

# Enhancing User Experience Through Effective Transitions

## 1. Elements of Transitions

Factors which should be considered while creating a transitions. These can be used to influence the users' perception of the transition.

### 1.1 Attention

Transitions are extremely effective in attracting users' attention. Running multiple transitions can be ineffective because the user can track limited number of elements simultaneously

### 1.2 Speed

Perception of speed can be altered by changing UI parameters such as contrast, luminance, size, eccentricity, motion trajectory

### 1.3 Frame of Reference

Perception of motion works in hierarchial manner, the surrounding object serve as a frame of reference for surrounded object

### 1.4 Interaction Between Elements

Users' assign meaning to elements depending how they interact with one another. Example: Johansson experiment, Heider & Simmel experiment

## 2. Principles of Transition

Principles which help establish effective communication between the user and the interface

### 2.1 Creating Virtual Space

Giving spatial attributes to the interface. Adding transitions between different states of the application help build better conceptual model and enable easy navigation

#### 2.1.1 Dimensionality

Giving 3D attributes to the interface. Example: Object, Floating and Origami dimensionality

#### 2.1.2 Maintain Contact While Changing Views

Transitions which allow the change of views while maintaining the overall context of the application. Example: Slide in Slide out, Flip, Carousel

#### 2.1.3 Expand Collapse

Expanding a particular element which provides more information or content.

### 2.2 Application Status

Helping the user to be cognizant of the functions which application is performing

#### 2.2.1 Improve Percieved Performance

When a long process is running, it is better to divert the users' attention towards something else to prevent restiveness.

#### 2.2.2 Spotlight

Subtly highlighting elements in the interface. These are used when the user needs to be informed about an update that has occurred.

#### 2.2.3 Visual Hint

Animations which hint the user about the hidden functionalities in the interface.

#### 2.2.4 Same Location New Action

Transitions which show change in function of an element

#### 2.2.5 Drag and Drop

Expanding a particular element which provides more information or content.

### 2.3 Focus

Helping the user by focus only on the elements he requires to interact with

#### 2.3.1 Bright and Dim

Brightening the areas of interest on the screen

#### 2.3.2 Obscuration

Keeping the essential elements as they are while obscuring the remaining elements

#### 2.3.3 Highlight

Highlight an element through motion to bring it to users notice.

### 2.4 Causality

By enforcing causal relation between events and the elements, the interface can be made natural and intuitive

#### 2.4.1 Feedback

Make the interface reactive to the user and give him a feeling that the device is "listening to him"

#### 2.4.2 Cloning

By cloning, user understands that the new element is an extension of old element. The user also understands that the new element provides similar or related functionality as the old element

#### 2.4.3 Relationship Between Elements

When user observes different objects inter-related with cause and effect relationship, he begins to associate both of them as one single entity