

Localization in Android Apps

Design a Layout

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout 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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MultiLangActivity"
    android:orientation="vertical">

    <androidx.appcompat.widget.Toolbar
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/toolbar"/>

    <TextView
        android:layout_width="match_parent"
        android:layout_height="60dp"
        android:text="@string/application_login"
        android:gravity="center"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="60dp"
        android:id="@+id/etUsername"
        android:hint="@string/enter_username"/>

    <EditText
        android:layout_width="match_parent"
        android:layout_height="60dp"
        android:id="@+id/etPassword"
        android:inputType="textPassword"
        android:hint="@string/enter_password"/>

    <Button
        android:layout_width="150dp"
        android:layout_height="60dp"
        android:text="@string/login"
        android:layout_marginTop="20dp"
        android:id="@+id/btnLogin"/>

    <Button
        android:layout_width="match_parent"
        android:layout_height="60dp"
        android:text="@string/dont_have_an_account_click_here"
        android:id="@+id/btnRegister"/>

</LinearLayout>
```

Create Localization Resource

strings.xml

```
<resources>
    <string name="app_name">MyApp</string>
    <string name="login_button">Login</string>
    <string name="register_button">Register</string>
    <string name="application_login">Application Login</string>
    <string name="enter_username">Enter Username</string>
    <string name="enter_password">Enter Password</string>
    <string name="login">Login</string>
    <string name="dont_have_an_account_click_here">Dont have an account?
Click Here</string>
</resources>
```

strings.xml(ne)

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name="app_name">ओप्शनल</string>
    <string name="login_button">भिन्न जानुहोस</string>
    <string name="register_button">नयाँ दर्ता गर्नुहोस</string>
    <string name="application_login">आवेदन लगईन</string>
    <string name="enter_username">आवेदकको नाम</string>
    <string name="enter_password">पासर्ड</string>
    <string name="login">लगईन</string>
    <string name="dont_have_an_account_click_here">खाता खोल्नुहोस</string>
</resources>
```

Create Menu for Choose Option

setting.xml

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto">
    <item
        android:title="नेपाली"
        android:icon="@drawable/np"
        android:id="@+id/nepali"
    />
    <item
        android:title="English"
        android:icon="@drawable/en"
        android:id="@+id/english"
    />
</menu>
```

Write code for Activity

```
public class MultiLangActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        loadLocale();
        setContentView(R.layout.activity_multi_lang);
        Toolbar toolbar = findViewById(R.id.toolbar);
        toolbar.setTitle(R.string.application_login);
        setSupportActionBar(toolbar);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.setting, menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        if (R.id.nepali == item.getItemId()) {
            setLocale("ne");
            recreate();
        } else {
            setLocale("en");
            recreate();
        }
        return true;
    }

    public void setLocale(String lang) {
        Locale locale = new Locale(lang);
        Locale.setDefault(locale);
        Configuration configuration = new Configuration();
        configuration.setLocale(locale);
        getBaseContext().getResources().updateConfiguration(configuration,
getBaseContext().getResources().getDisplayMetrics());

        //for saving language it will be used in next time
        SharedPreferences.Editor editor = getSharedPreferences("settings",
MODE_PRIVATE).edit();
        editor.putString("app_lang", lang);
        editor.apply();
    }

    public void loadLocale() {
        //for default language
        SharedPreferences sp = getSharedPreferences("settings",
MODE_PRIVATE);
        String lang = sp.getString("app_lang", "");
        setLocale(lang);
    }
}
```