Assignment 3

Exercise 1

a)

In Material Design, a surface refers to the visual representation of a UI element, like cards or menus. Elevation and shadows are used to create a sense of depth and hierarchy between these surfaces. By layering shadows with different elevations, designers can visually indicate which elements are interactive or stacked on top of others.

b)

Material Design uses two key colors: a primary and a secondary. The primary color is the most prominent and is used for branding, action buttons, and other important elements. The secondary color provides a complementary accent and is used for things like background elements or text. A tonal palette is a set of colors derived from a single base color, including variations in lightness and darkness. These tones are named systematically using their shade (how light or dark they are) relative to the base color. For instance, a light tone might be called "primary50" and a dark tone "primary900".

c)

Each accent color role in Material Design consists of four tones to provide a range of color options for different UI contexts. This allows for creating contrast, readability, and subtle variations within an element based on its state (e.g., disabled button vs. pressed button).

Exercise 2

b)

- The selectable modifier has been removed from the Row.
- The onClick handler has been moved to the RadioButton, where it updates the selected option and triggers the respective vibration pattern.

With this change, the interaction pattern is altered:

- Users must click directly on the RadioButton to trigger the selection action and corresponding effects (like vibration).
- Clicking on other parts of the Row, including the text, will not trigger the onClick event.

This modification could reduce usability by requiring more precise clicks, especially in touch-based interfaces. To maintain intuitive interaction, keeping the selectable modifier on the Row ensures a larger clickable area, making it easier for users to select an option.