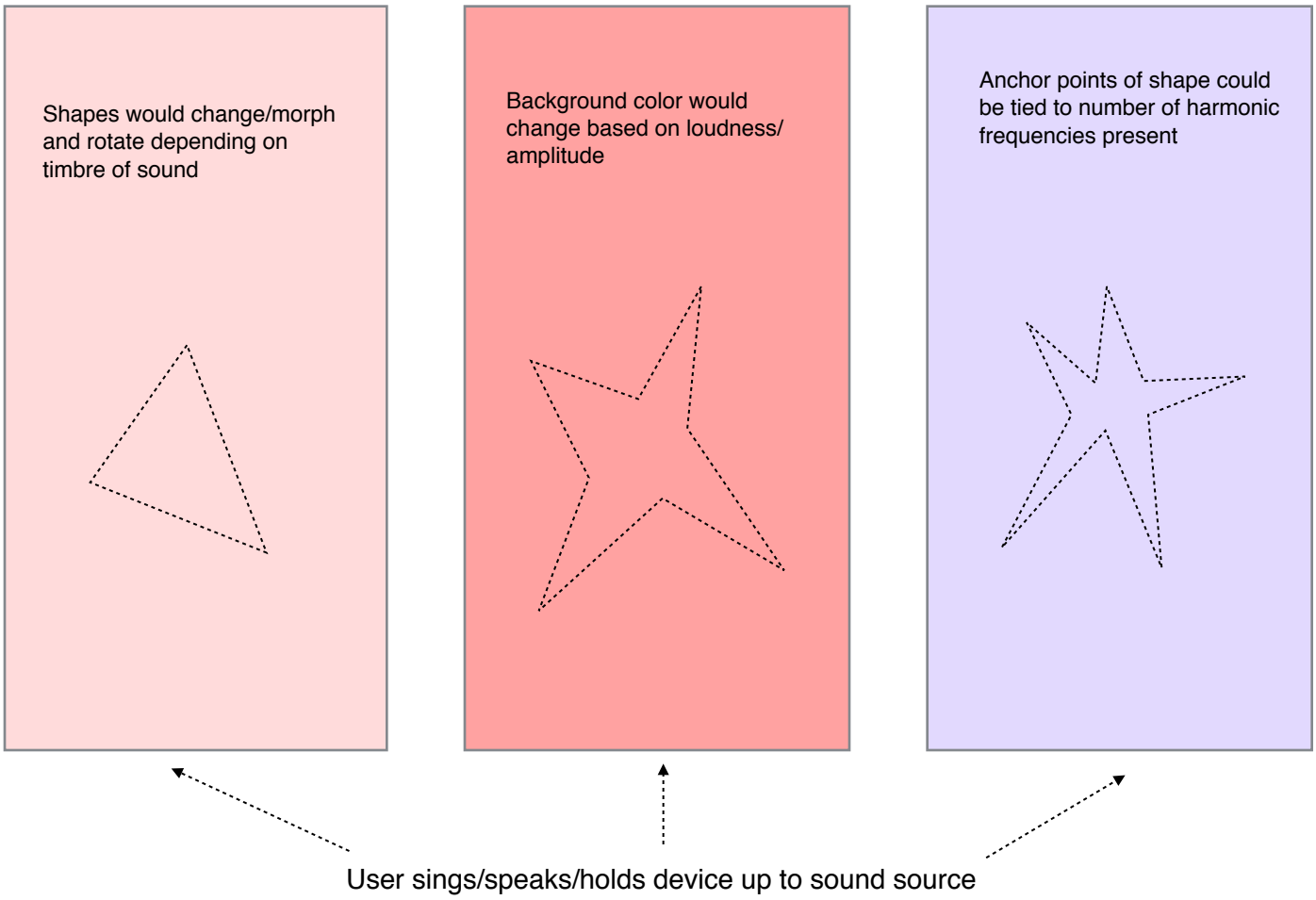
Project 1 Idea: Sound to Color

The concept of the app is the conversion of sound waves into visual imagery. Ideally, this would mean a shift in color and a changing shape relating directly to the amplitude and frequency being captured by the microphone, and then displayed on screen in an aesthetically pleasing way. Orientation of the device could also play a part in the shape or color displayed. Sketch for more detail:



Algorithm concept:

Microphone captures audio, and attributes of the audio are mapped to variables:

`soundVolume`
`soundFrequency`
(unsure what other attributes are available within existing frameworks)

also, orientation is captured:

```
deviceOrientation
```

Objects are created for the background square and the geometric shape:

```
background(hue, colorIntensity)
frequencyShape
```

and methods are created to change their attributes based on the changing variables coming from the microphone

```
map soundVolume to colorIntensity
map soundFrequency to frequencyShape
map deviceOrientation to hue
```

This runs constantly to reflect updates to in the input variables.