

Project Voice

Bixby Views

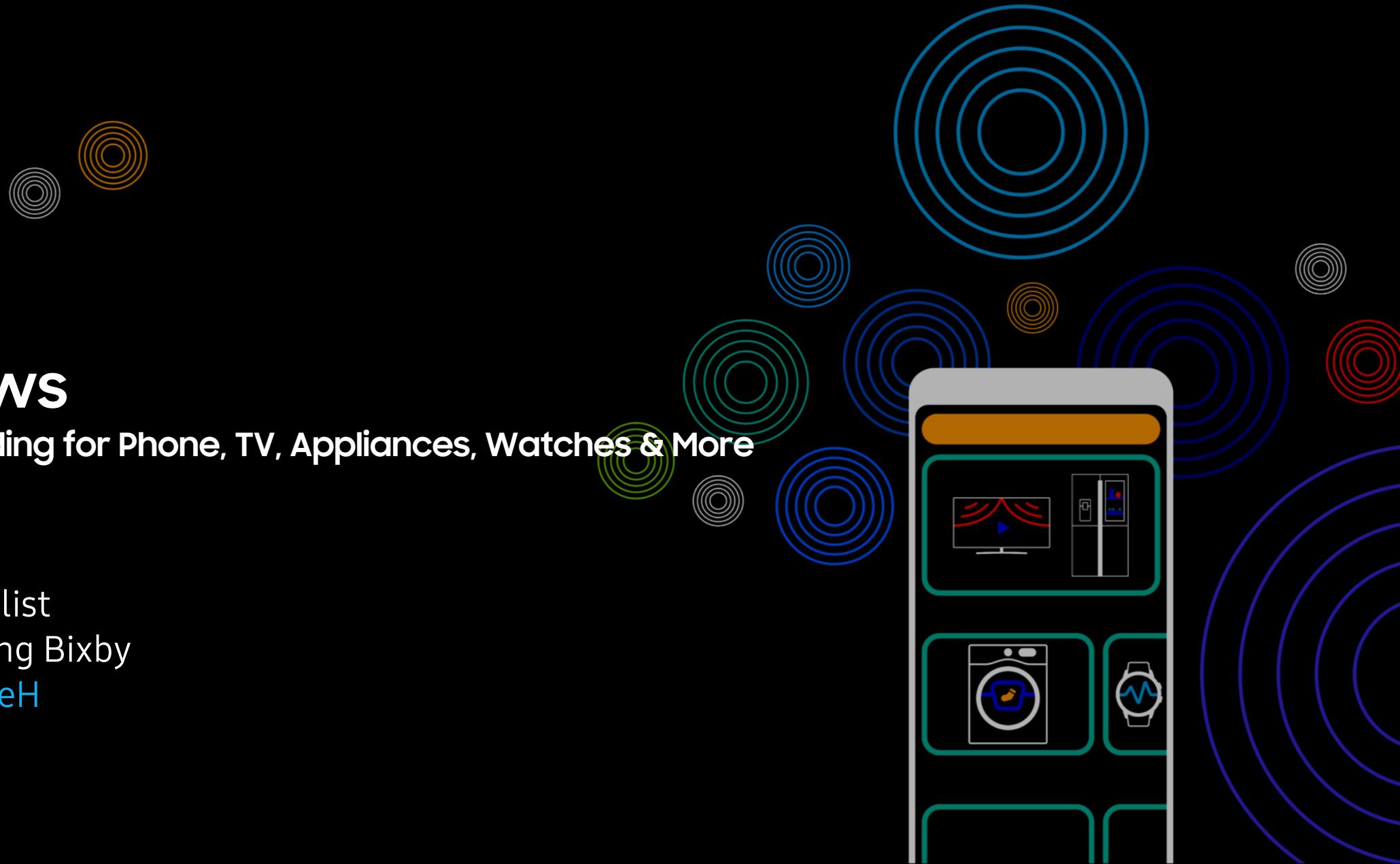
Bixby Views: Building for Phone, TV, Appliances, Watches & More

Jonathan Pan

Technical Evangelist

Viv Labs / Samsung Bixby

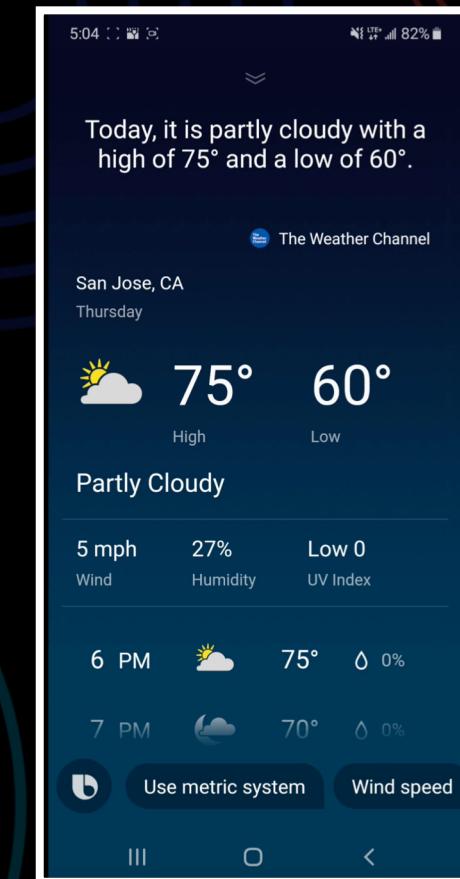
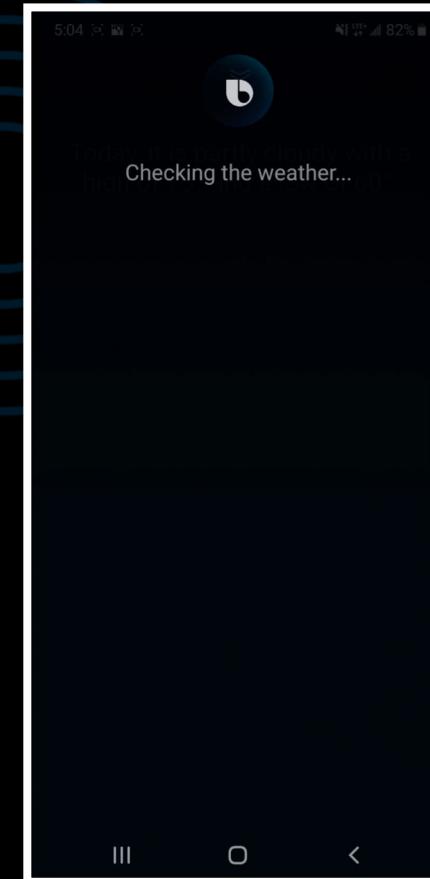
@JohnWithoutTheH



What are UI elements in Bixby that I can design?

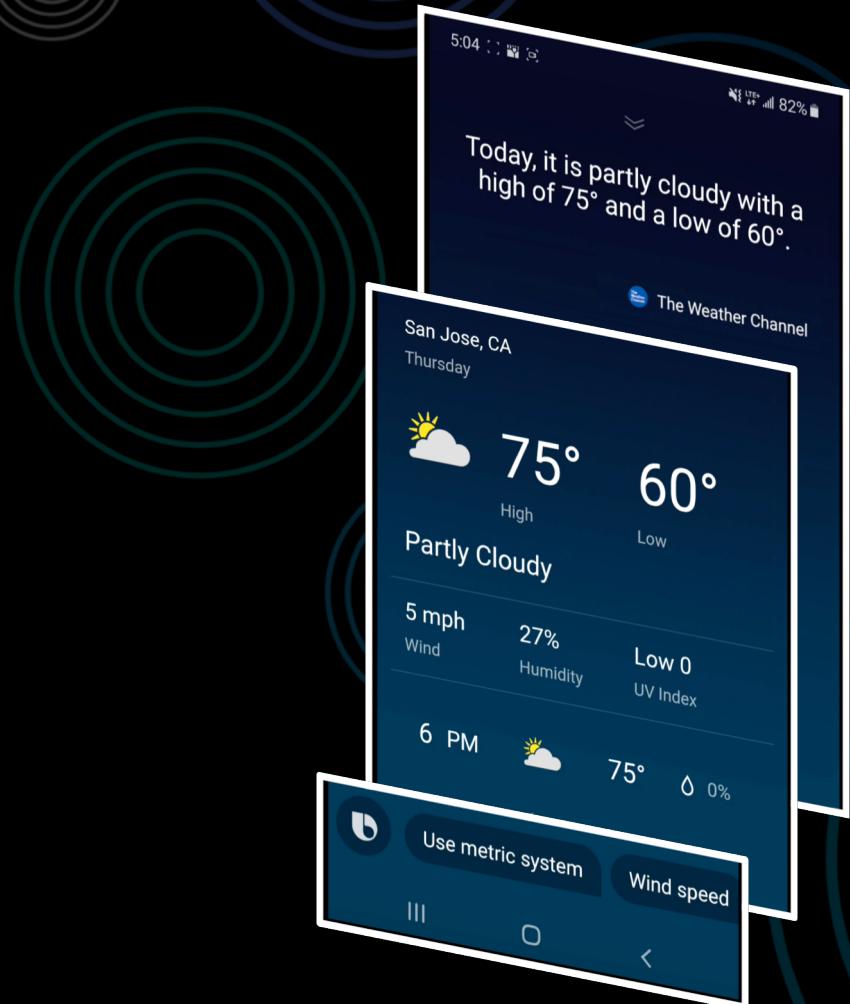
Bixby UI = Dialog + Content + Conversation Drivers

"Weather today?"



What are UI elements in Bixby that I can design?

Bixby UI = Dialog + Content + Conversation Drivers



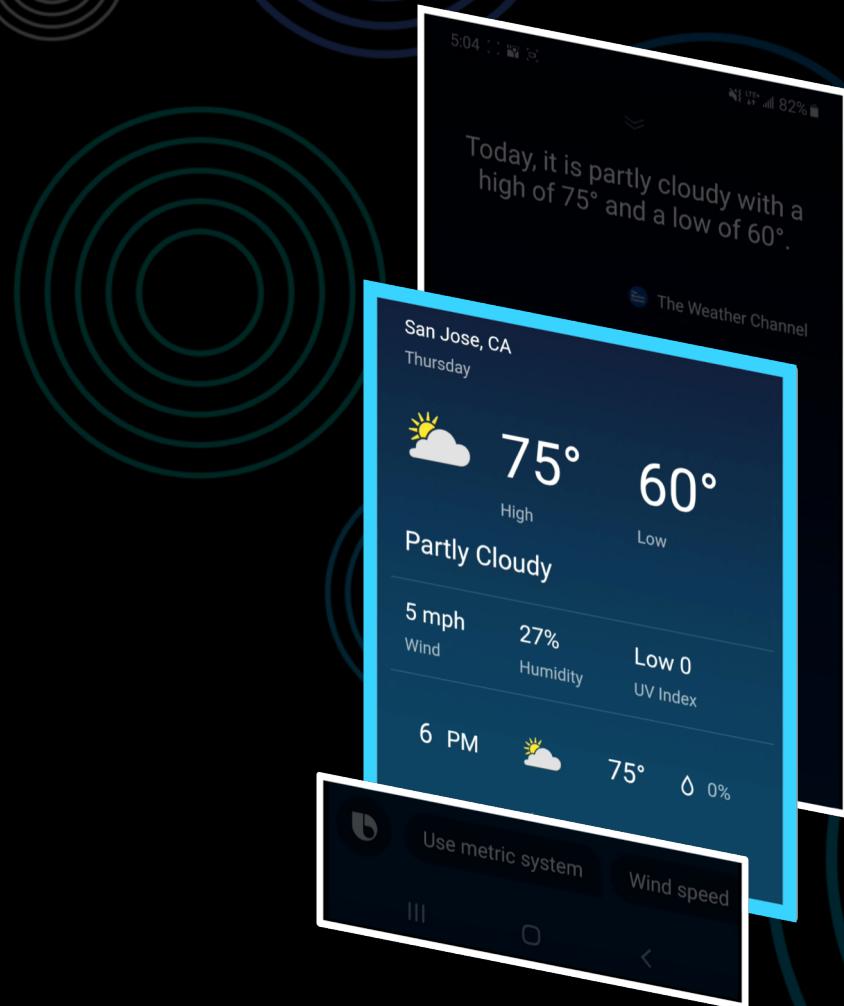
Dialog Message

Content Area

Conversation Drivers

What are UI elements in Bixby that I can design?

Bixby UI = Dialog + Content + Conversation Drivers



Dialog Message

Content Area

Conversation Drivers

Bixby Views — What can it do for your capsules?

Add easy to use, delightful UI
that works across devices
in a developer-friendly way

Bixby Views — What can it do for your capsules?

Add easy to use, delightful UI

that works across devices

in a developer-friendly way

Design iterations of Bixby Views

Balancing Flexibility and Consistency

Ver. 1

```
text ("My Title")
```



Not flexible
Usable

Ver. 2

```
<div style="font-size: 14px; color: #cc851a;">  
| My Title  
</div>
```



Maybe too flexible
Not very usable

Ver. 3

```
text {  
| value ("My Title")  
| style (Title_S)  
| color (Amber)  
}
```

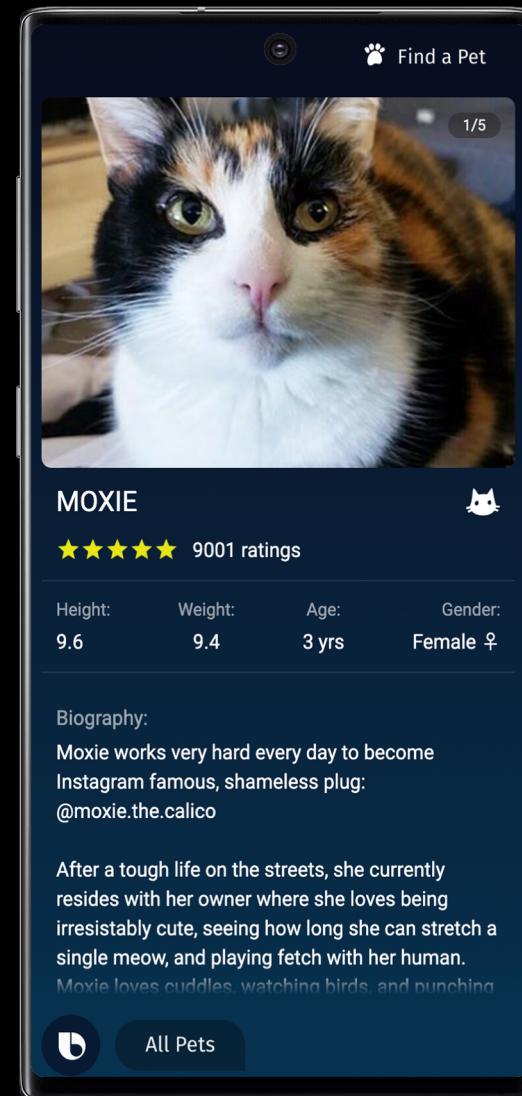
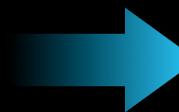
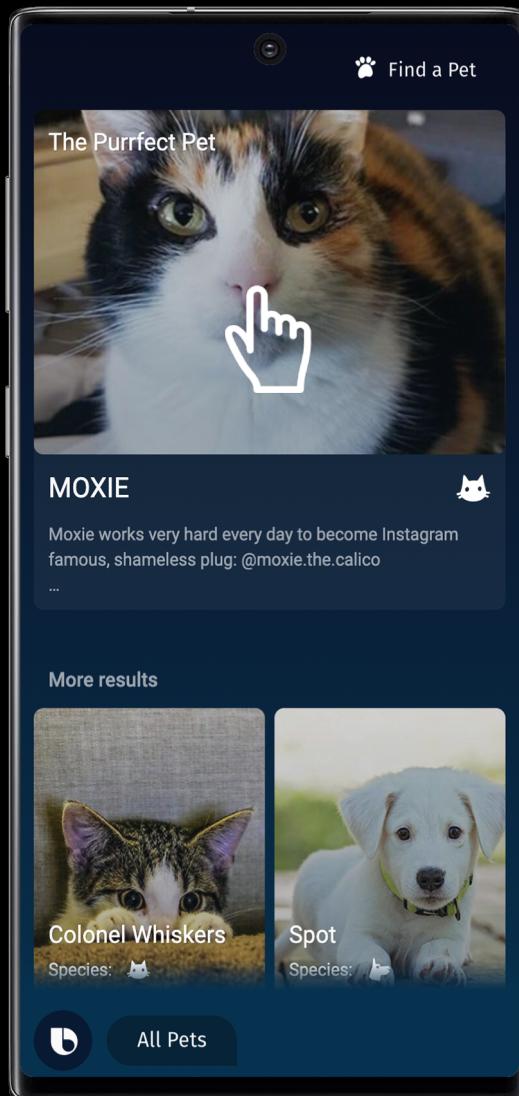


Flexible
Usable

List View vs Detail View

List View

List of relevant results



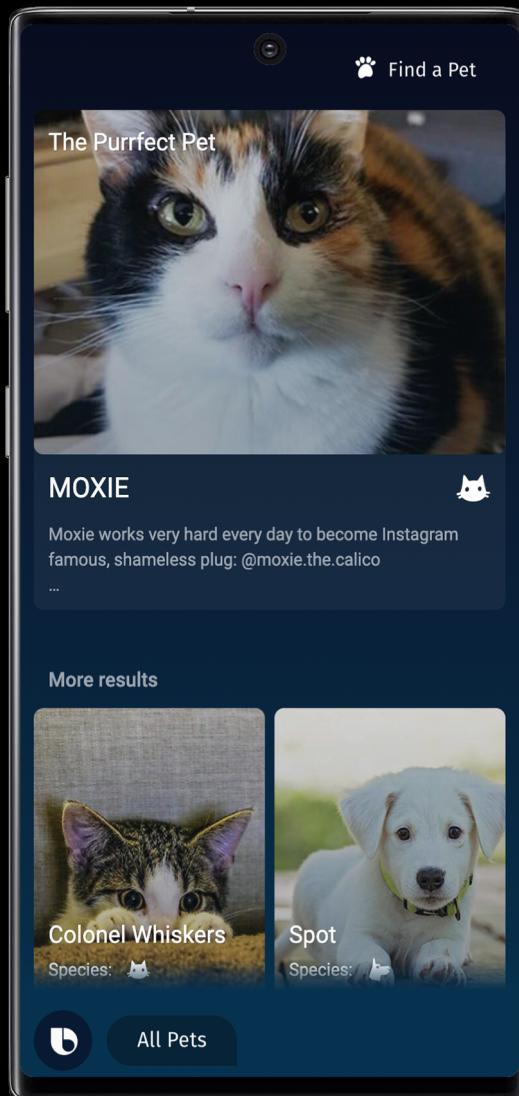
Detail View

More details on one item

List View vs Detail View

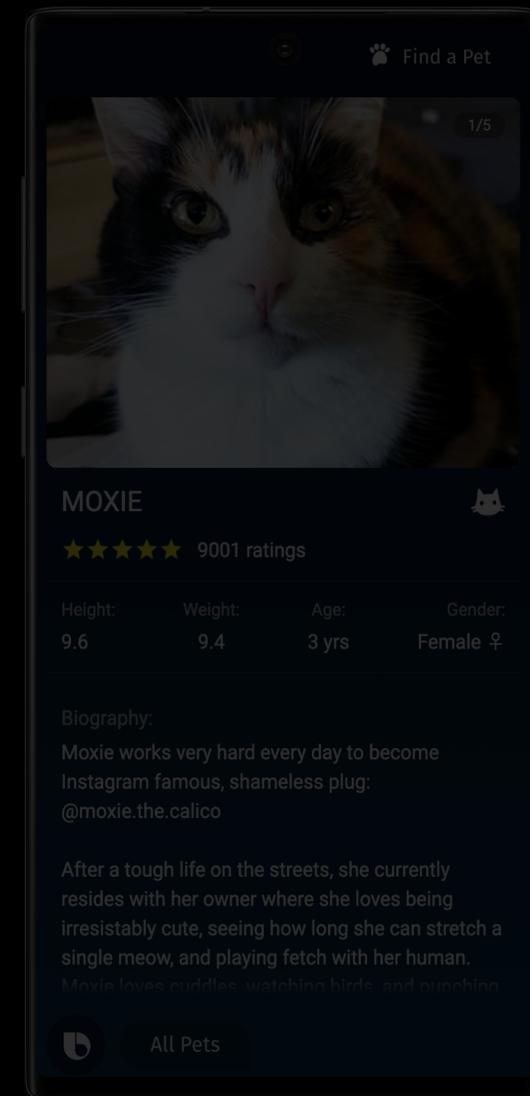
List View

List of relevant results



Detail View

More details on one item

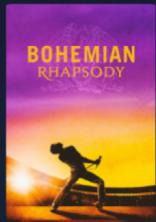


Building blocks for easy to use, delightful UI

Usage Examples: Card and Area

Thumbnail Card

Top recommendation



Bohemian

2018

More results



Whiplash



Yesterday



Rocketman

Image Card



Maureen G.

1495 The Alameda, San Jose CA

(82)

Cell Area



Single Line

Octavio was our amazing waiter to amazing food!
We had fajitas and also Elote....so delicious!
And of course we had margaritas!!...

Paragraph

Title Area

Tuesday, October 8th at 4:33pm

Compound Card



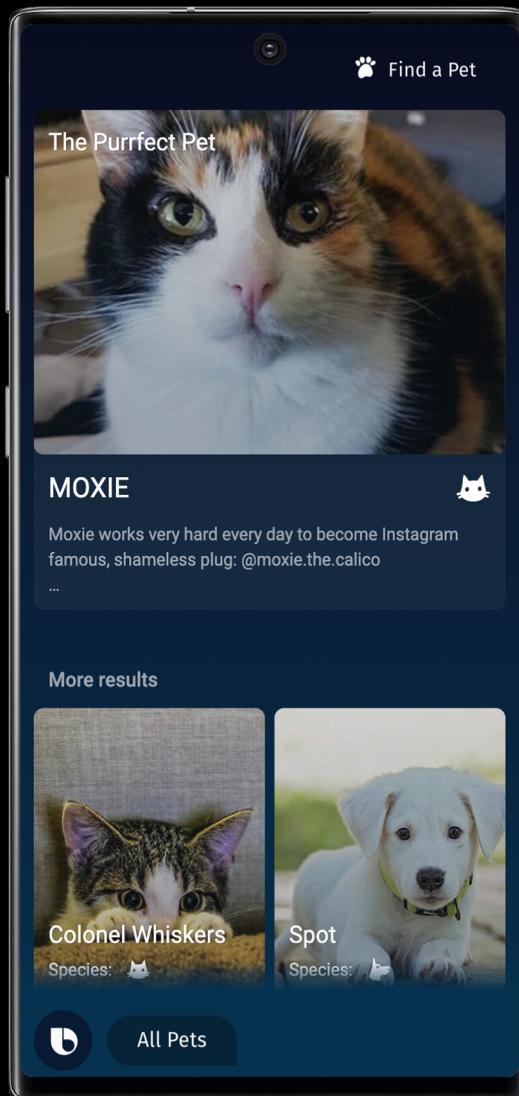
zing waiter to amazing food!
we had fajitas and also Elote....so delicious!
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Tuesday, October 8th at 4:33pm

List View vs Detail View

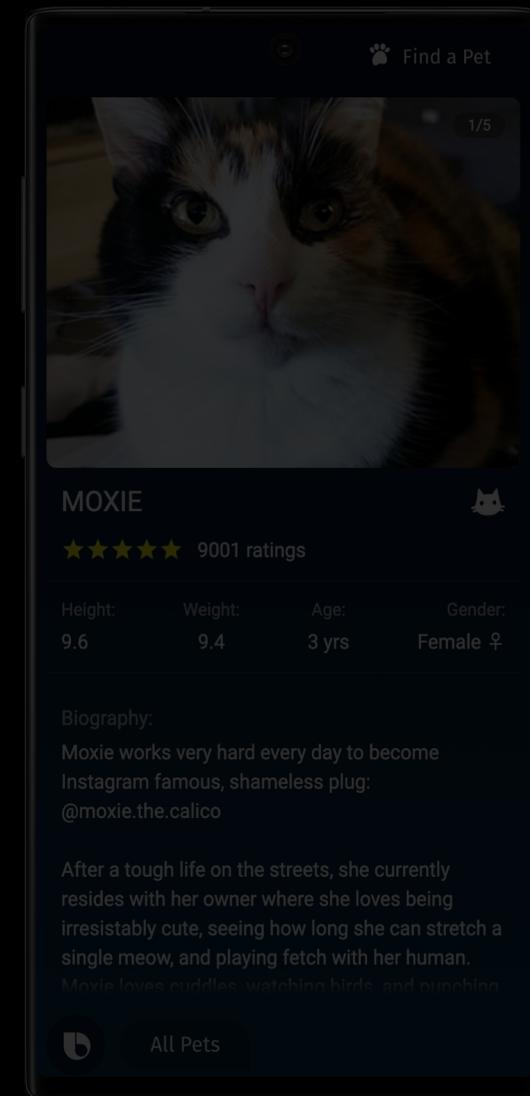
List View

List of relevant results



Detail View

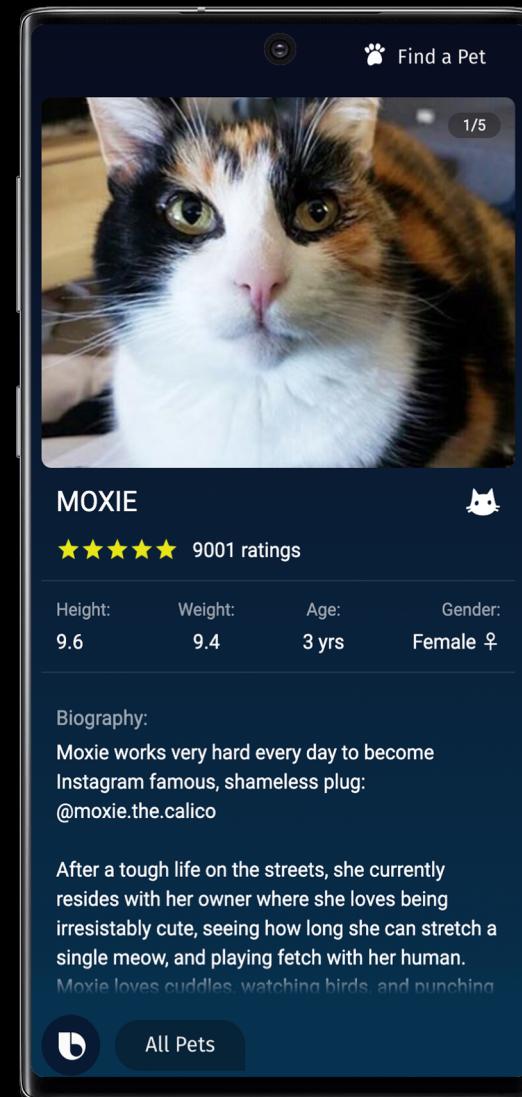
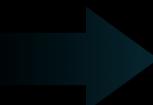
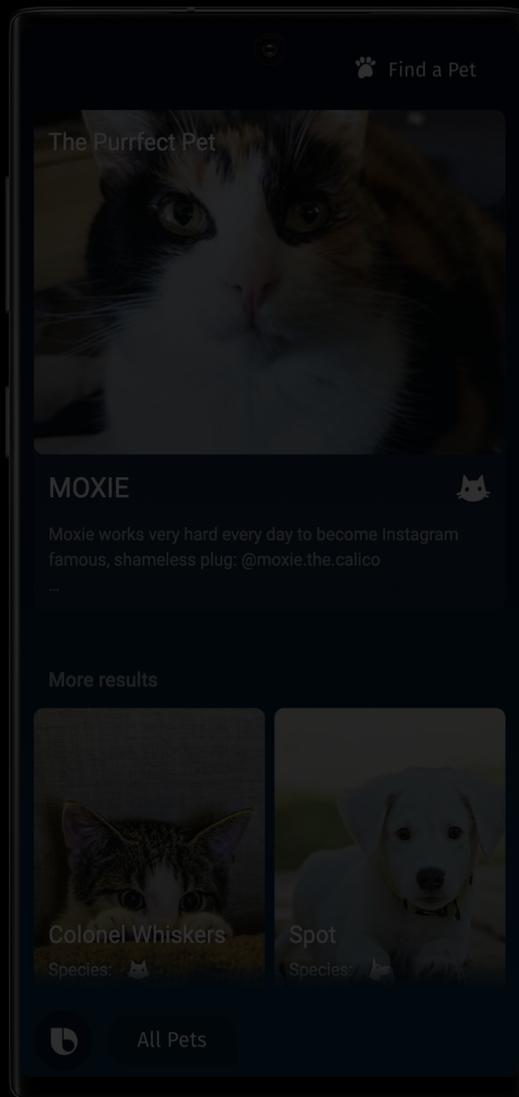
More details on one item



List View vs Detail View

List View

List of relevant results



Detail View

More details on one item

Building blocks for easy to use, delightful UI

Usage Examples: Image and Text

Image



Bohemian Rhapsody

Year

2018

Runtime

135 minutes

Budget

\$52,000,000

Revenue

\$894,027,543

Image Card



LUNA M

Mexican

\$\$

Location

Title XXL_67

Title XL_48

Title L_34

Title M_28

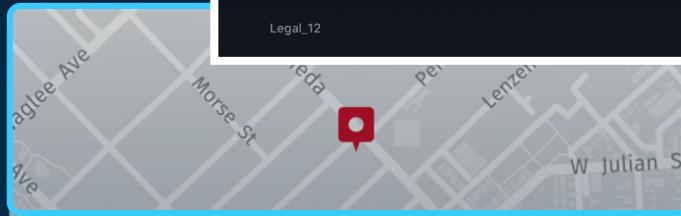
Title S_22

Title XS_19

Detail Large_16

Detail Medium_14

Legal_12



Paragraph

San Jose, CA

12:53am



52°

Clear

Horizontal/Vertical Box

4 mph

Wind

96%

Humidity

Low 0

UV Index

1 AM



52°

0%
0%

2 AM



52°

0%
0%

3 AM



51°

0%
0%

4 AM



51°

0%
0%

Bixby Views Works Across Devices

Bixby Views — What can it do for your capsules?

Add easy to use, delightful UI
that works across devices
in a developer-friendly way

Why do we care about cross-device?

Samsung has a Huge Device Ecosystem

SMARTPHONES >

- Galaxy Fold
- Galaxy 5G
- Galaxy S
- Galaxy Note
- Galaxy A
- Galaxy J

WEARABLES >

- Galaxy Watch
- Galaxy Watch Active
- Galaxy Watch Active2
- Galaxy Fit
- Galaxy Buds
- AKG Headphones

COMPUTING >

- Windows Laptops
- Chromebooks
- Tablets
- Accessories

New
Tus

Family
what's

TV >

- QLED 8K
- QLED 4K
- The Frame
- Premium 4K UHD
- 4K UHD
- Full HD & HD

SMART HOME >

- Galaxy Home
- SmartThings Wifi
- SmartThings
- SmartThings Cam
- SmartThings Tracker

TABLETS >

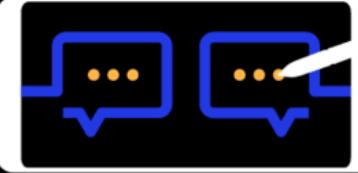
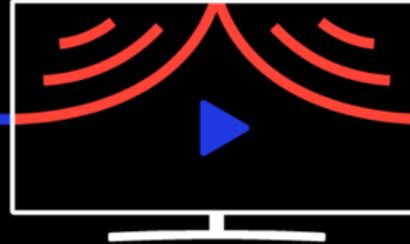
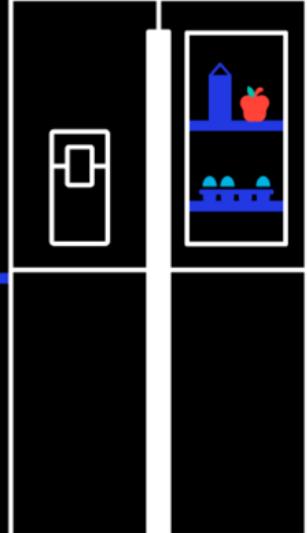
- Galaxy Tab S
- Galaxy Tab A

HOME AUDIO >

- Q Series Premium Soundbar
- Standard Soundbar
- Home Audio Accessories

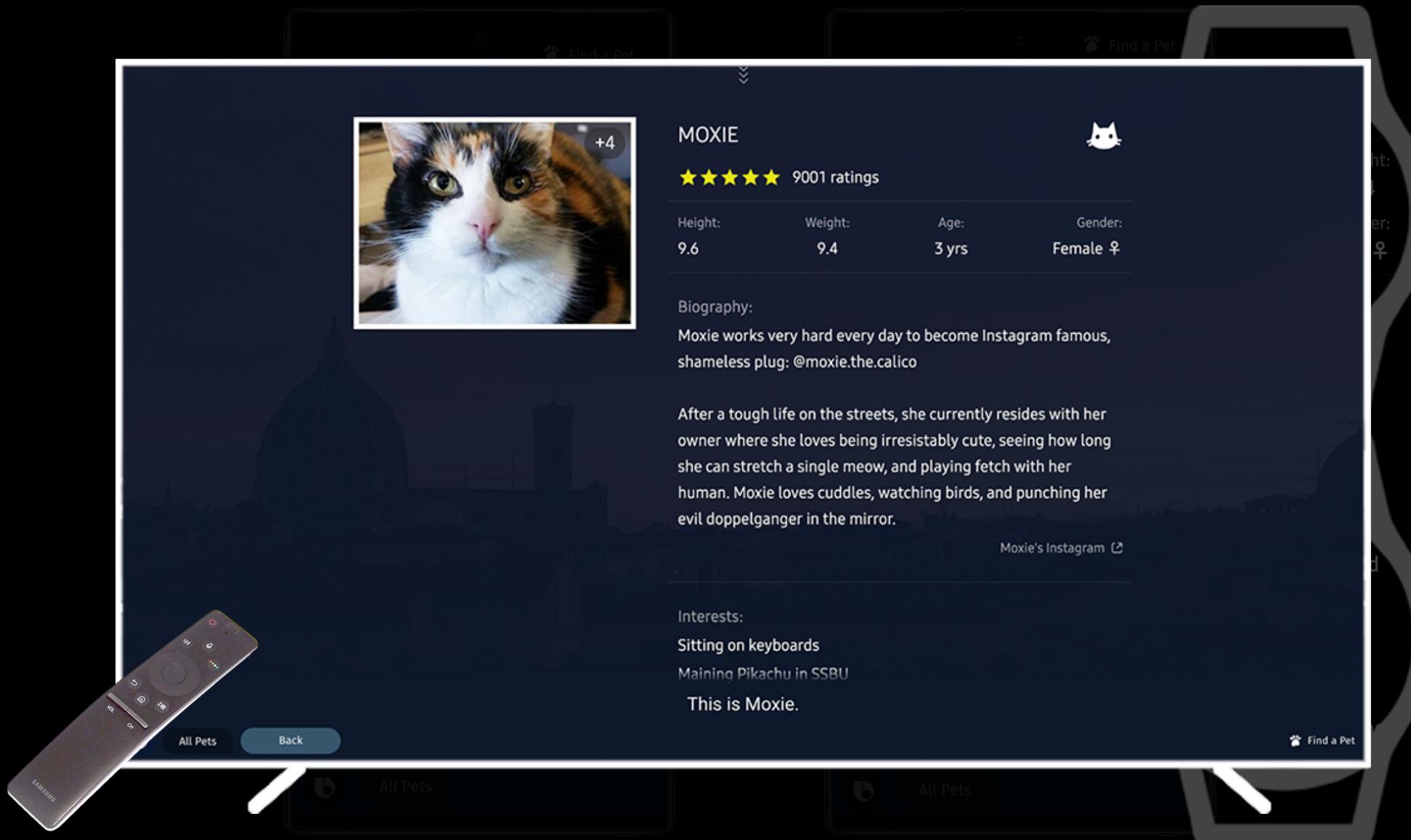
Why do we care about cross-device?

You can already start developing for Samsung's ecosystem

 A white mobile phone icon with two blue speech bubbles containing three yellow dots each.	 A white television set icon with red curtains and a blue play button in the center.	 A white refrigerator icon with a small screen on the door showing a blue bottle and a red apple.	 A white smartwatch icon with a blue heart rate monitor screen.
Mobile	TV	Refrigerator	Watch
Can Develop	Can Develop	Can Develop	Can Develop
Marketplace Available	Marketplace Coming 2020	Marketplace Coming 2020	Marketplace Coming 2020

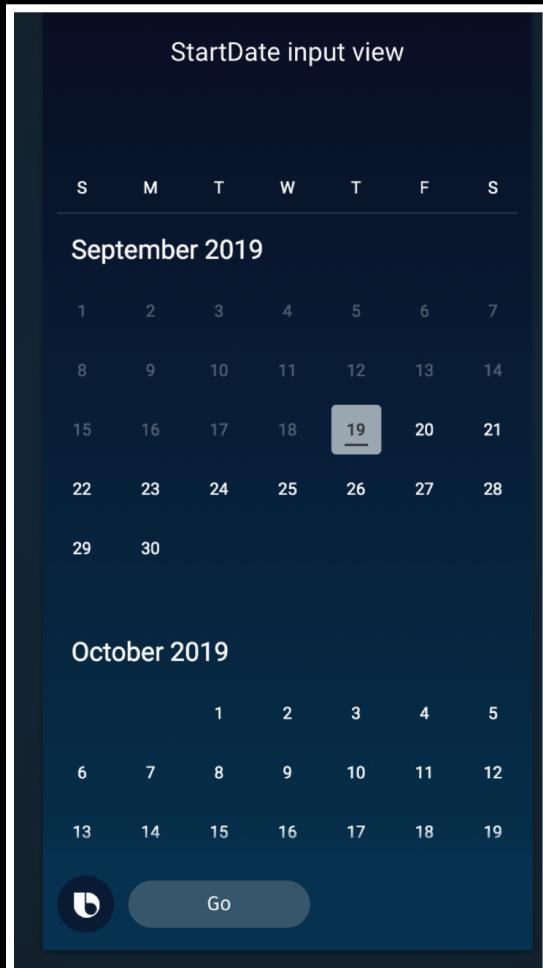
How does Bixby Views enable cross-device portability?

Components adapt to multiple devices



Automatic adaption of input view component

Calendar component



- On phone and fridge, vertical layout with touch support
 - On TV, horizontal layout with remote controller support



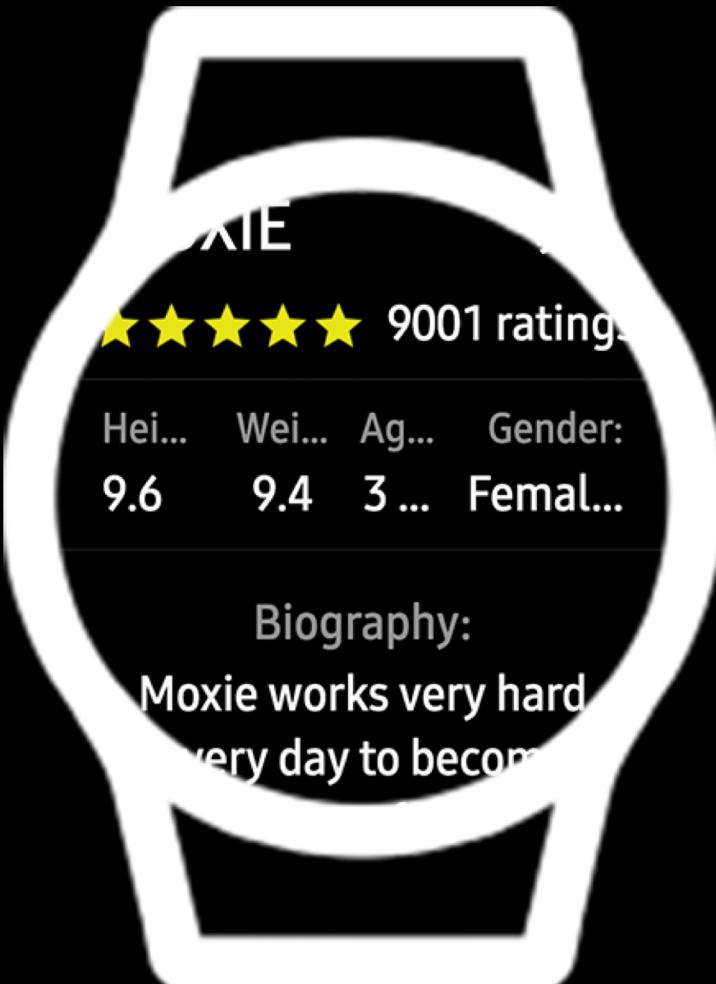
Bixby Views is Developer Friendly

Bixby Views — What can it do for your capsules?

Add easy to use, delightful UI
that works across devices
in a developer-friendly way

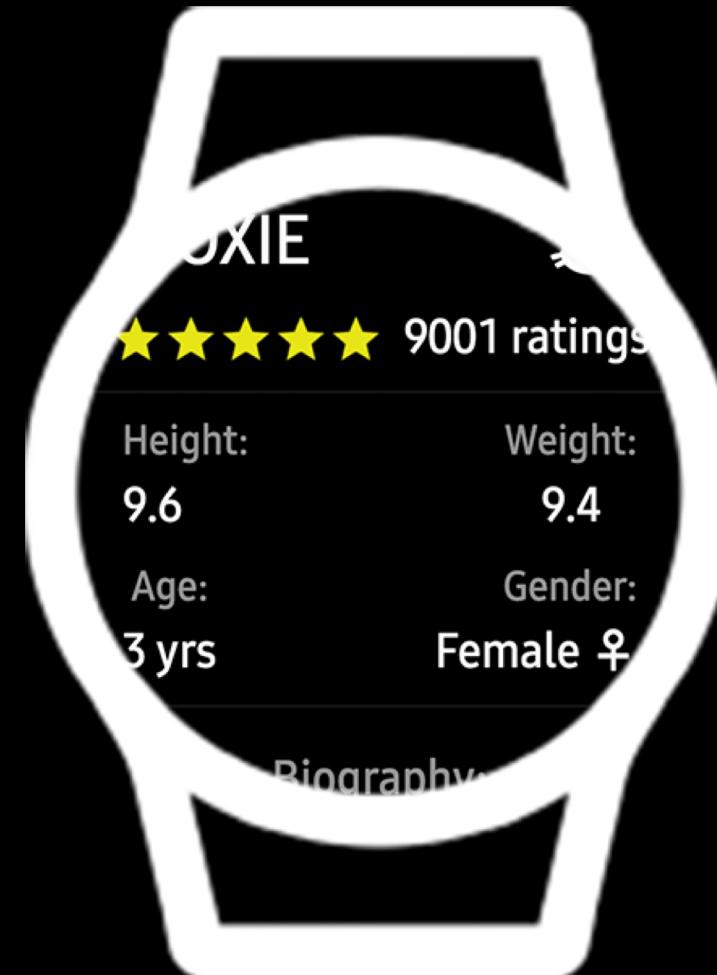
Allow for device-specific layout optimization

Custom layout depending on device



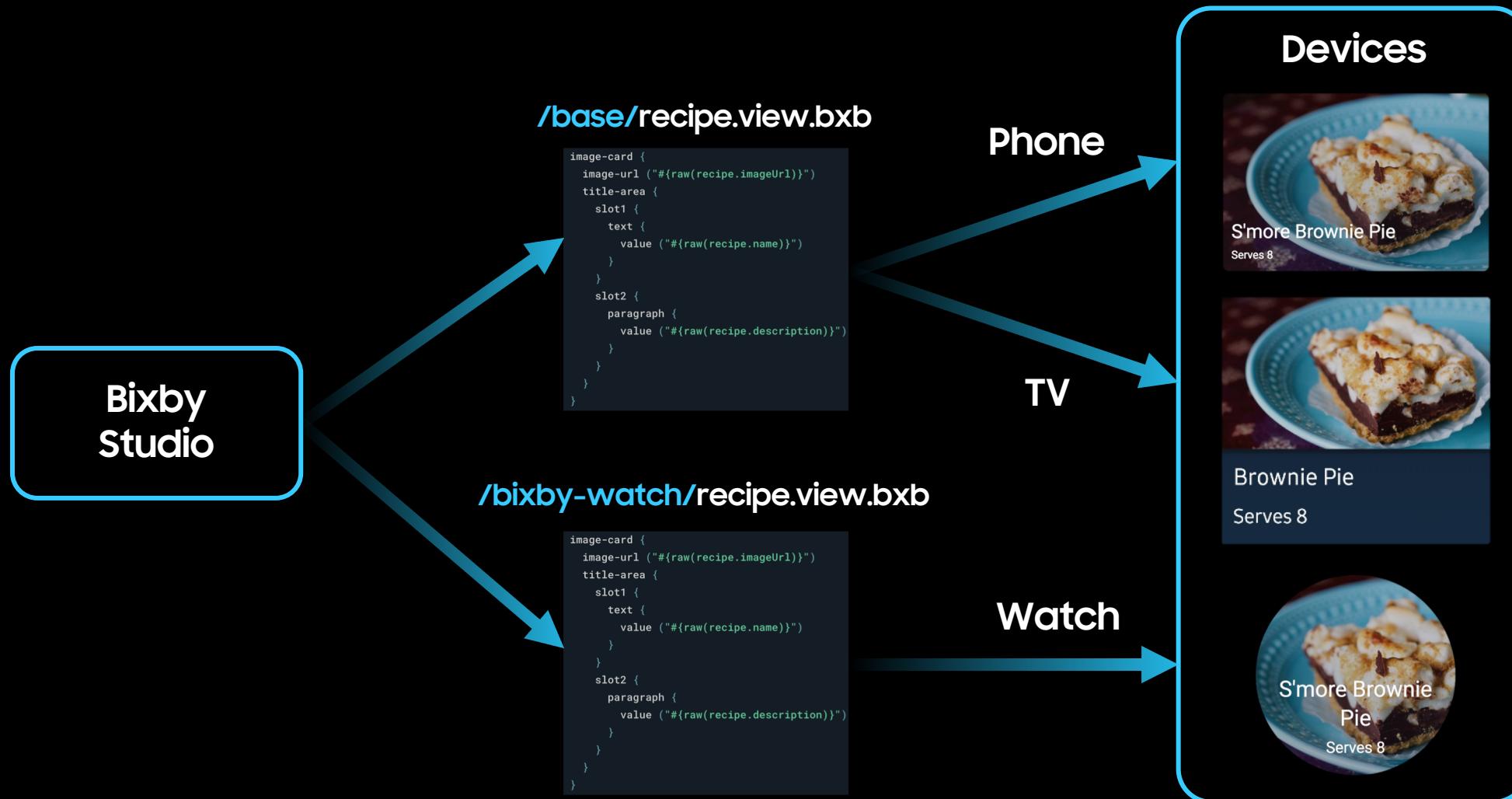
Simple if-else to change layout

```
// the pet's stats
if($can.device == 'bixby-watch'){
    hbox...
    hbox...
} else {
    hbox...
}
```



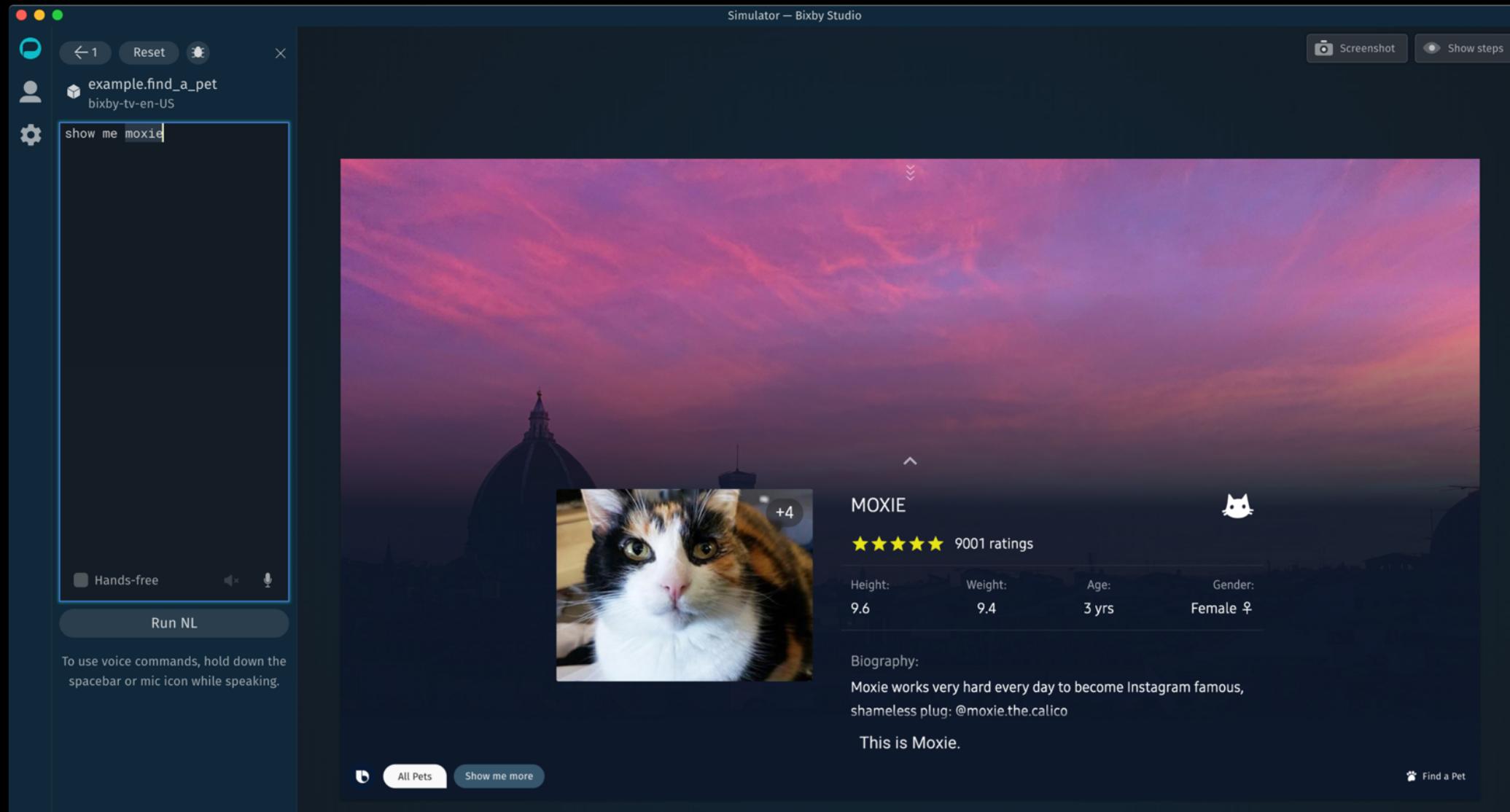
Allow for device-specific layout optimization

Completely different layout per device



See how your capsule looks on different devices

Bixby Studio Simulator



Write Bixby Views efficiently and error-free

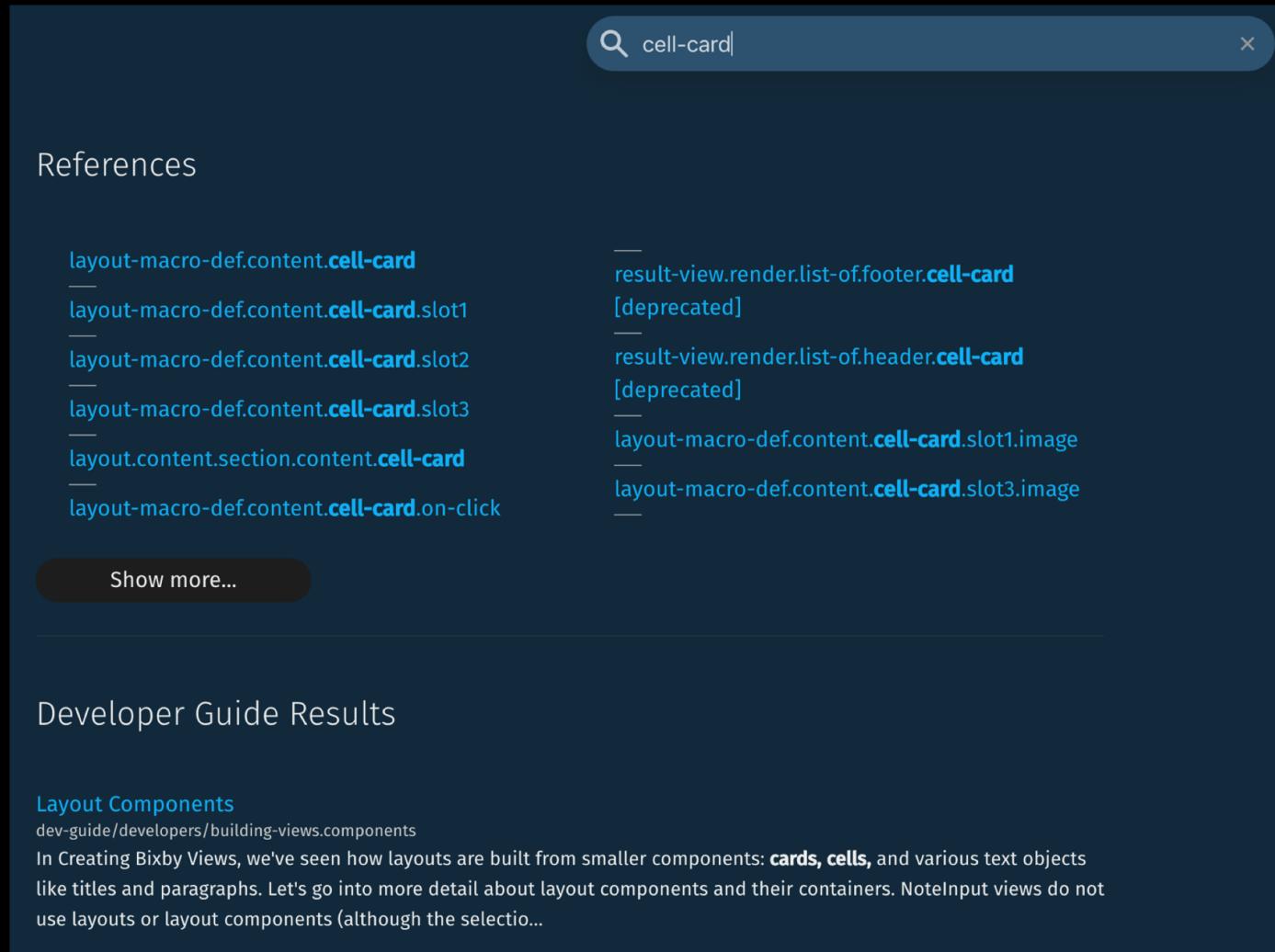
Auto-complete in Bixby Studio

```
image-card {  
    aspect-ratio (4:3)  
    title-area {  
        slot1 {  
            text {  
                value ("")  
            }  
        }  
    }  
    } ↳ halign (Center)  
    im ↳ halign (End)  
} ↳ halign (Start)  
para ↳ slot1  
st ↳ slot2  
va ↳ slot3
```

Auto-complete to quickly enter keys and see available options
Highlight matching brace to see component boundaries

Where can I find resources to learn Bixby Views?

Documentation



The screenshot shows a search interface with a blue header bar containing a magnifying glass icon and the text "cell-card". Below the header is a dark blue sidebar with the title "References". The main content area displays a list of search results, each consisting of a blue link followed by a short description. At the bottom left is a "Show more..." button. At the bottom right is a section titled "Developer Guide Results" with a "Layout Components" entry.

- [layout-macro-def.content.cell-card](#)
- [layout-macro-def.content.cell-card.slot1](#)
- [layout-macro-def.content.cell-card.slot2](#)
- [layout-macro-def.content.cell-card.slot3](#)
- [layout.content.section.content.cell-card](#)
- [layout-macro-def.content.cell-card.on-click](#)

Show more...

Developer Guide Results

[Layout Components](#)
dev-guide/developers/building-views.components

In Creating Bixby Views, we've seen how layouts are built from smaller components: **cards**, **cells**, and various text objects like titles and paragraphs. Let's go into more detail about layout components and their containers. NoteInput views do not use layouts or layout components (although the selectio...

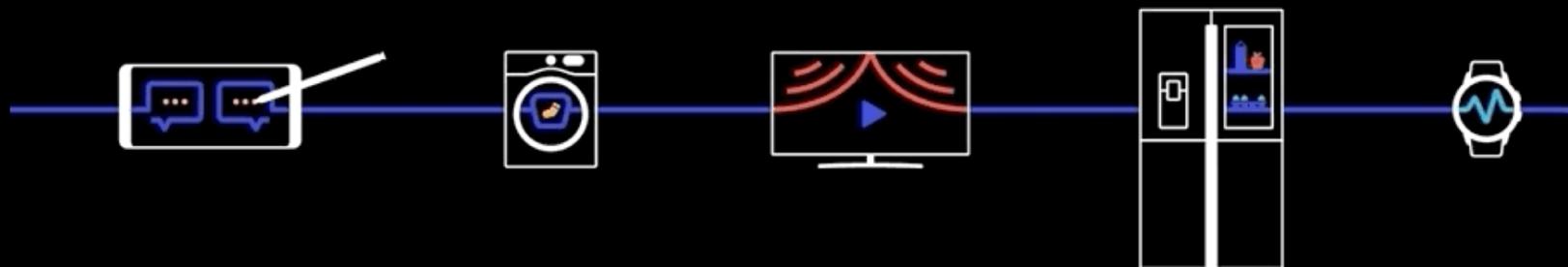
**Search on BixbyDevelopers.com
for documentation and
screenshots**

Sample capsules on GitHub repo

**Tutorial videos on YouTube
channel**

Where can I find resources to learn Bixby Views?

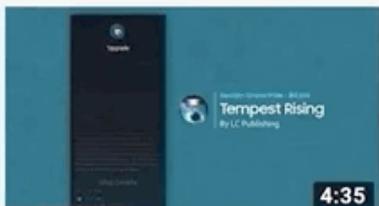
www.youtube.com/c/BixbyDevelopers



 **Bixby Developers**
387 subscribers

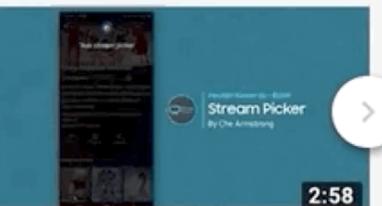
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Bixby DevJam Winners  [PLAY ALL](#)


4:35


2:13


2:14


2:58

[Bixby DevJam 2019 Winners! Tempest Rising by LC...](#)
[Bixby Developers](#)
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[Bixby DevJam 2019 Winners! Stream Picker by Che...](#)
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How can you interact with us?

Bixby Developers Social Media



twitter.com/BixbyDevelopers

SAMSUNG

Bixby Developers
@BixbyDevelopers Follows you

Samsung Bixby is a next-generation, AI platform that enables developers to build rich voice and conversational AI experiences for the Bixby Marketplace

② San Jose, California bixbydevelopers.com Joined July 2018

14 Following 124 Followers

Followed by Voice First, Marko Arezina, and 41 others you follow

Tweets Tweets & replies Media Likes

Pinned Tweet

Bixby Developers @BixbyDevelopers · Dec 13, 2019

Tweeting about all that is new and cool Bixby development wise! Be sure



facebook.com/BixbyDevelopers

Bixby Developers
@BixbyDevelopers

Home Posts Reviews Videos Photos About Community Create a Page

Liked Following Share ...

Write a post... Photo/Video Tag Friends Check in ...

Bixby Developers 2 hrs

Kick off the new year with the Start Stretching capsule. #Bixby will walk you through new stretches. Just ask "With Start Stretching, give me a stretch" and congratulations on being a runner up in

How can you interact with me?

My Contact Information



twitter.com/JohnWithoutTheH

Jon
@JohnWithoutTheH

Making stuff on Bixby
Removing H's from my name for 31 years

⌚ San Jose, CA 🎂 Born July 22, 1988 📅 Joined June 2019

174 Following 139 Followers

Tweets Tweets & replies Media Likes

Jon @JohnWithoutTheH · Jan 3
Another new tutorial video is up along with the sample code for my CopyCat capsule! This video covers how #Bixby remembers and forgets models along with how to use flags to reset context.



linkedin.com/in/jonmpan

Jonathan Pan

Technical Evangelist at Viv Labs

San Jose, California · 299 connections

Join to Connect

About

Ambitious and enthusiastic Software Engineer and Technical Evangelist currently working in cutting edge fields such as Augmented Reality (AR) and Full Stack Web Development. I have a passion for creating innovative solutions and solving complex problems. My experience spans across various industries, including technology, healthcare, and finance. I am always looking for opportunities to learn and grow, and I thrive in fast-paced environments where I can push myself to new heights. I am currently working as a Technical Evangelist at Viv Labs, where I help to showcase the power of their platform and work with developers to build amazing experiences. In my free time, I enjoy spending time with my family, playing video games, and exploring new hobbies. I am also a huge fan of science fiction and enjoy reading books and watching movies in that genre. Overall, I am a driven and dedicated professional who is always looking for ways to make a positive impact in the world.

How can you interact with us?

A Couple More Useful Links

<http://github.com/bixbydevelopers>

<http://bit.ly/bixbydevslack>

Thank you

Jonathan Pan | Technical Evangelist | Twitter: [@JohnWithoutTheH](https://twitter.com/JohnWithoutTheH)

Do more with Bixby

SAMSUNG