

# Android 第二次作业

## ——Android Activity 生命周期观察实验

### 实验目的

- 1. 掌握 Android Activity 生命周期的基本概念
- 2. 通过 Log 观察 Activity 在不同场景下的生命周期变化
- 3. 理解 Activity 跳转和返回时的生命周期调用顺序
- 4. 分析普通 Activity 与 Dialog Activity 在生命周期上的差异

### 实验步骤

#### 第一部分：基础生命周期观察

##### 启动应用观察

启动应用，观察 MainActivity 的生命周期调用顺序

记录 Logcat 中的输出

2025-10-12 00:30:50.330	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onCreate
2025-10-12 00:30:50.338	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onStart
2025-10-12 00:30:50.344	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onResume

##### 普通 Activity 跳转

从 MainActivity 跳转到 SecondActivity

观察两个 Activity 的生命周期变化

2025-10-12 00:30:53.731	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onPause
2025-10-12 00:30:53.748	5413-5413	Lifecycle	com.example.activitylifecyclelab	D SecondActivity - onCreate
2025-10-12 00:30:53.750	5413-5413	Lifecycle	com.example.activitylifecyclelab	D SecondActivity - onStart
2025-10-12 00:30:53.750	5413-5413	Lifecycle	com.example.activitylifecyclelab	D SecondActivity - onResume
2025-10-12 00:30:54.278	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onStop

从 SecondActivity 返回 MainActivity

再次观察生命周期变化

2025-10-12 00:30:57.450	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onRestart
2025-10-12 00:30:57.451	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onStart
2025-10-12 00:30:57.593	5413-5413	Lifecycle	com.example.activitylifecyclelab	D SecondActivity - onPause
2025-10-12 00:30:57.599	5413-5413	Lifecycle	com.example.activitylifecyclelab	D MainActivity - onResume
2025-10-12 00:30:58.056	5413-5413	Lifecycle	com.example.activitylifecyclelab	D SecondActivity - onStop
2025-10-12 00:30:58.057	5413-5413	Lifecycle	com.example.activitylifecyclelab	D SecondActivity - onDestroy

对话活动跳转

从 MainActivity 跳转到 Dialog Activity

观察生命周期变化

```
2025-10-12 00:31:00.077 5413-5413 Lifecycle com.example.activitylifecyclelab D MainActivity - onPause
```

从 Dialog Activity 返回

观察生命周期变化

```
2025-10-12 00:59:43.905 5987-5987 Lifecycle com.example.activitylifecyclelab D MainActivity - onCreate
2025-10-12 00:59:43.913 5987-5987 Lifecycle com.example.activitylifecyclelab D MainActivity - onStart
2025-10-12 00:59:43.918 5987-5987 Lifecycle com.example.activitylifecyclelab D MainActivity - onResume
```

第二部分：数据记录与分析

记录以下场景的 Log 输出：

场景	MainActivity 生命周期顺序	目标 Activity 生命周期顺序
应用启动	onCreate-onStart-onResume	/
Main → SecondActivity（主 SecondActivity）	onPause-onStop	onCreate-onStart-onResume
SecondActivity 返回	onRestart-onStart-onResume	onPause-onStop-onDestroy
Main → Dialog Activity	onPause	/
Dialog Activity 返回	onCreate-onStart-onResume	/