# **Animations**

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#### **Animations**

- Adds to better user experience
- React Native supports a powerful Animated API
  - Fluid, powerful and easy to build
  - Declarative relationships between inputs and outputs with configurable transforms in between
  - Simple start/stop methods to control time-based animation execution

# **Animated API**

- Values in Animated:
  - Animated.Value(): single values
  - Animated.ValueXY(): vector
  - Interpolate() to map input ranges to different output ranges
- Animation Types:
  - Animated.decay(): fast start and slows to a stop
  - Animated.spring(): spring physics model
  - Animated.timing(): animate values over time using easing functions

#### **Animated API**

- Animated components:
  - Animated.Image
  - Animated.ScrollView
  - Animated.Text
  - Animated View
- Can compose animations: delay(), parallel(), sequence(), stagger()

## React-native-animatable

- Standard set of easy to use animations and declarative transitions
- Declarative precomposed animations easy to apply to Animatable. View, Text and Image
- Several properties: animation, duration, delay, direction, easing, iterationCount, transition

## React-native-animatable

- Imperative use:
  - Animations exposed as functions on animatable elements
  - Get a reference to an element
  - Apply animation functions
  - Takes a duration argument
  - Returns a promise that is resolved when animation completes successfully or is cancelled