



Bixby
Developers

Bixby 101

How to Make AI Magic

www.bixbydevelopers.com

- IDE Download
- Samsung Account signup
- Getting Started – Use the Dice Capsule
- Developer Guides
- Support
 - Developer Forum – Stack Overflow
 - Features/Support Tickets

GITHUB

www.github.com/bixbydevelopers

- Review projects
 - Dice: Most basic
 - Shoe and Bank: Intermediate
 - Shirt and Space Resort: More advanced
- Samples Collection
 - Input Forms – Basic UI form for input
 - Bixby Views – Basic output

DEVELOPING FOR BIXBY - WHAT'S DIFFERENT?

- Declarative, model based approach
 - Heavy modeling
 - Model concepts, actions, dialogs, views and endpoints using BXB modelling language
 - Auto Program Generation
 - AI Writes the logic. Model → Code
 - Light traditional coding (Javascript)
 - External API call
 - Complex logic
- Very different than other voice assistants

SAMPLE SIMPLE CAPSULE: STATE CAPITALS

Question:

What is the capital
of California?

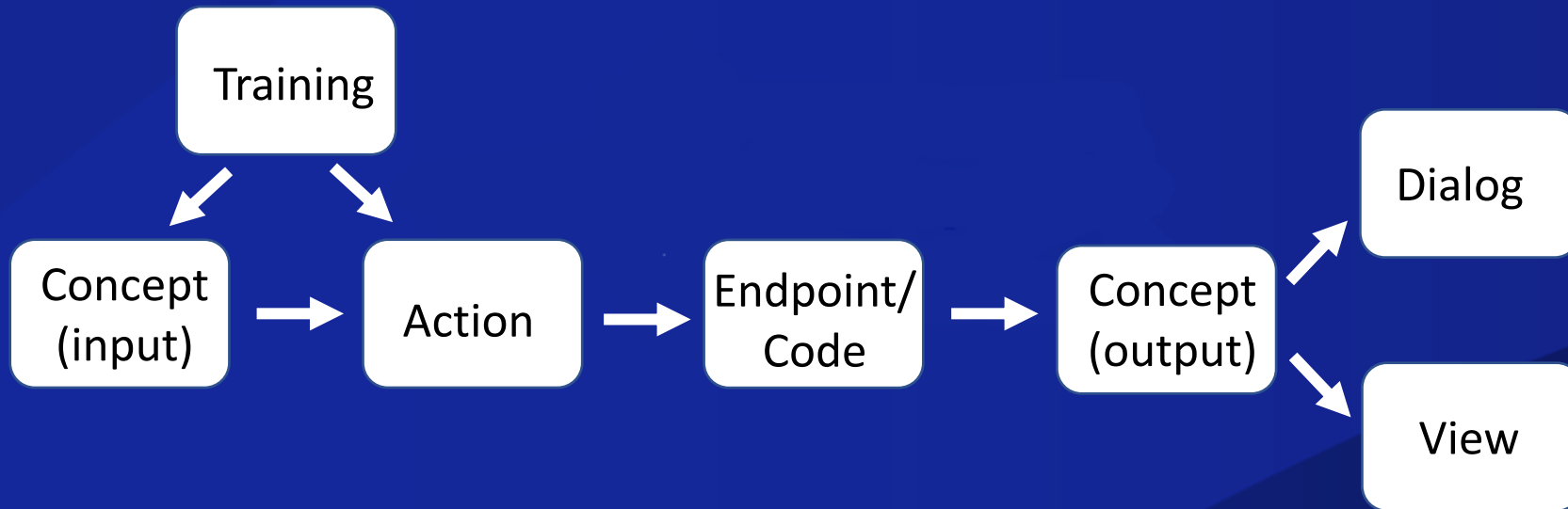
Answer:

The capital of California
is Sacramento



Code on Github: <https://github.com/bixbydevelopers/capsule-sample-states-and-capitals>

CONCEPTUAL FLOW OF A BIXBY CAPSULE (SIMPLIFIED)



INPUT: CONCEPTS AND ACTIONS

What is the capital of California?

Action:

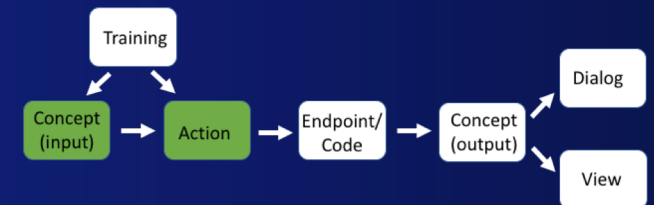
Find Capital

*The verb or
the method*

Concept:

The State e.g. California

*The noun or the
variable*



OUTPUT: CONCEPTS

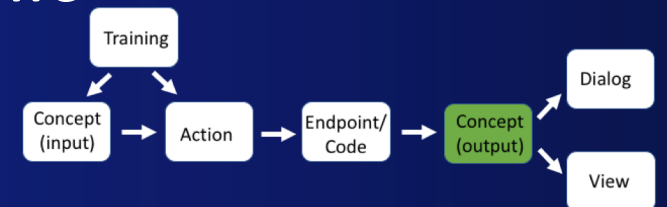
Sacramento



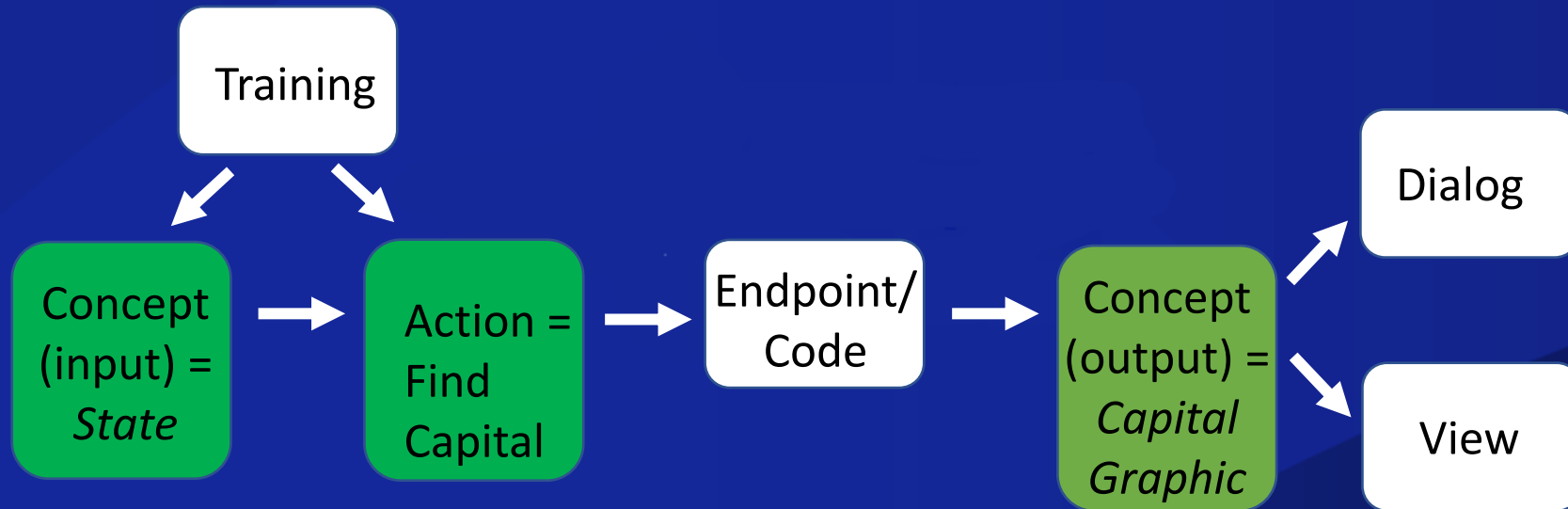
Concepts:
Capital
State Graphic



Structured Concept:
Object with both Capital and
State Graphic

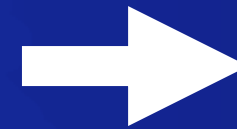
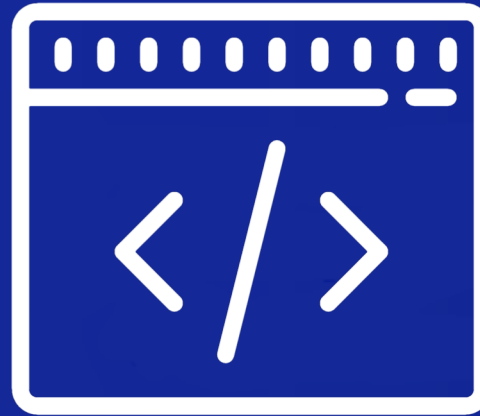


REVIEW — WHERE WE ARE



TIE IT TOGETHER ENDPOINT AND CODE

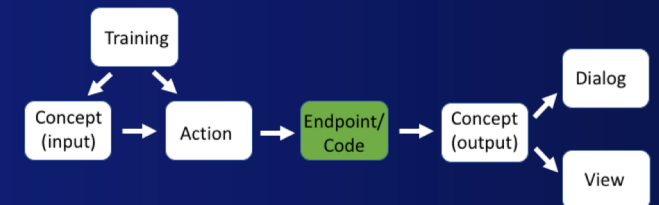
Action:
Find Capitals



Output Concepts
Capital
State Graphic

Endpoint:
Ties Action
to Code

Code:
Business logic
CapitalLookup.js

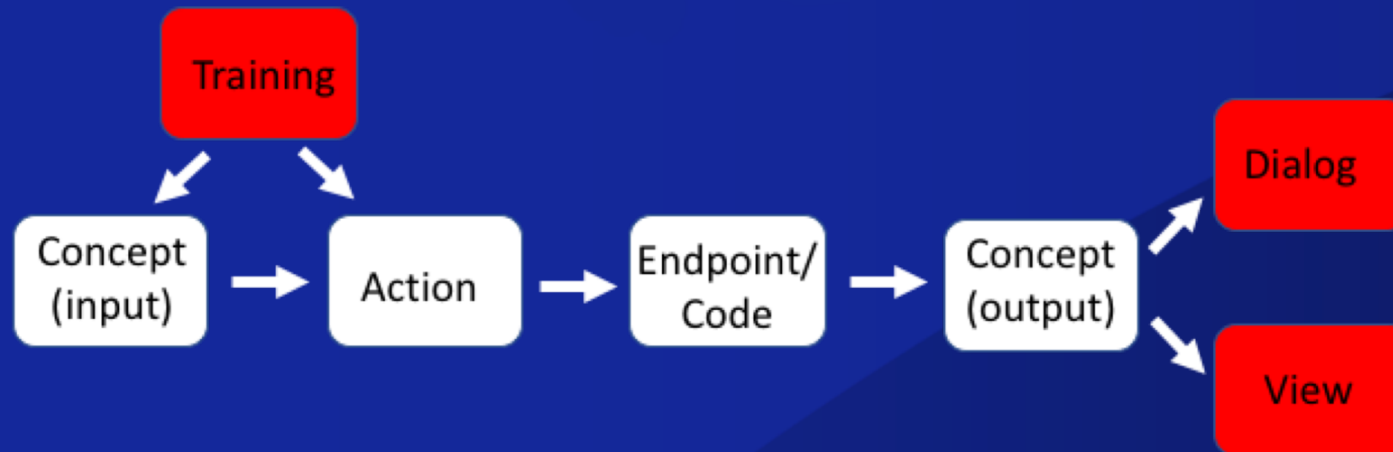


RUN IT!

RUN IT RESULTS

Information is there but there is no:

- Output UI and Speech (Dialog and View)
- Natural Language input (Training)

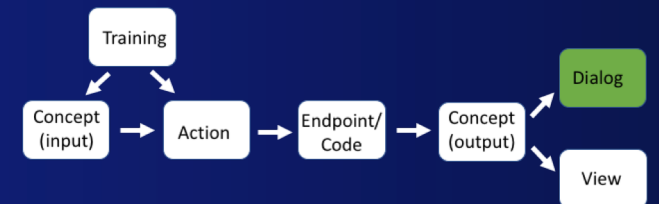


OUTPUT: DIALOG

The capital of California is Sacramento

Dialog:
*The answer on
screen and
spoken*

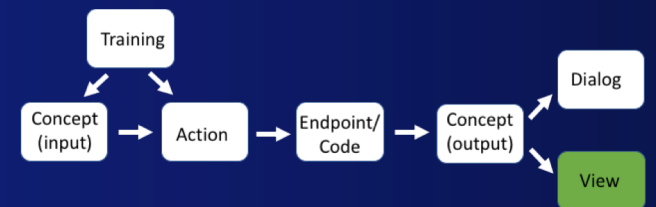
Concepts



UI: VIEWS

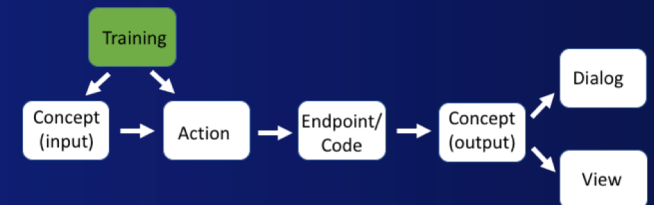


View:
State Graphic



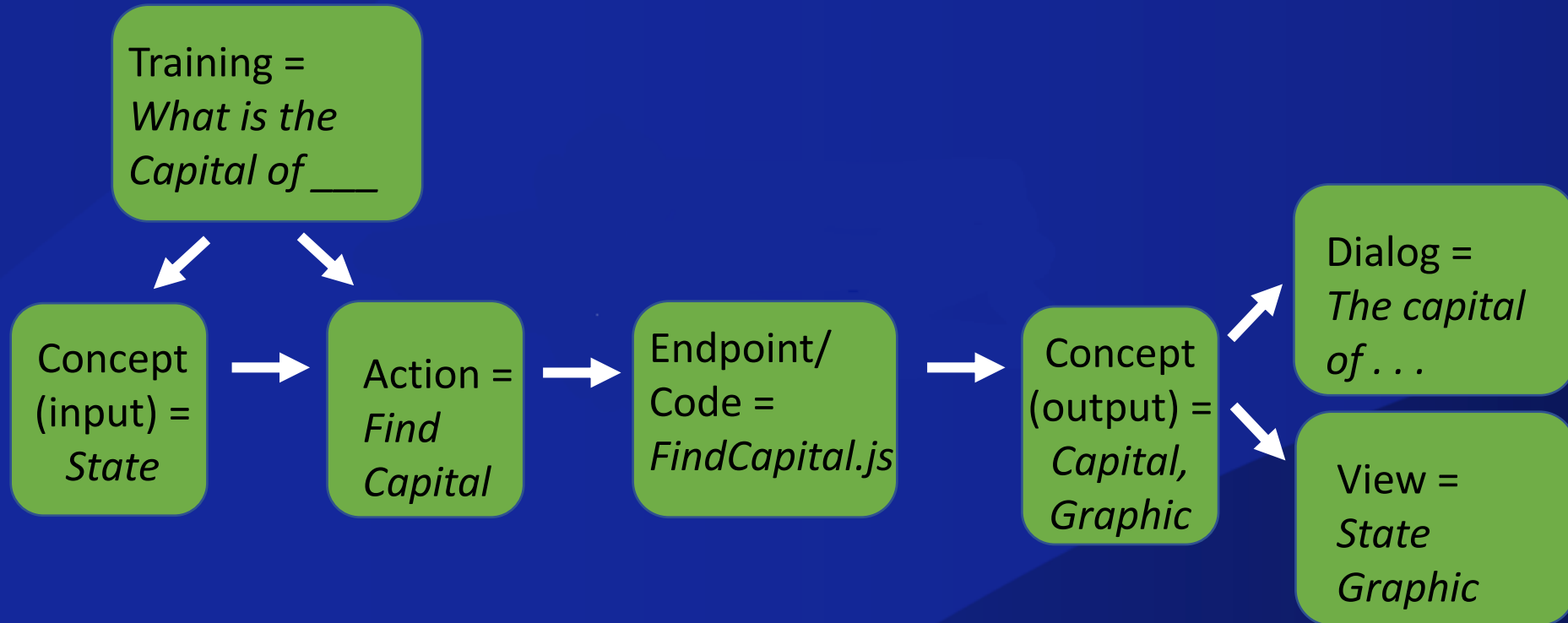
UNDERSTANDING: TRAINING

“What is the capital of _____” = *Training:*
NLU (Natural Language understanding)



RUN IT!

REVIEW — WHAT WE CREATED



NEXT STEPS

Go to www.bixbydevelopers.com

- Download and install Bixby Studio
- Sign up for a Samsung Account
- Download and run the States and Capitals Capsule
<https://github.com/bixbydevelopers/capsule-sample-states-and-capitals>
- Read the docs
- Experiment, try more example capsules
- Create you own Capsule! Have Fun!

THANKS!

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