

Gettysburg College

From Alexa to AI:
Rethinking Your Content in a
Headless Strategy

October 25, 2018

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From Alexa to AI: Is Clicking with Your Content Enough for Your Audiences?

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Riddle

What individual knows the most about your organization but is dumb as a rock?

Hal CMS 9000

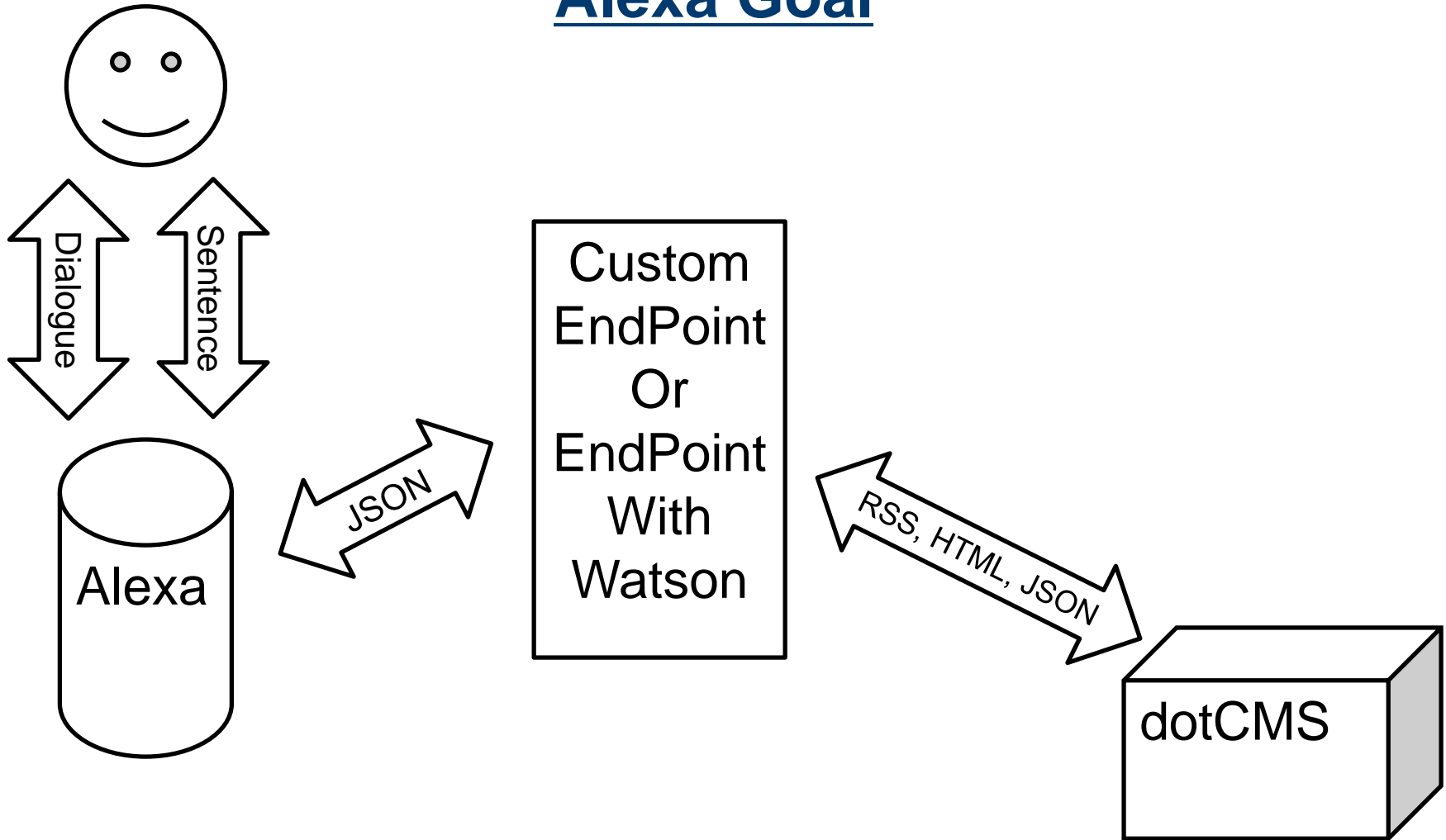
Your Content Management System

New Web Design

Current Student Landing Page

Redesigned Student Landing Page

Alexa Goal



Alexa at Gettysburg College

- Student Initiated
- Skills Available
 - Dining Menu
 - Events
 - News
 - Phone Directory
 - Academic
 - Network Status
 - Campus Tour
- Academic Major Requirements Advisor (Dev)
- Heavy Equipment Maintenance Assistant (Dev)
- Garage Door Opener with Arduino (Dev)

Alexa at Gettysburg College

- Objective: Reuse 100% of CMS Content
- Most time spent on Interaction Model (Journey Map)
 - Dialog
 - Designing Endpoint to:
 - Determine the exact question
 - Search CMS content for an answer
 - Formatting CMS content to answer

Interaction Model

- Utterances
 - What are the phrases users will be using?
- Intents
 - What are the general structures of user utterances?
- Slots (Predefined and Custom)
 - What are the variables and domain of values that a user will speak in an utterance?

Sample Interaction Model

- Utterances
 - Alexa, ask gettysburg college dining, to get menu for commons on Thursday
 - HELP!!
- Intents
 - get menu for { Venue } on { Date }
 - help intent
- Slots (LIST_OF_VENUES)
 - {"Dining Center", "Servo", "Bullet Hole", "Bullet", "Servo Express", "Express", "Dive", "Commons" }

Consoles

Alexa Console

Lambda Console



Deploy Project

Profile

ACTIVE PROJECT

Designer

Integrations

Analytics

Projects

OTHER

Documentation

Community

Help

Platforms

Search Nodes...

Platforms

Alexa In

Alexa Out

Assistant In

Assistant Out

Conversation

Start

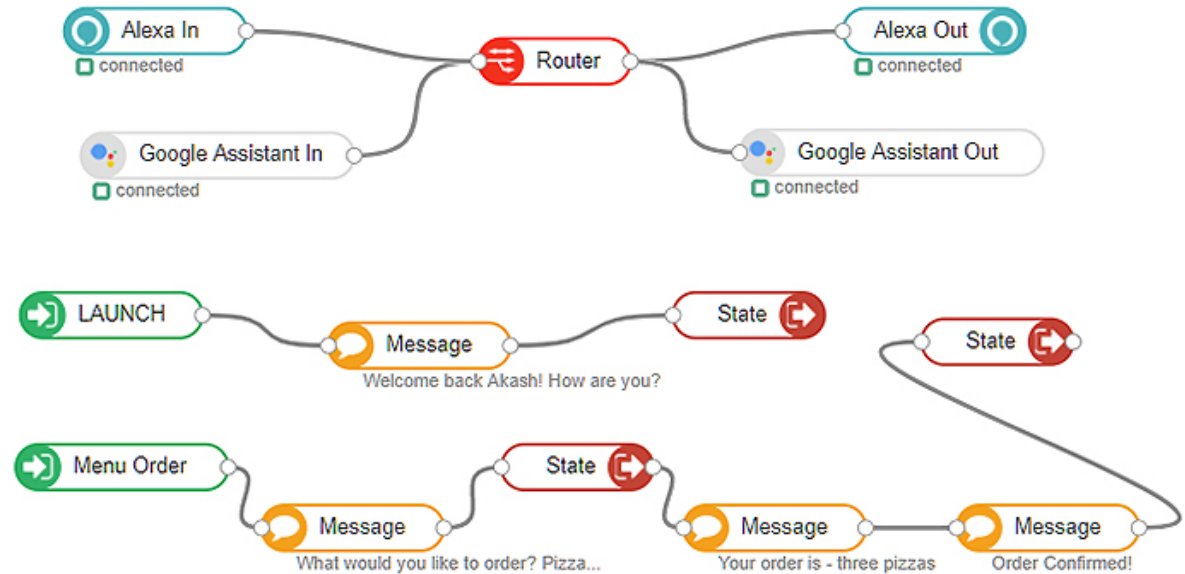
Router

State

GoVocal

Message

Food Delivery



IBM Watson at Gettysburg College

- Watson Assistant
 - Residence Hall selection
- Watson Studio like (Rapid Insights)
 - Trend data and major prediction
- Watson Discovery (Pre-Discovery... more to follow)
 - Student handbook expert

Transforming a Handbook

- Using **Retrieve and Rank** before **Discovery**
- Generate Questions and Answers
- Formatting Content
- Diagramming sentences

IBM Watson - Reflections

- Is still a very much changing system that can make programming challenging and at times very frustrating.
- Ever since the switch to “Discovery” I have had trouble finding up to date documentation that could help me program in Java, python, and even just CURL.
- The future (maybe closer than farther) IBM will release solid documentation once they stop changing their SDKs all the time.
- Get a working version of Watson without any code. Just have someone use IBM's web application to ingest data into Watson and see if it produces valid output.
- My problem was that Discovery is supposed to automatically split full documents into single answer units like “Retrieve and Rank” originally did but much more intelligently and with a lot less training required. Once that is successfully working you can create an Alexa application for it which will be really easy working alongside IBM's APIs

Lessons Learned

- Changing Tools (floor falls away)
- Transforming Content (easy or next to impossible)
- Designing the Dialog (most difficult)
- CMS – Database as a Service (DaaS)
- Watson - \$\$\$

What is Next?

- Launch new web site in January 2019
 - Retool Alexa Skills accordingly
 - Market Skills
 - Audience specific Skills
- Keep exploring Watson Assistant and Discovery
- Virtual Reality
 - Unity with CMS fed content

Questions