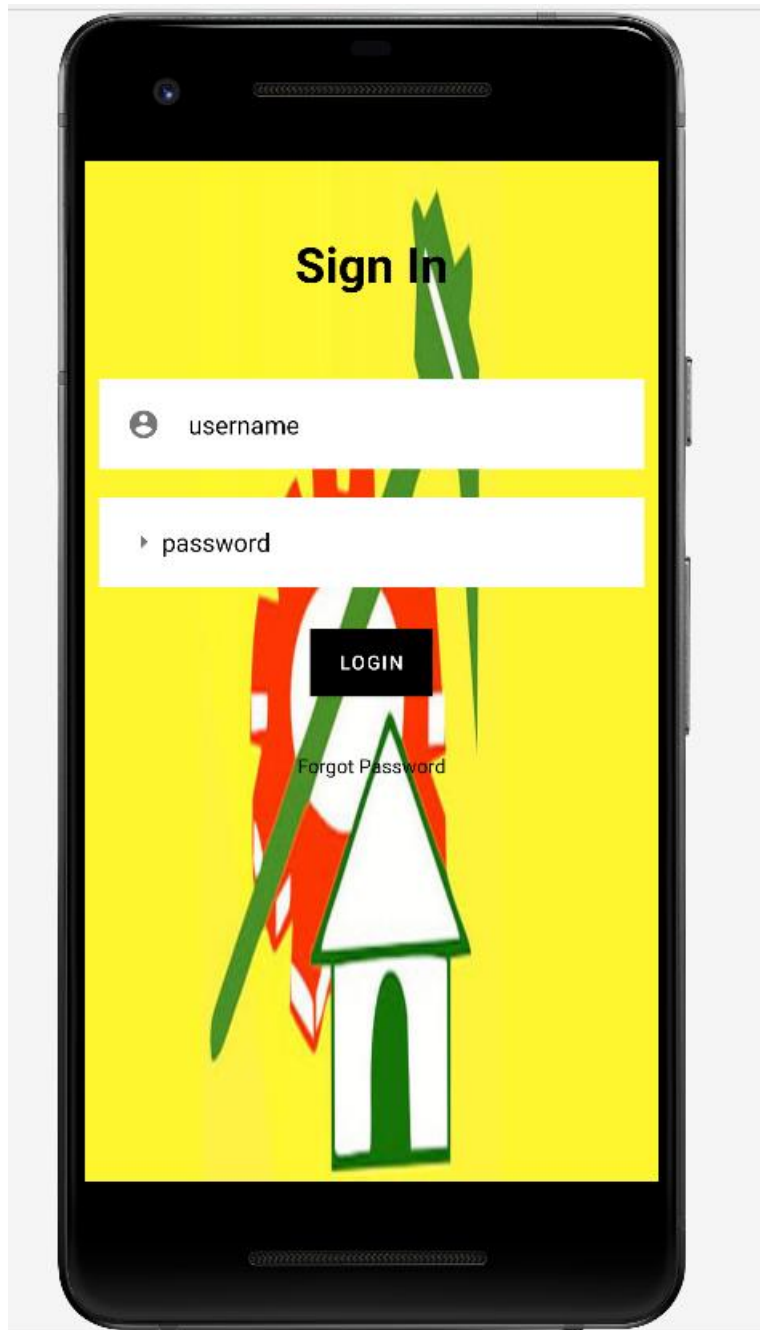
```

```
<com.google.android.material.button.MaterialButton
    android:id="@+id/loginbtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/password"
    android:layout_centerHorizontal="true"
    android:layout_marginStart="20dp"
    android:layout_marginTop="20dp"
    android:layout_marginEnd="20dp"
    android:layout_marginBottom="20dp"
    android:background="@color/black"
    android:backgroundTint="#FF5722"
    android:text="LOGIN"
    app:backgroundTint="#000000" />
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/forgotpass"
    android:layout_below="@id/loginbtn"
    android:text="Forgot Password"
    android:textColor="@color/black"
    android:layout_centerHorizontal="true"
    android:layout_margin="20dp"/>
```

```
</RelativeLayout>
```

Output :

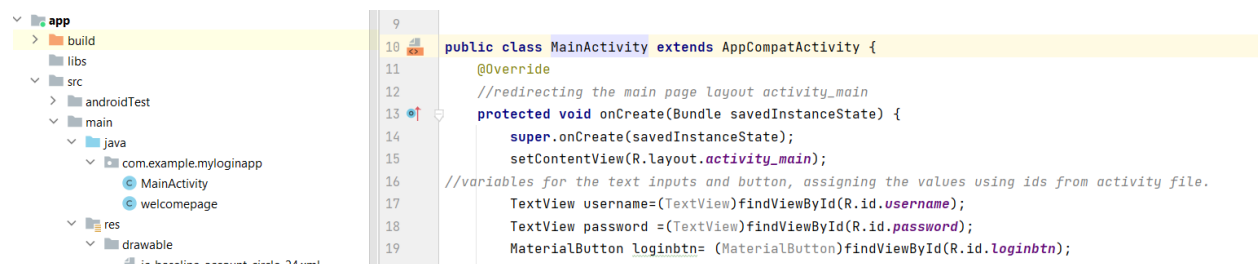


2.Java folder:

This folder contains your project's.java source files. It comes with a MainActivity.java source file with an activity class that runs when you use the app icon to launch your app.

In this folder we have two files MainActivity.java and welcomepage.java files.

The MainActivity.java is the class file for the MainActivity layout file. Which will view the layout activity_main.



We do have the functionality of checking the userID and password when we click the login button.

We added the 3 scenarios to the hardcoded username **admin63** and password **admin63**

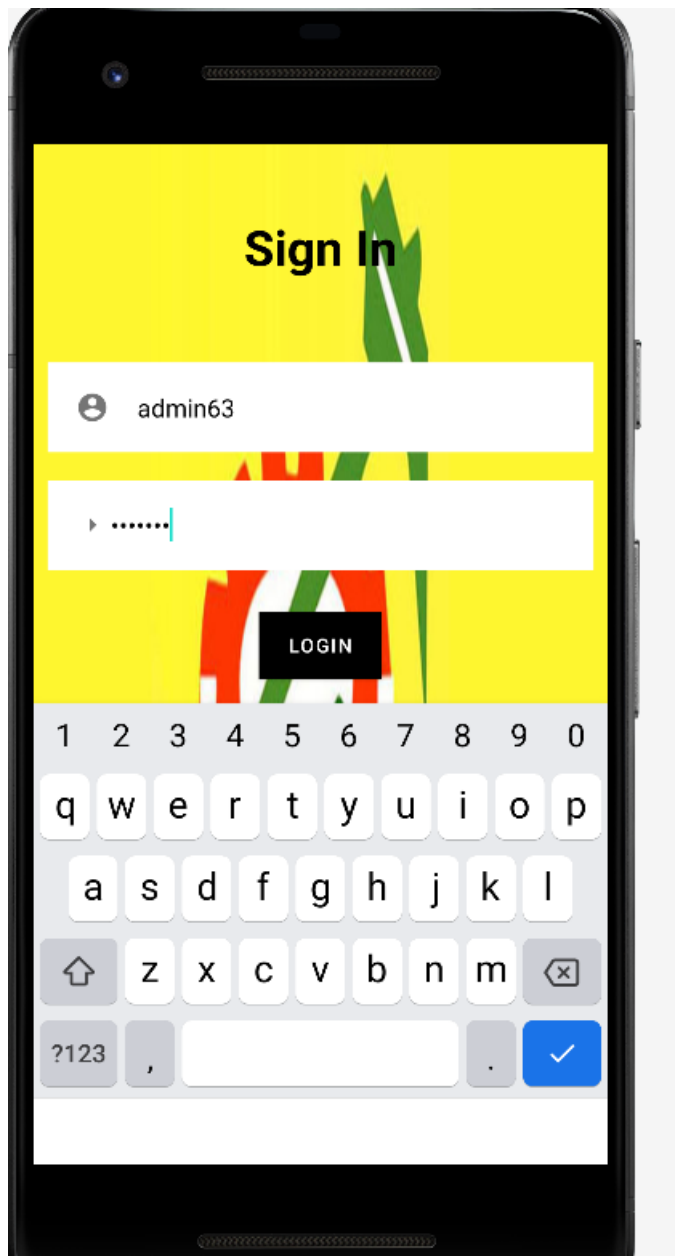
1. checking for the not null condition for both the userid and password.
2. incorrect username/password
3. missing valid userid and password.

After successful login the page will redirect to the welcomepage the other page.

```

//checking the username admin63 and password admin63
loginbtn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        //checking for the not null condition for both the userid and password.
        if(!username.getText().toString().isEmpty() && !password.getText().toString().isEmpty()) {
            if ((username.getText().toString().equals("admin63")) && (password.getText().toString().equals("admin63"))) {
                //creating the instance of intent to redirect to welcome page
                Intent intent = new Intent( packageContext: MainActivity.this,welcomepage.class);
                startActivity(intent);
                //showing text after the successful redirect.
                Toast.makeText( context: MainActivity.this, text: "Redirected to welcome", Toast.LENGTH_SHORT).show();
            } else { //incorrect username/password
                if (!username.getText().toString().equals("admin63") && !password.getText().toString().equals("admin63")) {
                    Toast.makeText( context: MainActivity.this, text: "Incorrect Username & Password", Toast.LENGTH_SHORT).show();
                } else if (!username.getText().toString().equals("admin63")) {
                    Toast.makeText( context: MainActivity.this, text: "Username InCorrect", Toast.LENGTH_SHORT).show();
                } else if (!password.getText().toString().equals("admin63")) {
                    Toast.makeText( context: MainActivity.this, text: "Password InCorrect", Toast.LENGTH_SHORT).show();
                }
            }
        } else { //missing valid userid and password.
            Toast.makeText( context: MainActivity.this, text: "You need to enter valid username/password", Toast.LENGTH_SHORT).show();
        }
    }
});

```



Activity_welcomepage.xml file

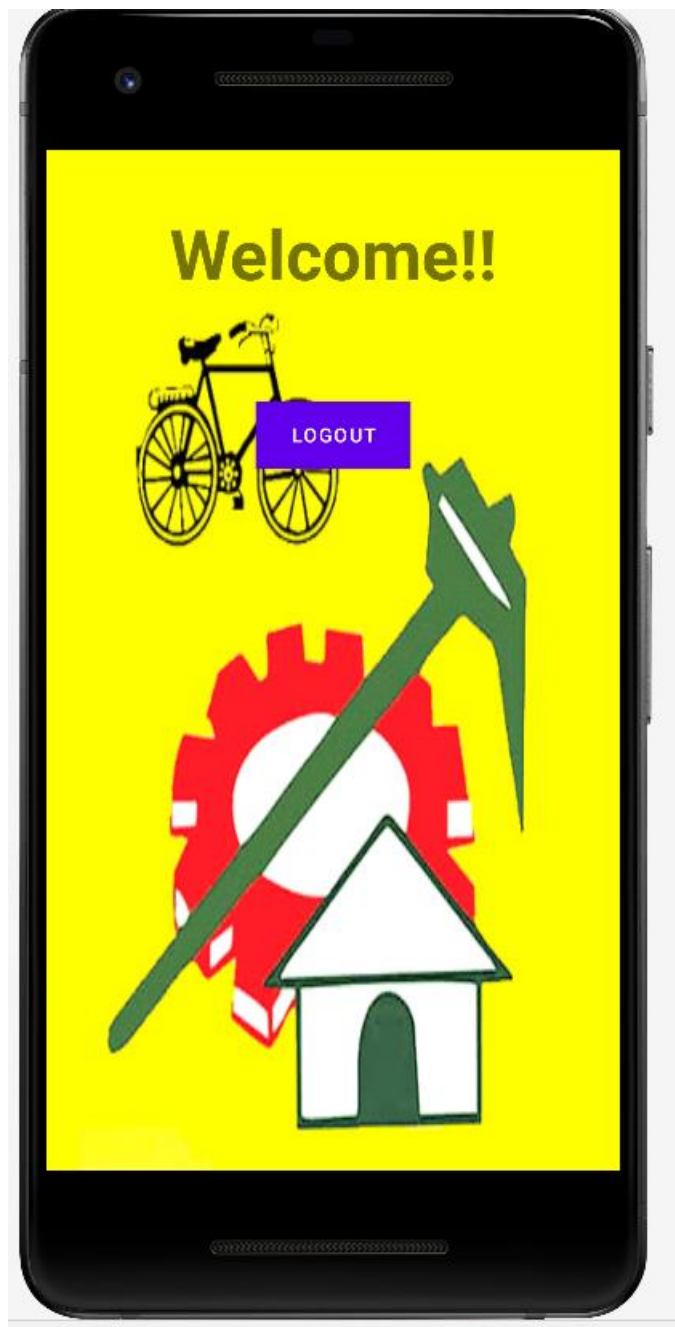
in this file we have added the textview and material button which will take to the login page.

We added the other background image to this activity layout.

Input code :

```
<?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"
    android:background="@drawable/logo_2"
    android:clickable="false"
    tools:context=".welcomepage">
    <TextView
        android:id="@+id/welcomeText"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_marginStart="20dp"
        android:layout_marginTop="20dp"
        android:layout_marginEnd="20dp"
        android:layout_marginBottom="20dp"
        android:gravity="center"
        android:padding="20dp"
        android:text="Welcome!!"
        android:textSize="50sp"
        android:textStyle="bold" />
    <com.google.android.material.button.MaterialButton
        android:id="@+id/logoutbtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignTop="@+id/welcomeText"
        android:layout_alignParentStart="true"
        android:layout_alignParentEnd="true"
```


Ouput :



Welcomepage.java :

Here in this class we have used button to take to the sign in page when we click the button. And also the text view for the welcome text.

Code :

```
public class welcomepage extends AppCompatActivity {

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

        MaterialButton logoutBtn= (MaterialButton)findViewById(R.id.logoutbtn);

        logoutBtn.setOnClickListener(view -> { //It goes from second page to the login page
Intent redirectT0Home = new Intent( packageContext: welcomepage.this, MainActivity.class);
startActivity(redirectT0Home);
});
    }
}
```

Conclusion:

By this ICP we have gained knowledge on how to create android page with simple activity layout along with the java code.

Diffculties :

we have written the code for in correct password and user id checking. And also to popup a error toast text. But the message toast is not popping up.