Launch Modes

in Android

Standard

Standard

A ⟶ **B** ⟶ C ⟶ D

New instance
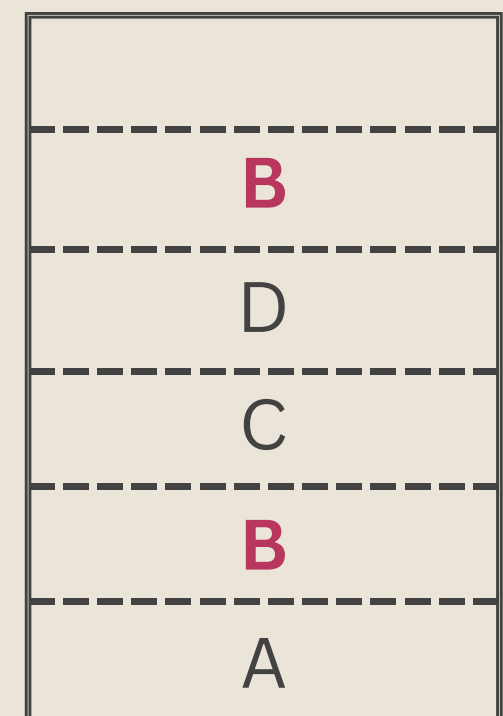
A ⟶ **B** ⟶ C ⟶ D ⟶ **B**

Stack tray

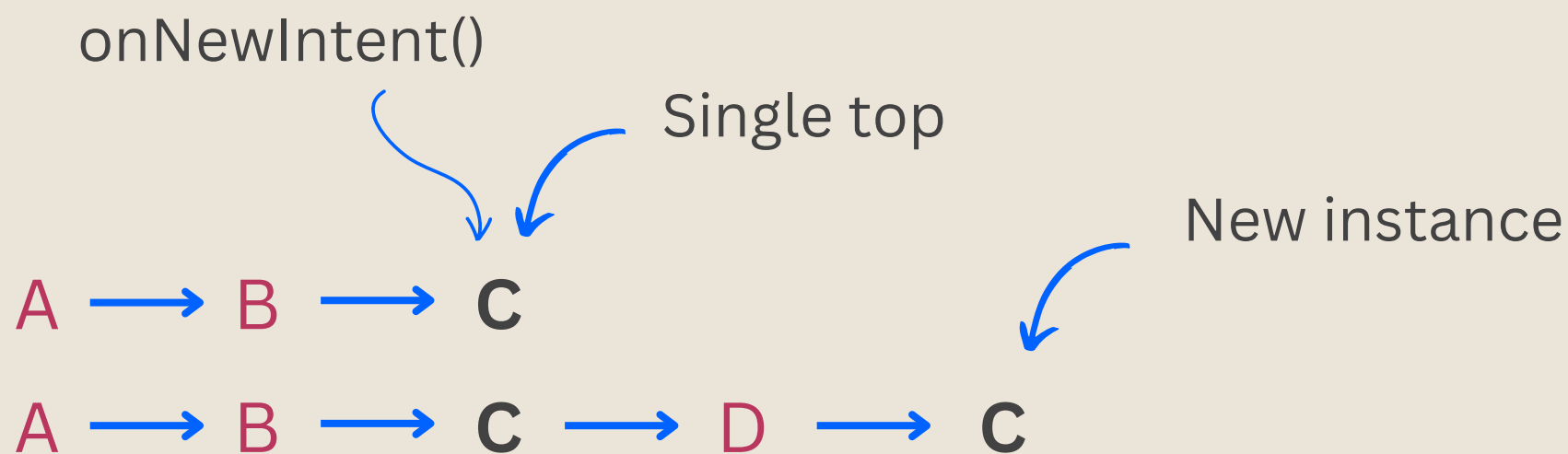| |
|---|
| **B** |
| D |
| C |
| **B** |
| A |
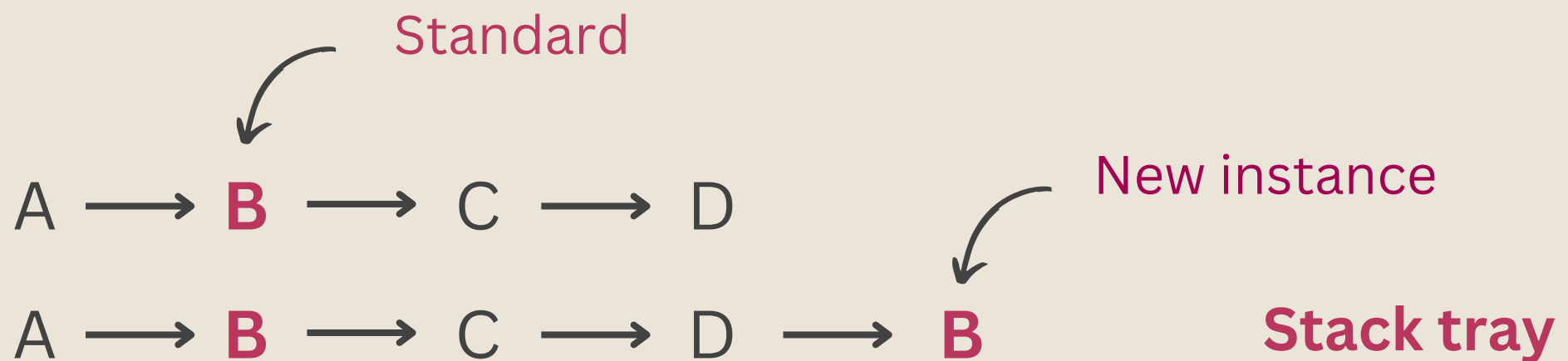
This is the **default mode.** Every time when we start new activity a new instance is created and added onto the stack.

Single Top

onNewIntent()

Single top

New instance

A ⟶ B ⟶ **C**

A ⟶ B ⟶ **C** ⟶ D ⟶ **C**
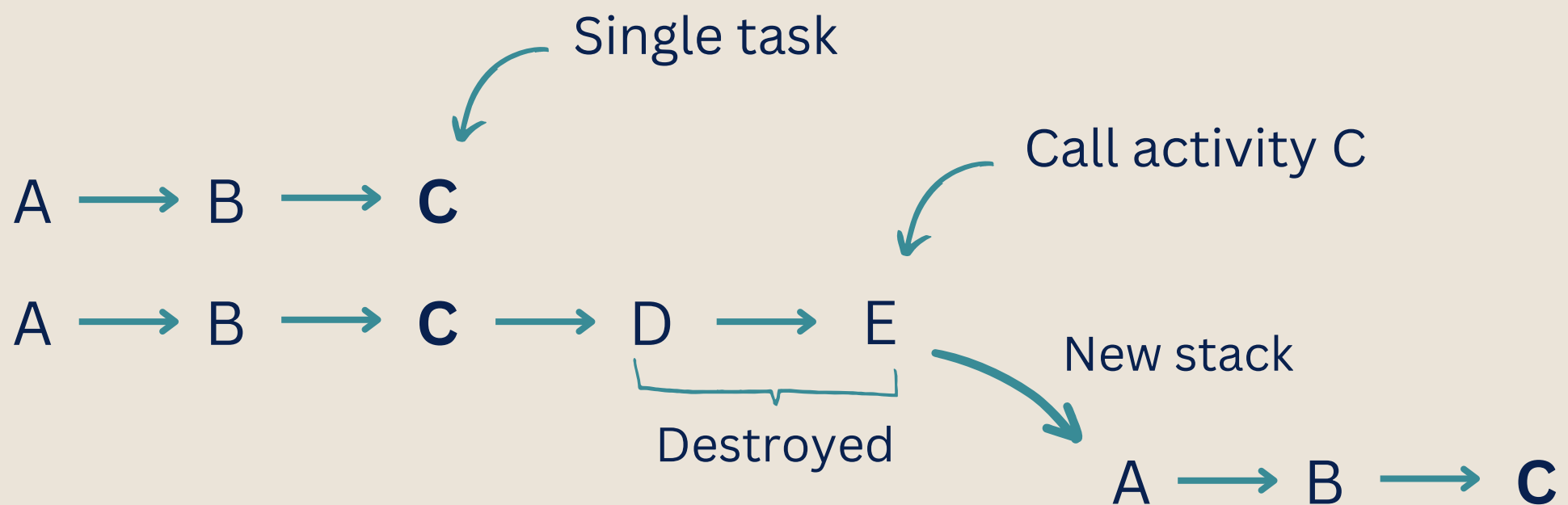
If the instance is already present on the top of stack, it will **not create a new instance**, instead it will call a method **onNewIntent()**. If the instance is **not present** on the top it will **create a new instance**.
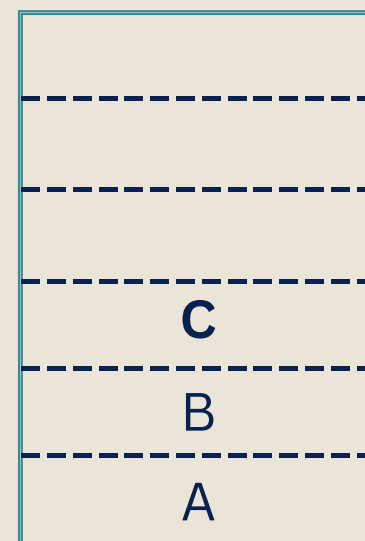
Stack tray
C
B
A

onNewIntent()

Stack tray
C
D
C
B
A
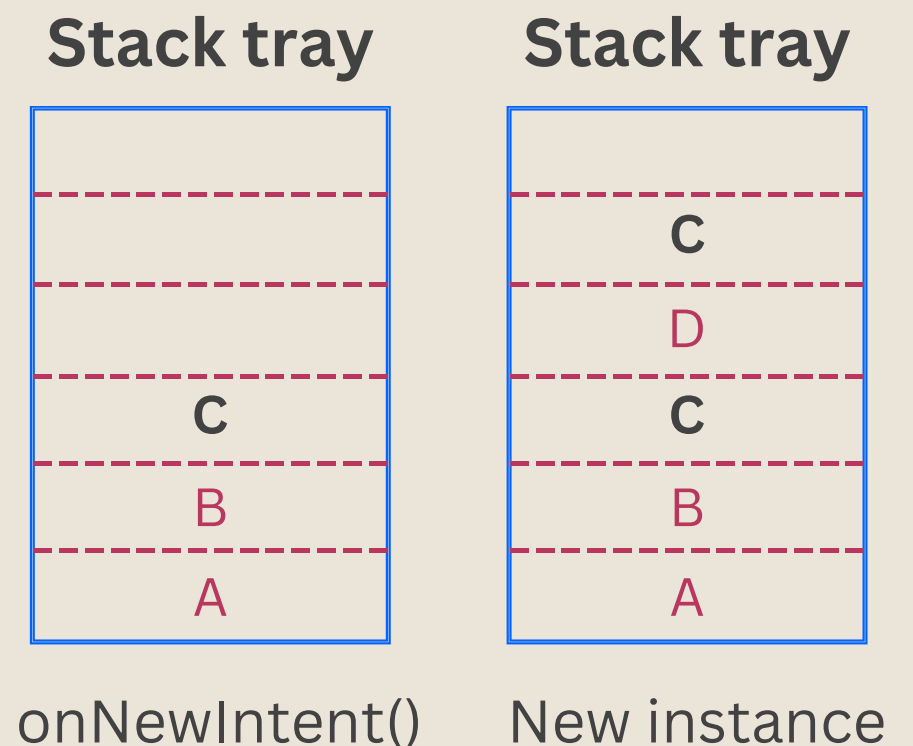
New instance

Single Task

Single task

Call activity C

A ⟶ B ⟶ **C**

A ⟶ B ⟶ **C** ⟶ D ⟶ E
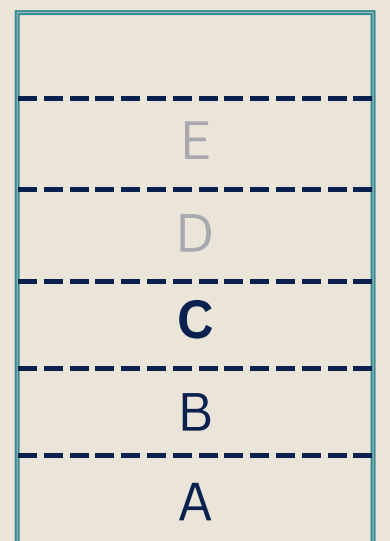
Destroyed

New stack

A ⟶ B ⟶ **C**

singleTask can have **only one instance in the system.** If activity instance is **not present** in the stack then the **new instance** will be created. If it is present then the method **onNewIntent()** will be called and all the previous activities will be **destroyed**.
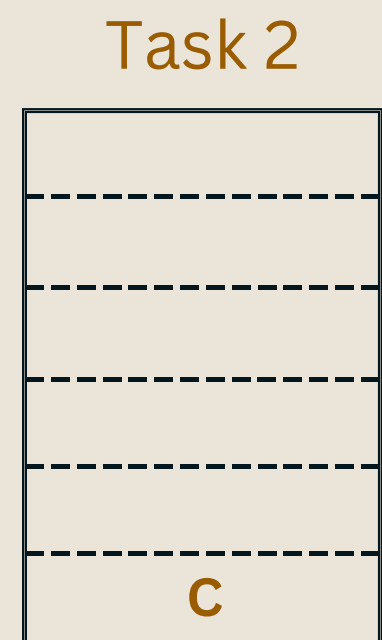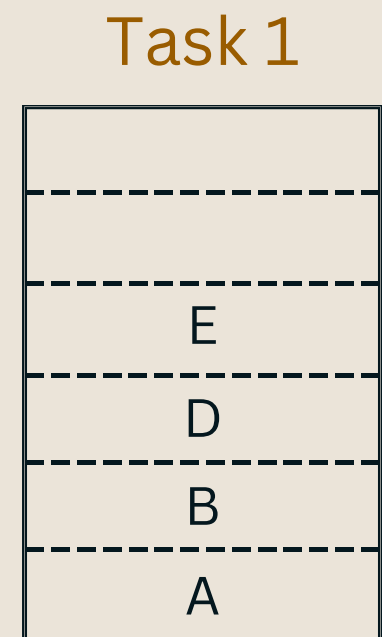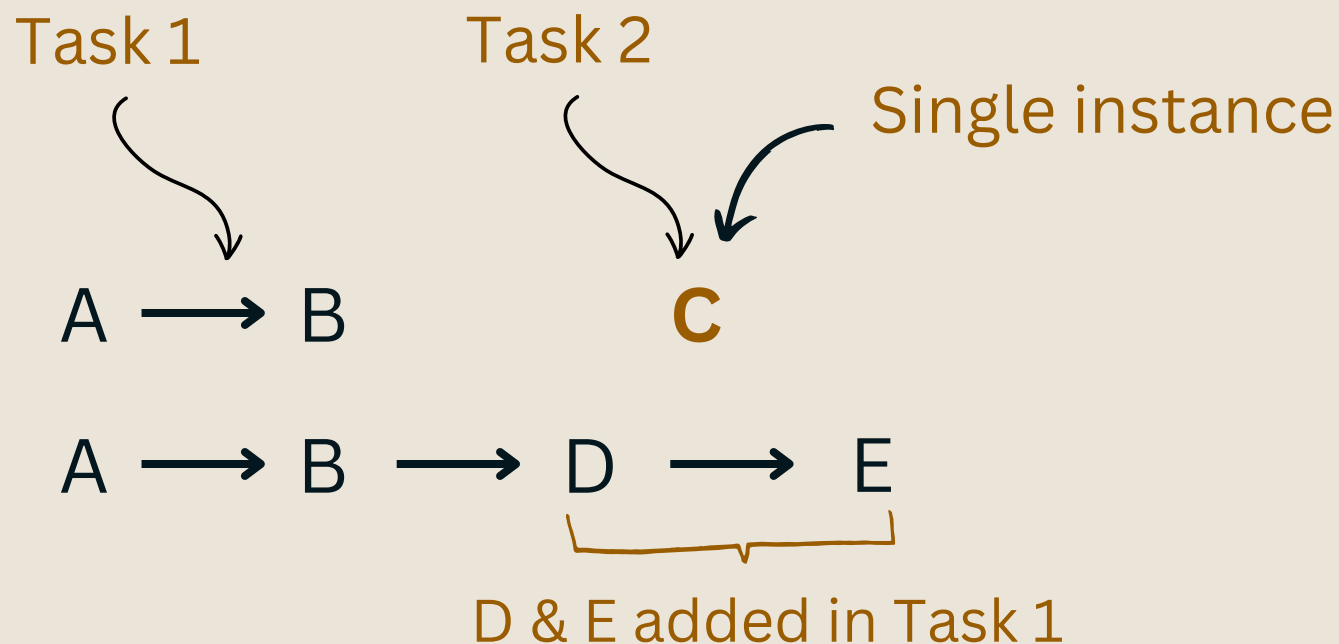
Stack tray
C
B
A

Stack tray
E
D
C
B
A

Single Instance

Task 1   Task 2

Single instance

A ⟶ B

C

A ⟶ B ⟶ D ⟶ E

D & E added in Task 1

This is almost same as singleTask with some changes in the tasks. If an activity with **singleInstance** is called then it will launch in **new different task (Task 2)**. If another activity is called except singleInstance then it will be **added** on the **top of first stack** (D & E). If C is called again then, we will get a callback in **onNewIntent().**

Task 1

E
D
B
A

Task 2

c

onNewIntent()