New Features in Figma

**1. Color variables**

These variables can be applied to a **solid fill or a stroke**. You can define custom values when you’re defining variables or connect them to values from existing libraries.

That means that if you need to change the color of a variable linked to a value from an existing library, you can just change the source variable instead of each and every instance of it. This makes updating color values much faster.

**2. Number variables**

Adding these variables means assigning **a numerical value** to define spacing, padding, radius, width, and height.

**3. Boolean variables**

By assigning boolean values to a variable, we can control the **visibility of a layer** or an instance.

**4. String variables**

String variables can be applied to text. They will help teams who work on projects with multiple languages in terms of localization and content management, but it also makes it easier to work with repeated content.

**5. Auto Layout**

Ability to apply min and max width to components to layout elements of different sizes. Also ability to wrap elements when an auto layout size changes

**6. Ai Tools**

Text prompts to generate templates or charts, summarize contents of notes, group notes by theme. Generate vector illustration and copy text

**Project Ideas**

Birding Nature Tourism App

* Interactive Trail Spots
  + Recommended trail routes
  + Contextual information as you walk along the trail (AR). Overlay information
  + Interaction rewards: can take a picture/sketch add to personal library
  + View bird information, sound, video
  + Filters to find specific bird: bird silhouette/text
  + Recommended tips for observing
  + Swap between model versions (male, female, baby, molting, skeleton, aerial view)
* Digital Bird Calendar
  + Select bird of the month
  + Opens popup window where you can see:
    - Bird sounds
    - Upload bird sketch/picture
    - Bird description and location
    - Bird male/female/juvenile/skeleton/air view
    - Video/model can interact with

Merlin Bird App Comparison

* **Audio**
  + Audio from macaulay library at cornell lab of ornithology
  + Identify bird by audio recording, save audio recordings
* **Picture Library**
  + Identify bird by matching your picture to photo library
* **Search filters**
  + Location
  + Date
  + Family
  + Alphabetic
  + Lost likely location and family
  + Hide birds already on your favourite list
* **Explore menu**
  + Location and date at the top
  + Search bar and filter above that
  + Row for each individual bird sorted by type
    - Picture
    - Name
    - Month, how common they are
  + Enable location for more accurate results
  + Birds shown as silhouettes to jump to each section
* **Bird Page**
  + Bird description, rarity, location on map (seasonal color coding)
  + Map: from birds of north America
  + Pictures: adult/juvenile
  + Rarity: red dot
* **Other Notes**
  + Need a cornell lab account to save birds to your list
  + No park location just general area
  + Download bird catalogue by region

**Workflow**

Tasks performed

* Opens app
* Selects region and parks
* View park map of area
* Select trail
  + Select marker on trail for area highlighs
  + Area shows various bird markers
  + Markers can be clicked on to show more information: sound, model, animation etc.
* Library of birds section
  + Birds by area
  + Filter options: type, time of year, location, date, family, alphabetic
* Individual bird section
  + Bird pictures for male/female/juvenile/aerial view
  + Bird habitat/typical park location
  + Bird tracks
  + Sound clips
  + Description
  + Map of typical range

Features needed

* 3d model view of the bird (male, female, juvenile, skeleton)
* Bird info card
* Bird audio playback
* Bird pictures: male/female/juvenile/tracks/aerial view
* Bird location on park map/general
* Bird animation
* Trail map overlay and park navigation tips

Resources

|  |  |  |
| --- | --- | --- |
| **Skills** | **Features** | **Support/Library** |
| ux design | Map and ar markers, description | * <https://www.qgis.org/en/site/> (free, open source) * Mapbox (free version) * Open Street Map * Scribblemaps (5 maps free, low res) * <https://www.annotation.com/map/> * <https://www.gaiagps.com/> * <https://explorer.audubon.org/home?legend=collapse&layersPanel=expand> (bird migration maps) |
| 3d modelling | Bird model | * Blender * Maya * Needle.tools |
| Graphic design, ai generation | Bird illustration | * Photoshop * Illustrator * Designs.ai * <https://blush.design/> (figma/web) |
| Ux/ui design | Bird information card | * Figma * Illustrator * photoshop |
| Audio design | Bird audio | * <https://xeno-canto.org/> (downloadable sound clips) * <https://birdlanguage.com/resources/bird-voices-audio-library/> (bird specific, view pages source to find mp3 clips) * <https://www.bird-sounds.net/> (sound library) * <https://www.birdweb.org/birdweb/audiosource> (sound, picture library) |
| photography | Bird reference pictures | * <https://www.macaulaylibrary.org/> (cornell lab photos, video, audio) * <https://www.natureinstruct.org/piranga> (Image library) * <https://www.birdweb.org/birdweb/audiosource> (sound, picture library) * <https://unsplash.com/s/photos/bird> (royalty free) * <https://www.rspb-images.com/default.aspx> (wildlife general) * <https://www.stephenfischerphotography.com/Bird%20library/Bird_library_main.html> (photographer library) |
| Illustration to animation | Animated videos | * Animaker <https://www.animaker.com/> (video using prompts and inputs selected) ai voice presets, edit after, lip synch, subtitles * Deepmotion (<https://www.deepmotion.com/>)   Text to 3d animation or video clip to 3d animation. Free plan   * Runway (<https://runwayml.com/>) Video from video, video from prompts, image set to video. Various editing tools for color, motion tracking, face blur. Free plan with limited credits * Animated Drawings (<https://sketch.metademolab.com/>) illustration to animation. Free to use. No editing options * Krikey ai (<https://www.krikey.ai/>) text or video into animation. Can create scripts for animated characters. Free option * Kaiber (<https://kaiber.ai/>) text, video, photos, music into video. Frame by frame animation or motion video. 7 day free trial * Adobe Character Animator. Facial recognition to create animation. Customize facial expression, voice over, sound ,camera, free plan |
|  |  |  |

# Illustration to Animation Testing

Animated Drawings

* Input a sketch or vector image
* Software will determine the character outline. You can choose to remove the background
* Adjust rigging points for animation: head/shoulder/legs
* Generates animation presets: walking, jumping. Moving limbs
* Can then adjust anchor points for animation
* Unable to edit further such as the background, voiceover, sound fx