

CREATING LOGIN PAGE

AIM:

To creating Login page using Mobile Application.

ALGORITHM:

- Step 1:** Design the layout in activity_main.xml, including two EditText fields for the username and password, and a Button for submitting the login form.
- Step 2:** The MainActivity.java, initialize the UI components by linking the EditText fields and Button using findViewById() in the onCreate() method.
- Step 3:** Set an OnClickListener for the loginButton to handle login actions when the button is clicked.
- Step 4:** The handleLogin() method, retrieve the text input from the usernameEditText and passwordEditText.
- Step 5:** Implement simple validation to check if both fields are filled. If not, show a Toast message prompting the user to enter both fields.
- Step 6:** Compare the entered username and password against predefined credentials (e.g., "admin" and "password"). If they match, show a success message using Toast.
- Step 7:** If the credentials do not match, show an error message using Toast indicating that the credentials are invalid.
- Step 8:** Stop the Process.

MainActivity.java

```
package com.example.loginpageapp;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    private EditText usernameInput;
    private EditText passwordInput;
    private TextView statusText;

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

        usernameInput = findViewById(R.id.usernameInput);
        passwordInput = findViewById(R.id.passwordInput);
        statusText = findViewById(R.id.statusText);
        Button loginButton = findViewById(R.id.loginButton);

        loginButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                handleLogin();
            }
        });
    }
}
```

```

    }
    });
}

private void handleLogin() {
    String username = usernameInput.getText().toString();
    String password = passwordInput.getText().toString();

    if (username.isEmpty() || password.isEmpty()) {
        statusText.setText("Please enter both username and password.");
    } else if (username.equals("user") && password.equals("pass")) {
        statusText.setText("Login successful!");
        // Proceed to another activity or perform login operations
    } else {
        statusText.setText("Invalid username or password.");
    }
}
}

```

activity_main.xml

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="16dp">

    <TextView
        android:id="@+id/usernameLabel"
        android:layout_width="wrap_content"

```

```
android:layout_height="wrap_content"
    android:text="Username"
    android:textSize="18sp"
android:layout_alignParentTop="true"
    android:layout_marginTop="40dp"/>
```

```
<EditText
    android:id="@+id/usernameInput"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_below="@+id/usernameLabel"
    android:layout_marginTop="8dp"
    android:hint="Enter username"
    android:inputType="text"/>
```

```
<TextView
    android:id="@+id/passwordLabel"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Password"
    android:textSize="18sp"
    android:layout_below="@+id/usernameInput"
    android:layout_marginTop="24dp"/>
```

```
<EditText
    android:id="@+id/passwordInput"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_below="@+id/passwordLabel"
    android:layout_marginTop="8dp"
    android:hint="Enter password"
```

```
android:inputType="textPassword"/>
```

```
<Button  
    android:id="@+id/loginButton"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text="Login"  
    android:layout_below="@+id/passwordInput"  
    android:layout_marginTop="24dp"  
    android:layout_centerHorizontal="true"/>
```

```
<TextView  
    android:id="@+id/statusText"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:text=""  
    android:textColor="#FF0000"  
    android:layout_below="@+id/loginButton"  
    android:layout_marginTop="16dp"  
    android:layout_centerHorizontal="true"/>
```

```
</RelativeLayout>
```

AndroidManifest.xml


```
<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
    package="com.example.loginpageapp">  
  
    <application  
        android:allowBackup="true"  
        android:icon="@mipmap/ic_launcher"
```


```
    android:label="@string/app_name"
    android:roundIcon="@mipmap/ic_launcher_round"
    android:supportsRtl="true"
    android:theme="@style/Base.Theme.Loginpageapp">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>




</manifest>
```

Output:

9:54





Username

Enter username

Password

Enter password

Login