



## INDICATOR AND SEARCH IN RECYCLEVIEW

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- Bước 1: Thiết kế giao diện activity\_main.xml và item\_icon\_promotion.xml

```
<androidx.recyclerview.widget.RecyclerView
    android:id="@+id/rclcon"
    android:layout_alignParentStart="true"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="@color/red"
    android:paddingBottom="10dp"/>
```

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="75dp"
    android:orientation="vertical"
    android:padding="4dp"
    android:layout_height="75dp">
    <ImageView
        android:id="@+id/ivImgIcon"
        android:src="@drawable/ic_baseline_person_24"
        android:layout_gravity="center"
        android:layout_width="40dp"
        android:layout_height="40dp"/>
    <TextView
        android:id="@+id/tvIcon"
        android:layout_marginTop="4dp"
        android:layout_gravity="center"
        android:gravity="center"
        android:text="icon dfdf"
        android:textColor="@color/white"
        android:textSize="10sp"
        android:layout_width="75dp"
        android:layout_height="wrap_content"/>
</LinearLayout>
```

## □ Bước 2: Tạo Model và Tạo Adapter

```
public class IconModel implements Serializable {
    private Integer imgId;
    private String desc;

    public IconModel(Integer imgId, String desc) {
        this.imgId = imgId;
        this.desc = desc;
    }

    public Integer getImgId() { return imgId; }

    public void setImgId(Integer imgId) { this.imgId = imgId; }

    public String getDesc() { return desc; }

    public void setDesc(String desc) { this.desc = desc; }
}
```

## □ Bước 2: Tạo Model và Tạo Adapter

```
public class IconAdapter extends RecyclerView.Adapter<IconAdapter.IconHolder>{
    private Context context;
    private List<IconModel> arrayList;

    public IconAdapter(Context context, List<IconModel> arrayList) {
        this.context = context;
        this.arrayList = arrayList;
    }
}
```

## □ Bước 2: Tạo Model và Tạo Adapter

```

@NonNull
@Override
public IconHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {
    View view = LayoutInflater.from(parent.getContext()).inflate(R.layout.item_icon_promotion, parent, attachToRoot: false);
    return new IconHolder(view);
}

@Override
public void onBindViewHolder(IconHolder viewHolder, int position) {
    IconModel iconModel = arrayList.get(position);
    Glide.with(context).load(iconModel.getImgId()).into(viewHolder.imageView);
    viewHolder.tvIcon.setText(iconModel.getDesc());
}

@Override
public int getItemCount() {
    if(arrayList!=null){
        return arrayList.size();
    }
    return 0;
}
}

public class IconHolder extends RecyclerView.ViewHolder {
    private ImageView imageView;
    private TextView tvIcon;
    public IconHolder(View itemView) {
        super(itemView);
        imageView = itemView.findViewById(R.id.ivImgIcon);
        tvIcon = itemView.findViewById(R.id.tvIcon);
    }
}

```

## □ Bước 3: Viết Class indicator

Copy class `LinePagerIndicatorDecoration` bỏ vào bên ngoài hàm `onCreate` của `MainActivity.java`

Khai báo và Chỉnh lại dòng sau theo Activity của mình

```
private ShopeeActivity shopeeActivity;
```

```
private final float DP = shopeeActivity.getResources().getDisplayMetrics().density;
```

## □ Bước 4: Viết code trong mainactivity

```
rcIcon = findViewById(R.id.rcIcon);
arrayList1 = new ArrayList<>();
arrayList1.add(new IconModel(R.drawable.icon1, desc: "jfdjfdjf djfdh"));
arrayList1.add(new IconModel(R.drawable.icon2, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon3, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon4, desc: "dfgfhyh sxdff"));
arrayList1.add(new IconModel(R.drawable.icon5, desc: "jfdjfdjf djfdh"));
arrayList1.add(new IconModel(R.drawable.icon6, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon7, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon8, desc: "dfgfhyh sxdff"));
arrayList1.add(new IconModel(R.drawable.icon9, desc: "dfgfhyh sxdff"));
arrayList1.add(new IconModel(R.drawable.icon1, desc: "jfdjfdjf djfdh"));
arrayList1.add(new IconModel(R.drawable.icon2, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon3, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon4, desc: "dfgfhyh sxdff"));
arrayList1.add(new IconModel(R.drawable.icon5, desc: "jfdjfdjf djfdh"));
arrayList1.add(new IconModel(R.drawable.icon6, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon7, desc: "sdfdf sdfsf"));
arrayList1.add(new IconModel(R.drawable.icon8, desc: "dfgfhyh sxdff"));
arrayList1.add(new IconModel(R.drawable.icon9, desc: "dfgfhyh sxdff"));

GridLayoutManager gridLayoutManager = new GridLayoutManager(context: ShopeeActivity.this, spanCount: 2,
    GridLayoutManager.HORIZONTAL, reverseLayout: false);
rcIcon.setLayoutManager(gridLayoutManager);
iconAdapter = new IconAdapter(getApplicationContext(), arrayList1);
rcIcon.setAdapter(iconAdapter);
rcIcon.addItemDecoration(new LinePagerIndicatorDecoration());
```

- Hình lấy trên khóa học
- Thay đổi mô tả tên hình cho đẹp

Gọi Indicator



- Bước 5: Viết thêm hàm `setListenerList()` trong `IconAdapter` của ví dụ 1

```
public void setListenerList(List<IconModel> iconModelList){
    this.arrayList = iconModelList;
    notifyDataSetChanged();
}
```

- Bước 6: Thiết kế thêm giao diện trong `activity_main.xml`

```
<androidx.appcompat.widget.SearchView
    android:id="@+id/searchView"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="8dp"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:queryHint="Search here..."
    app:iconifiedByDefault="false"/>
```

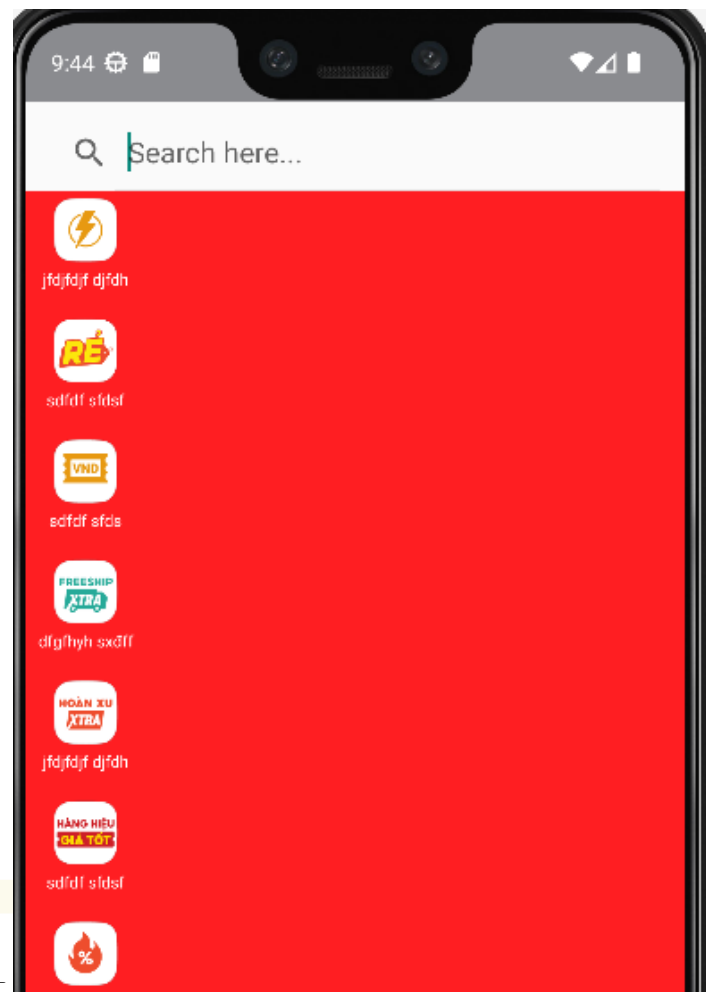
## □ Bước 7: Xử lý search trong MainActivity.java

```

searchView = findViewById(R.id.searchView);
searchView.clearFocus();
searchView.setOnQueryTextListener(new SearchView.OnQueryTextListener() {
    @Override
    public boolean onQueryTextSubmit(String query) {
        return false;
    }

    @Override
    public boolean onQueryTextChange(String newText) {
        filterListener(newText);
        return true;
    }
});

private void filterListener(String text) {
    List<IconModel> list = new ArrayList<>();
    for (IconModel iconModel:arrayList1){
        if(iconModel.getDesc().toLowerCase().contains(text.toLowerCase())){
            list.add(iconModel);
        }
    }
    if(list.isEmpty()){
        Toast.makeText(context, this, text, "Không có dữ liệu", Toast.LENGTH_SHORT).show();
    }else{
        iconAdapter.setListenerList(list);
    }
}
    
```



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