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Adding Animated Navigation Between Screens

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Section Overview

- Animated navigation
- Accompanist Navigation Animation Overview
- Code
- Wrap up

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Animated Navigation and Accompanist

- Animated navigation : more intuitive and easier to use
- Jetpack Compose Navigation does not YET support navigation animation
- Accompanist Navigation Animation : Library that we use to add animation support to Jetpack Compose navigation
- Project page : https://github.com/google/accompanist

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Code Time

- Folder : s8-adding-animated-navigation-between-screens/starter-project
- Files:
  - libs.versions.toml and app/build.gradle.kts
    - Add Accompanist Navigation Animation artifact to project
  - VoiceNavGraph.kt
    - Replace Jetpack Navigation with Compose Navigation
    - Customize Navigation animation in :
      - AnimatedNavHost
      - composable
      - navigation

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Transition parameters

- enterTransition: for content that enters screen
- exitTransition: for content that exits screen
- popEnterTransition: for content entering screen as result of back stack pop
- popExitTransition: for content exiting screen as result of back stack pop

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Section Summary

- Accompanist Navigation Animation Overview
- Add Accompanist Navigation Animation to the project
- Customize navigation animations

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Course Summary and Takeaways

- Compose Animations :
  - High-level : AnimatedVisibility, AnimatedContent, Crossfade, animateContentSize, InfiniteTransition, Transition
  - Low-level : Animatable, Animation, AnimationState, animate
- When and how to use a specific animation API in Compose
- Customize animation behavior by defining custom AnimationSpecs e.g. tween, spring, keyframes, repeatable, infiniteRepeatable, and snap
- Animation in real-world app : list animation, gesture animation, Lottie, navigation animation
- Animation best practices

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Where to go next?

- Try to complete starter projects of each section without looking at solution
- Try to add more animations to the Voices app
- Be friends with references and samples as you develop :
  - d.android.com/reference
  - cs.anroid.com/androidx

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