

makeup|SDK features

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AR makeup

makeup|SDK automatically detects important facial landmarks and applies virtual makeup by blending the colors using carefully designed semi-transparent masks and appropriate post-processing.

The SDK supports a wide range of AR makeup features out-of-the-box - all you need to do is to choose its color (or more colors) and finish:

- **Foundation**
- **Concealer**
- **Blush**
- **Eyeshadow**
- **Eyeline**
- **Mascara**
- **Eyebrow**
- **Lipstick**
- **Lip gloss**
- **Lipliner**
- **Contour**
- **Highlighter**
- **Face softener**
- **Face paint**

To ensure a more realistic look, some AR makeup features can be **applied to more (complementary) facial areas**.

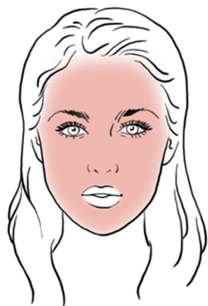
For example, the mascara feature can display short, medium or long eyelashes, and be applied to top eyelashes, bottom eyelashes, or both. Similarly, eyeliner can be applied to the top or bottom area of the eye, to both areas, or have a winged shape. Other makeup features, such as eyeshadow, foundation, lipstick, blush, etc. also come with different options you can choose from to create the best digital representation of your physical products.

Currently available finishes are: **glossy, matte, metallic, satin, shimmer and glitter**. Matte, metallic, glossy and satin finishes can be used with any of the features. The glitter and shimmer finishes can be used on lipstick, lipgloss, and all eyeshadow features. Additionally, there are the lipgloss and lipgloss shimmer finishes which can be used on lips.

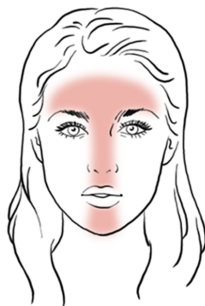
Finally, makeup|SDK comes with the **face softening feature**, too. When turned on, this feature will create a softer, smoother look of the user's skin.

Face

Foundation



Full face



T-zone

Highlighter



Concealer



Contour



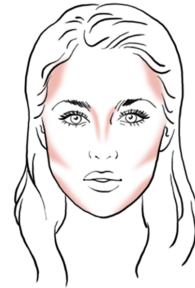
Contour for different face shapes



Heart



Round



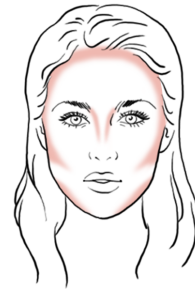
Square



Oval



Oblong

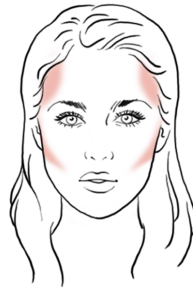


Rectangle

Oval contour customization example



Light



Medium



Heavy

Blush



Apple

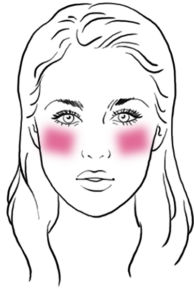


Cheekbone

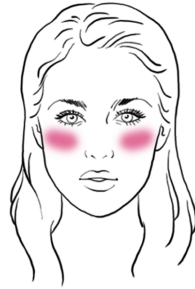


Contour

Blush for different face shapes



Long



Oval



Round

Face Paint



Forehead



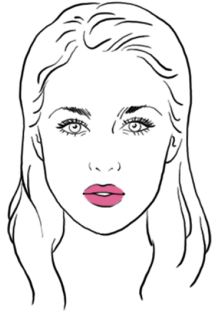
One Side



Temples

Lips

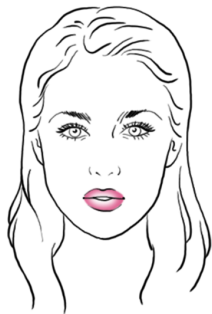
Lipstick



Lipliner



Ombre Lipstick



Outer



Inner

Petal Lipstick



Eyes

Eyeshadow



Lid



Contour



Highlight



Eyebrow Line



Smokey



Vertical Inside



Vertical Outside

Eyeliner



Winged



TopBottom



Top



Bottom



Double Flick



Double Mod



Box



Retro

Mascara



Top



Bottom



TopBottom

Eyebrows



Thin



Medium



Thick



Arched Intense



Arched Soft



Flat Intense



Flat Soft



Combed Intense



Combed Soft

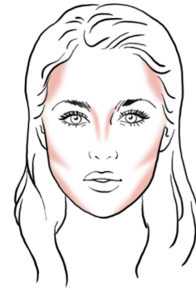
Alternative Contour areas



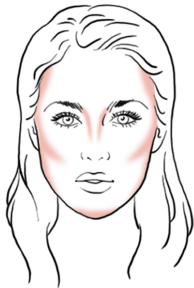
Heart 2



Round 2



Square 2



Oval 2

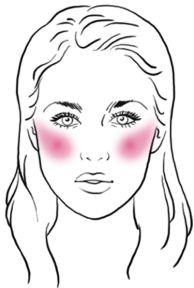


Oblong 2

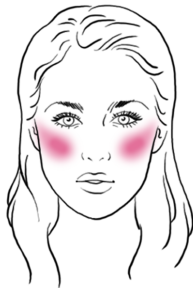


Rectangle 2

Alternative Blush areas



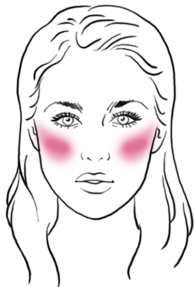
Heart 2



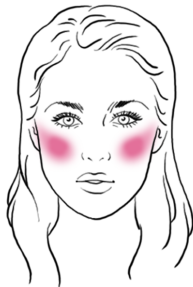
Round 2



Square 2



Oval 2



Oblong 2



Rectangle 2

Face tracker functionality

Face tracker module of makeup|SDK exposes face analysis results obtained by underlying [visage|SDK FaceTrack](#) functionality. This feature provides data describing 2D and 3D head pose, the coordinates of facial feature points (e.g. chin tip, nose tip, lip corners, mouth contour, chin pose, eyebrow contours), fitted 3D face model, eye closure and eye rotation (gaze direction).

Shade finder with skin tone estimation technology

The Shade finder, a distinct module of makeup|SDK, is designed to automatically detect skin tone color and offer results using the Monk Skin Tone scale. Unlike the traditional Fitzpatrick scale, which provides a potential 6-class output, our model offers a more comprehensive 10-class scale for the images submitted. This scale ranges from the lightest pale skin to the deepest darker tones, thereby enabling more accurate personalization by including a broader spectrum of shades in the model.

To ensure the most accurate results, the model guides users to position themselves in an optimal frontal pose within a circle, taking into consideration the lighting, and then gives the output based on a face mask tailored to the user's skin tone color. The result is then categorized into the relevant Monk Skin Tone class (1-10) and includes the estimated RGB color of the skin.

Additional implementation of a product recommender can be conducted on the backend, tailored to inputs from the beauty brand. This can be custom-designed to align with a specific beauty brand's portfolio.



For more information about the Shade finder, contact product@visagetechnologies.com.