

Ubah **build.gradle (Module:app)**, tambahkan di bagian dependencies

```
implementation 'com.squareup.retrofit2:retrofit:2.6.2'  
implementation 'com.squareup.retrofit2:converter-gson:2.5.0'
```

Kemudian klik **sync now**



Buat package baru **model**, kemudian buat class baru **Product**

```
public class Product {  
    String productId;  
    String productName;  
    Integer price;  
  
    //Buat Getter Setter nya...  
}
```

Pada method onCreate di class SplashScreenActivity, tambahkan

```
...  
  
SharedPreferences pref = getSharedPreferences("app_config", MODE_PRIVATE);  
SharedPreferences.Editor editor = pref.edit();  
editor.putString("api_base_url", "http://192.168.43.29:3006");  
editor.commit();  
  
new Handler().postDelayed(new Runnable() {  
...  
}
```

Buat package baru **api**, kemudian buat class baru **RetrofitClientInstance**

```
import retrofit2.Retrofit;
import retrofit2.converter.gson.GsonConverterFactory;

public class RetrofitClientInstance {
    private static Retrofit retrofit;
    private static String BASE_URL = "";

    public static Retrofit getRetrofitInstance() {
        if (retrofit == null) {
            SharedPreferences prf = App.getAppContext()
                .getSharedPreferences("app_config", Context.MODE_PRIVATE);
            BASE_URL = prf.getString("api_base_url", "");
            retrofit = new retrofit2.Retrofit.Builder()
                .baseUrl(BASE_URL)
                .addConverterFactory(GsonConverterFactory.create())
                .build();
        }
        return retrofit;
    }
}
```

Di folder res > layout > klik kanan > new > **Layout Resource File**
File Name : **product_list.xml**, Root Element : **Linear Layout**

Tarik sebuah Relative Layout, kemudian tambahkan 3 component TextView untuk menampung informasi product, berikan id yang sesuai

txtProductPrice

- layout_alignParentEnd : true

txtProductId

- layout_alignTop : @id/txtProductName
- layout_marginLeft : 10dp
- layout_marginTop : 30dp

txtProductName

- textSize : 18sp
- textStyle : bold

Linear Layout & Relative Layout

- layout_height : wrap_content

Pada package **ui** buat class baru **ProductViewHolder**

```
import android.view.View;
import android.widget.TextView;

import androidx.annotation.NonNull;
import androidx.recyclerview.widget.RecyclerView;

import com.enigma.pascal.helloworlddb.R;

public class ProductViewHolder extends RecyclerView.ViewHolder {
    public TextView txtProductId, txtProductName, txtPrice;

    public ProductViewHolder(@NonNull View itemView) {
        super(itemView);
        txtProductId = (TextView) itemView.findViewById(R.id.txtProductId);
        txtProductName = (TextView) itemView.findViewById(R.id.txtProductName);
        txtPrice = (TextView) itemView.findViewById(R.id.txtProductPrice);
    }
}
```

Pada package **ui** buat class baru **ProductListAdapter**

```
public class ProductListAdapter extends RecyclerView.Adapter {
    private List<Product> dataList;

    public ProductListAdapter(List<Product> dataList) {
        this.dataList = dataList;
    }

    @NonNull
    @Override
    public RecyclerView.ViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {
        View mView = LayoutInflater.from(parent.getContext()).inflate(R.layout.product_list, parent, false);
        ProductViewHolder mViewHolder = new ProductViewHolder(mView);
        return mViewHolder;
    }

    @Override
    public void onBindViewHolder(@NonNull RecyclerView.ViewHolder holder, int position) {
        ((ProductViewHolder) holder).txtProductId.setText("Id = " + dataList.get(position).getProductId());
        ((ProductViewHolder) holder).txtProductName.setText(dataList.get(position).getProductName());
        ((ProductViewHolder) holder).txtPrice.setText("Rp. " + dataList.get(position).getPrice());
    }

    @Override
    public int getItemCount() {
        return this.dataList.size();
    }
}
```

tambahkan component RecyclerView pada fragment yang diinginkan

```
public class PayBuyFragment extends Fragment {
    private ProductListAdapter productListAdapter;
    private RecyclerView mRecyclerView;

    ...

    @Override
    public void onCreateView(@NonNull View view, @Nullable Bundle savedInstanceState) {
        super.onCreateView(view, savedInstanceState);
        mRecyclerView = view.findViewById(R.id.recyclerView);

        ProductRestService service = RetrofitClientInstance.getRetrofitInstance().create(ProductRestService.class);
        Call<List<Product>> call = service.getAllProducts();
        call.enqueue(new Callback<List<Product>>() {
            @Override
            public void onResponse(Call<List<Product>> call, Response<List<Product>> response) {
                generateDataList(response.body());
            }

            @Override
            public void onFailure(Call<List<Product>> call, Throwable t) {
                Log.e("Retrofit Get", t.toString());
            }
        });
    }

    private void generateDataList(List<Product> productList) {
        if (productList != null) {
            LinearLayoutManager layout = new LinearLayoutManager(getContext());
            mRecyclerView.setLayoutManager(layout);
            productListAdapter = new ProductListAdapter(productList);
            mRecyclerView.setAdapter(productListAdapter);
        }
    }
}
```