package com.example.unsdg;  
package com.google.firebase.quickstart.auth.java;  
  
import android.app.ProgressDialog;  
import android.os.AsyncTask;  
import android.os.Bundle;  
import android.support.annotation.NonNull;  
import android.text.TextUtils;  
import android.util.Log;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import com.google.android.gms.tasks.OnCompleteListener;  
import com.google.android.gms.tasks.Task;  
import com.google.firebase.auth.AuthResult;  
import com.google.firebase.auth.FirebaseAuth;  
import com.google.firebase.auth.FirebaseUser;  
//import com.google.firebase.quickstart.auth.R;  
  
public class YourAsyncTask extends AsyncTask<Void, Void, Void>  
{  
 public ProgressDialog dialog;  
  
 public YourAsyncTask(Login activity) {  
 dialog = new ProgressDialog(activity);  
 }  
  
 @Override  
  
}  
  
public class Login extends MainActivity implements  
 View.OnClickListener {  
  
 private static final String *TAG* = "EmailPassword";  
  
 private TextView mStatusTextView;  
 private TextView mDetailTextView;  
 private EditText mEmailField;  
 private EditText mPasswordField;  
  
 // [START declare\_auth]  
 private FirebaseAuth mAuth;  
 // [END declare\_auth]  
  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*login*);  
  
 // Views  
 mStatusTextView = findViewById(R.id.*logintext*);  
 mDetailTextView = findViewById(R.id.*enter\_email*);  
 mEmailField = findViewById(R.id.*edittext\_email*);  
 mPasswordField = findViewById(R.id.*edittext\_pw*);  
  
 // Buttons  
 findViewById(R.id.*login\_button*).setOnClickListener(this);  
  
  
 // [START initialize\_auth]  
 // Initialize Firebase Auth  
 mAuth = FirebaseAuth.*getInstance*();  
 // [END initialize\_auth]  
 }  
  
 // [START on\_start\_check\_user]  
 @Override  
 public void onStart() {  
 super.onStart();  
 // Check if user is signed in (non-null) and update UI accordingly.  
 FirebaseUser currentUser = mAuth.getCurrentUser();  
 updateUI(currentUser);  
 }  
 // [END on\_start\_check\_user]  
  
 private void createAccount(String email, String password) {  
 Log.*d*(*TAG*, "createAccount:" + email);  
 if (!validateForm()) {  
 return;  
 }  
  
 //YourAsyncTask;  
  
 // [START create\_user\_with\_email]  
 mAuth.createUserWithEmailAndPassword(email, password)  
 .addOnCompleteListener(this, new OnCompleteListener<AuthResult>() {  
 @Override  
 public void onComplete(@NonNull Task<AuthResult> task) {  
 if (task.isSuccessful()) {  
 // Sign in success, update UI with the signed-in user's information  
 Log.*d*(*TAG*, "createUserWithEmail:success");  
 FirebaseUser user = mAuth.getCurrentUser();  
 updateUI(user);  
 } else {  
 // If sign in fails, display a message to the user.  
 Log.*w*(*TAG*, "createUserWithEmail:failure", task.getException());  
 Toast.*makeText*(Login.this, "Authentication failed.",  
 Toast.*LENGTH\_SHORT*).show();  
 updateUI(null);  
 }  
  
 // [START\_EXCLUDE]  
 // hideProgressDialog();  
 // [END\_EXCLUDE]  
 }  
 });  
 // [END create\_user\_with\_email]  
 }  
  
 private void signIn(String email, String password) {  
 Log.*d*(*TAG*, "signIn:" + email);  
 if (!validateForm()) {  
 return;  
 }  
  
 showProgressDialog();  
  
 // [START sign\_in\_with\_email]  
 mAuth.signInWithEmailAndPassword(email, password)  
 .addOnCompleteListener(this, new OnCompleteListener<AuthResult>() {  
 @Override  
 public void onComplete(@NonNull Task<AuthResult> task) {  
 if (task.isSuccessful()) {  
 // Sign in success, update UI with the signed-in user's information  
 Log.*d*(*TAG*, "signInWithEmail:success");  
 FirebaseUser user = mAuth.getCurrentUser();  
 updateUI(user);  
 } else {  
 // If sign in fails, display a message to the user.  
 Log.*w*(*TAG*, "signInWithEmail:failure", task.getException());  
 Toast.makeText(EmailPasswordActivity.this, "Authentication failed.",  
 Toast.*LENGTH\_SHORT*).show();  
 updateUI(null);  
 }  
  
 // [START\_EXCLUDE]  
 if (!task.isSuccessful()) {  
 mStatusTextView.setText(R.string.auth\_failed);  
 }  
 hideProgressDialog();  
 // [END\_EXCLUDE]  
 }  
 });  
 // [END sign\_in\_with\_email]  
 }  
  
 /\*private void signOut() {  
 mAuth.signOut();  
 updateUI(null);  
 }  
  
 private void sendEmailVerification() {  
 // Disable button  
 findViewById(R.id.verifyEmailButton).setEnabled(false);  
  
 // Send verification email  
 // [START send\_email\_verification]  
 final FirebaseUser user = mAuth.getCurrentUser();  
 user.sendEmailVerification()  
 .addOnCompleteListener(this, new OnCompleteListener<Void>() {  
 @Override  
 public void onComplete(@NonNull Task<Void> task) {  
 // [START\_EXCLUDE]  
 // Re-enable button  
 findViewById(R.id.verifyEmailButton).setEnabled(true);  
  
 if (task.isSuccessful()) {  
 Toast.makeText(EmailPasswordActivity.this,  
 "Verification email sent to " + user.getEmail(),  
 Toast.LENGTH\_SHORT).show();  
 } else {  
 Log.e(TAG, "sendEmailVerification", task.getException());  
 Toast.makeText(EmailPasswordActivity.this,  
 "Failed to send verification email.",  
 Toast.LENGTH\_SHORT).show();  
 }  
 // [END\_EXCLUDE]  
 }  
 });  
 // [END send\_email\_verification]  
 }\*/  
   
 private boolean validateForm() {  
 boolean valid = true;  
  
 String email = mEmailField.getText().toString();  
 if (TextUtils.*isEmpty*(email)) {  
 mEmailField.setError("Required.");  
 valid = false;  
 } else {  
 mEmailField.setError(null);  
 }  
  
 String password = mPasswordField.getText().toString();  
 if (TextUtils.*isEmpty*(password)) {  
 mPasswordField.setError("Required.");  
 valid = false;  
 } else {  
 mPasswordField.setError(null);  
 }  
  
 return valid;  
 }  
  
 private void updateUI(FirebaseUser user) {  
 //hideProgressDialog();  
 if (user != null) {  
 mStatusTextView.setText(getString(R.string.emailpassword\_status\_fmt,  
 user.getEmail(), user.isEmailVerified()));  
 mDetailTextView.setText(getString(R.string.firebase\_status\_fmt, user.getUid()));  
  
 findViewById(R.id.emailPasswordButtons).setVisibility(View.*GONE*);  
 findViewById(R.id.emailPasswordFields).setVisibility(View.*GONE*);  
 findViewById(R.id.signedInButtons).setVisibility(View.*VISIBLE*);  
  
 findViewById(R.id.verifyEmailButton).setEnabled(!user.isEmailVerified());  
 } else {  
 mStatusTextView.setText(R.string.signed\_out);  
 mDetailTextView.setText(null);  
  
 findViewById(R.id.emailPasswordButtons).setVisibility(View.*VISIBLE*);  
 findViewById(R.id.emailPasswordFields).setVisibility(View.*VISIBLE*);  
 findViewById(R.id.signedInButtons).setVisibility(View.*GONE*);  
 }  
 }  
  
 @Override  
 public void onClick(View v) {  
 int i = v.getId();  
 if (i == R.id.*login\_button*) {  
 signIn(mEmailField.getText().toString(), mPasswordField.getText().toString());  
 }   
 }  
}

SIGNUP:

package com.example.unsdg;  
package com.google.firebase.quickstart.auth.java;  
  
import android.os.Bundle;  
import android.support.annotation.NonNull;  
import android.text.TextUtils;  
import android.util.Log;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import com.google.android.gms.tasks.OnCompleteListener;  
import com.google.android.gms.tasks.Task;  
import com.google.firebase.auth.AuthResult;  
import com.google.firebase.auth.FirebaseAuth;  
import com.google.firebase.auth.FirebaseUser;  
//import com.google.firebase.quickstart.auth.R;  
  
public class Signup extends MainActivity implements  
 View.OnClickListener {  
  
 private static final String *TAG* = "EmailPassword";  
  
 private TextView mStatusTextView;  
 private TextView mDetailTextView;  
 private EditText mEmailField;  
 private EditText mPasswordField;  
  
 // [START declare\_auth]  
 private FirebaseAuth mAuth;  
 // [END declare\_auth]  
  
 @Override  
 public void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*sign\_up*);  
  
 // Views  
 mStatusTextView = findViewById(R.id.);  
 mDetailTextView = findViewById(R.id.*enter\_email*);  
 mEmailField = findViewById(R.id.*edittext\_email*);  
 mPasswordField = findViewById(R.id.*edittext\_pw*);  
  
 // Buttons  
 findViewById(R.id.*login\_button*).setOnClickListener(this);  
 findViewById(R.id.emailCreateAccountButton).setOnClickListener(this);  
 findViewById(R.id.signOutButton).setOnClickListener(this);  
 findViewById(R.id.verifyEmailButton).setOnClickListener(this);  
  
 // [START initialize\_auth]  
 // Initialize Firebase Auth  
 mAuth = FirebaseAuth.*getInstance*();  
 // [END initialize\_auth]  
 }  
  
 // [START on\_start\_check\_user]  
 @Override  
 public void onStart() {  
 super.onStart();  
 // Check if user is signed in (non-null) and update UI accordingly.  
 FirebaseUser currentUser = mAuth.getCurrentUser();  
 updateUI(currentUser);  
 }  
 // [END on\_start\_check\_user]  
  
 private void createAccount(String email, String password) {  
 Log.*d*(*TAG*, "createAccount:" + email);  
 if (!validateForm()) {  
 return;  
 }  
  
 showProgressDialog();  
  
 // [START create\_user\_with\_email]  
 mAuth.createUserWithEmailAndPassword(email, password)  
 .addOnCompleteListener(this, new OnCompleteListener<AuthResult>() {  
 @Override  
 public void onComplete(@NonNull Task<AuthResult> task) {  
 if (task.isSuccessful()) {  
 // Sign in success, update UI with the signed-in user's information  
 Log.*d*(*TAG*, "createUserWithEmail:success");  
 FirebaseUser user = mAuth.getCurrentUser();  
 updateUI(user);  
 } else {  
 // If sign in fails, display a message to the user.  
 Log.*w*(*TAG*, "createUserWithEmail:failure", task.getException());  
 Toast.makeText(EmailPasswordActivity.this, "Authentication failed.",  
 Toast.*LENGTH\_SHORT*).show();  
 updateUI(null);  
 }  
  
 // [START\_EXCLUDE]  
 hideProgressDialog();  
 // [END\_EXCLUDE]  
 }  
 });  
 // [END create\_user\_with\_email]  
 }  
  
 private void signIn(String email, String password) {  
 Log.*d*(*TAG*, "signIn:" + email);  
 if (!validateForm()) {  
 return;  
 }  
  
 showProgressDialog();  
  
 // [START sign\_in\_with\_email]  
 mAuth.signInWithEmailAndPassword(email, password)  
 .addOnCompleteListener(this, new OnCompleteListener<AuthResult>() {  
 @Override  
 public void onComplete(@NonNull Task<AuthResult> task) {  
 if (task.isSuccessful()) {  
 // Sign in success, update UI with the signed-in user's information  
 Log.*d*(*TAG*, "signInWithEmail:success");  
 FirebaseUser user = mAuth.getCurrentUser();  
 updateUI(user);  
 } else {  
 // If sign in fails, display a message to the user.  
 Log.*w*(*TAG*, "signInWithEmail:failure", task.getException());  
 Toast.makeText(EmailPasswordActivity.this, "Authentication failed.",  
 Toast.*LENGTH\_SHORT*).show();  
 updateUI(null);  
 }  
  
 // [START\_EXCLUDE]  
 if (!task.isSuccessful()) {  
 mStatusTextView.setText(R.string.auth\_failed);  
 }  
 hideProgressDialog();  
 // [END\_EXCLUDE]  
 }  
 });  
 // [END sign\_in\_with\_email]  
 }  
  
 private void signOut() {  
 mAuth.signOut();  
 updateUI(null);  
 }  
  
 private void sendEmailVerification() {  
 // Disable button  
 findViewById(R.id.verifyEmailButton).setEnabled(false);  
  
 // Send verification email  
 // [START send\_email\_verification]  
 final FirebaseUser user = mAuth.getCurrentUser();  
 user.sendEmailVerification()  
 .addOnCompleteListener(this, new OnCompleteListener<Void>() {  
 @Override  
 public void onComplete(@NonNull Task<Void> task) {  
 // [START\_EXCLUDE]  
 // Re-enable button  
 findViewById(R.id.verifyEmailButton).setEnabled(true);  
  
 if (task.isSuccessful()) {  
 Toast.makeText(EmailPasswordActivity.this,  
 "Verification email sent to " + user.getEmail(),  
 Toast.*LENGTH\_SHORT*).show();  
 } else {  
 Log.*e*(*TAG*, "sendEmailVerification", task.getException());  
 Toast.makeText(EmailPasswordActivity.this,  
 "Failed to send verification email.",  
 Toast.*LENGTH\_SHORT*).show();  
 }  
 // [END\_EXCLUDE]  
 }  
 });  
 // [END send\_email\_verification]  
 }  
  
 private boolean validateForm() {  
 boolean valid = true;  
  
 String email = mEmailField.getText().toString();  
 if (TextUtils.*isEmpty*(email)) {  
 mEmailField.setError("Required.");  
 valid = false;  
 } else {  
 mEmailField.setError(null);  
 }  
  
 String password = mPasswordField.getText().toString();  
 if (TextUtils.*isEmpty*(password)) {  
 mPasswordField.setError("Required.");  
 valid = false;  
 } else {  
 mPasswordField.setError(null);  
 }  
  
 return valid;  
 }  
  
 private void updateUI(FirebaseUser user) {  
 hideProgressDialog();  
 if (user != null) {  
 mStatusTextView.setText(getString(R.string.emailpassword\_status\_fmt,  
 user.getEmail(), user.isEmailVerified()));  
 mDetailTextView.setText(getString(R.string.firebase\_status\_fmt, user.getUid()));  
  
 findViewById(R.id.emailPasswordButtons).setVisibility(View.*GONE*);  
 findViewById(R.id.emailPasswordFields).setVisibility(View.*GONE*);  
 findViewById(R.id.signedInButtons).setVisibility(View.*VISIBLE*);  
  
 findViewById(R.id.verifyEmailButton).setEnabled(!user.isEmailVerified());  
 } else {  
 mStatusTextView.setText(R.string.signed\_out);  
 mDetailTextView.setText(null);  
  
 findViewById(R.id.emailPasswordButtons).setVisibility(View.*VISIBLE*);  
 findViewById(R.id.emailPasswordFields).setVisibility(View.*VISIBLE*);  
 findViewById(R.id.signedInButtons).setVisibility(View.*GONE*);  
 }  
 }  
  
 @Override  
 public void onClick(View v) {  
 int i = v.getId();  
 if (i == R.id.emailCreateAccountButton) {  
 createAccount(mEmailField.getText().toString(), mPasswordField.getText().toString());  
 } else if (i == R.id.emailSignInButton) {  
 signIn(mEmailField.getText().toString(), mPasswordField.getText().toString());  
 } else if (i == R.id.signOutButton) {  
 signOut();  
 } else if (i == R.id.verifyEmailButton) {  
 sendEmailVerification();  
 }  
 }  
}