

Technical Requirements – Haunted Theme Switcher

Challenge is accessible on Memberspot: <https://pl-coding.mymemberspot.io/library/jx3b7Qik9ip5qpNI8IF2/FgYR5e2HfPtserJY1udz/PtYdgGS0zpL3RW2e8XB0/details>

🤖 Scenario

This challenge simulates a day/night theme switcher in a Halloween-inspired style. Tapping the custom pumpkin toggle triggers a sequence of animations that transition the scene between day and night.

🎨 Figma Mockups

<https://www.figma.com/design/jBflfs7N6lphZE3Ue03Lot/Android-Halloween-Lab?node-id=2010-1429>

🎯 Feature Goal

Implement a smooth animated transition between two states — “Day” and “Night” — according to the following animation rules.

📌 Requirements

Transition Day → Night

- The **sun** moves downward to the right along a curved path and disappears.
- Simultaneously, the **moon** moves upward from the left along a mirrored curved path and replaces the sun.
- **Clouds** slide outward in opposite directions (left and right) while gradually fading out.
- The **graveyard background** slides to the right, and a new night version of the graveyard (with a different tree and scenery) appears.
- A **semi-transparent dark overlay** fades in. Overlay must cover only the graveyard, while all other elements (sun, moon, clouds, stars, ghost) must appear above it.
- The overlay color is **black (#000000)** with 50% transparency.
- **Stars** fade in across the sky.
- The **ghost** appears statically at a fixed point with a scale-in effect.
- The ghost should start at 50% scale and smoothly grow to 100% when appearing.



Transition Night → Day

- The **moon** moves downward to the left along its curved path and disappears.
- Simultaneously, the **sun** moves upward from the right along its original curved path to reclaim its position.
- **Stars** fade out.
- The ghost fades out by shrinking from 100% to 50%.
- The **graveyard background** slides to the left, and the day version of the scenery reappears.
- **Clouds** slide back into the scene from the sides while gradually fading in.
- The **dark overlay** fades out.



Additional Animation Notes

- All animations must complete within **1 second**.
- Elements should animate smoothly and synchronously.
- All elements that disappear off-screen (e.g., sun, moon, clouds) must move by a distance equal to the **screen width**. The screen width can be obtained from `LocalConfiguration.current`.
- The semi-transparent dark overlay must cover only **the graveyard**, while all other elements (sun, moon, clouds, stars, ghost) must appear above it.
- For the Graveyard Background, wrap the element in a **horizontal scrollable container** (e.g., a `Box` with scrolling) to implement smooth sliding of the scenery during transitions. Example:

```
15  @Composable
16  fun Graveyard(
17      isDayMode: Boolean,
18      modifier: Modifier = Modifier
19  ) {
20      val scroll = rememberScrollState(initial = if (isDayMode) Int.MAX_VALUE else 0)
21
22      LaunchedEffect(key1 = isDayMode) {
23          val target = if (isDayMode) scroll.maxValue else 0
24      -> scroll.animateScrollTo(
25          value = target,
26          animationSpec = tween(durationMillis = 1000, easing = EaseIn)
27      )
28      }
29
30      Box(
31          modifier = modifier.horizontalScroll(state = scroll, enabled = false)
32      ) {
33          Image(
34      🖼️ painter = painterResource(id = R.drawable.graveyard),
35          contentDescription = null
36      )
37      }
38  }
```

🤔 What's Allowed?

- Standard Android/Jetpack libraries
- No 3rd party libraries are allowed or would be required to complete this challenge
- Use Jetpack Compose Animation APIs (animateFloat, fadeIn/fadeOut, scaleIn/scaleOut, AnimatedVisibility).

⚠️ What's not important

- Responsiveness across every device size or orientation is not mandatory.
- Exact motion curves (smooth interpolation is enough).
- Additional effects like sound or parallax.

🔗 Useful Links for This Challenge

- [Full Guide to Jetpack Compose Animations](#)
- [Quick Guide to Animations in Compose](#)
- [Value-based Animations](#)
- [Jetpack Compose Animation Codelab](#)
- [Choosing the Right Animation API in Compose](#)
- [Vector drawables overview](#)
- [How You Use an AI Coding Agent](#)

🏆 Submission & Rewards

- Successfully submitting this challenge via the `/submit-challenge` command on Discord grants you **100 XP**.
- Your submission must include:
 - a. A link to a Gist with your implementation
 - b. A screen recording (max 20 seconds) showing:
 - Initial daytime state.
 - Transition Day → Night with all animations.
 - Transition Night → Day back to daytime.