1 Building a Simple Message Assistant Application Using Watson Services on Bluemix

This lab will take you through several of the Watson Services that are available on Bluemix to build a simple travel advisor application. Throughout the workshop, we will navigate through Bluemix, Github, and the source code of our application in order to demonstrate how apps can be created quickly and easily using the Bluemix platform, and the value of providing Watson and Cognitive capabilities through APIs.

So let's get started. The first thing to do is to build out the shell of our application in Bluemix.
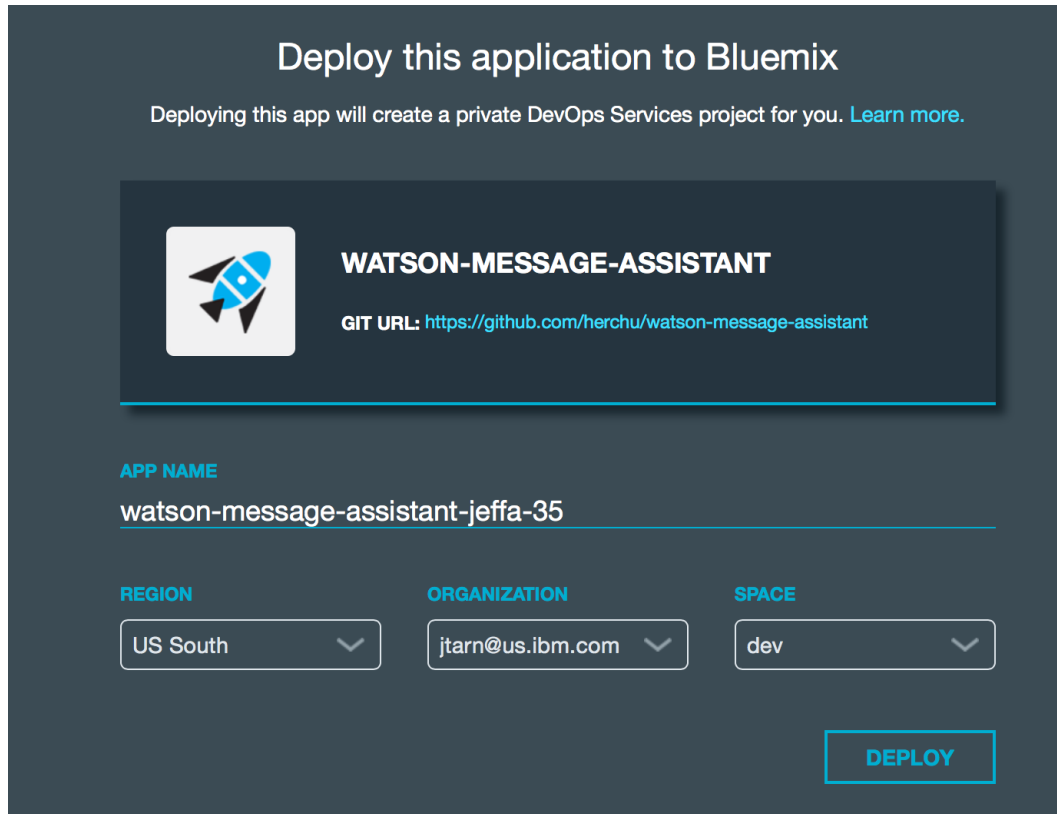
1.1 Creating a shell app in Bluemix

1.1.1 Log into Bluemix

. __1. Go to https://ace.ng.bluemix.net/

. __2. Create a Bluemix account if required,

. __3. Log in with your IBM ID (the ID used to create your Bluemix account)

1.1.2 Watson Developer Cloud GitHub

. __1. Go to https://github.com/herchu/watson-message-assistant.git

__2. Scroll down on the Github landing page and find the "Deploy to Bluemix" button within the ReadMe

__3. From here you will be taken to a Bluemix page, where you will be prompted to name your app. A sample name is provided for you, but feel free to give your application any name you like (if the name is taken by another user you will be prompted to try another name)
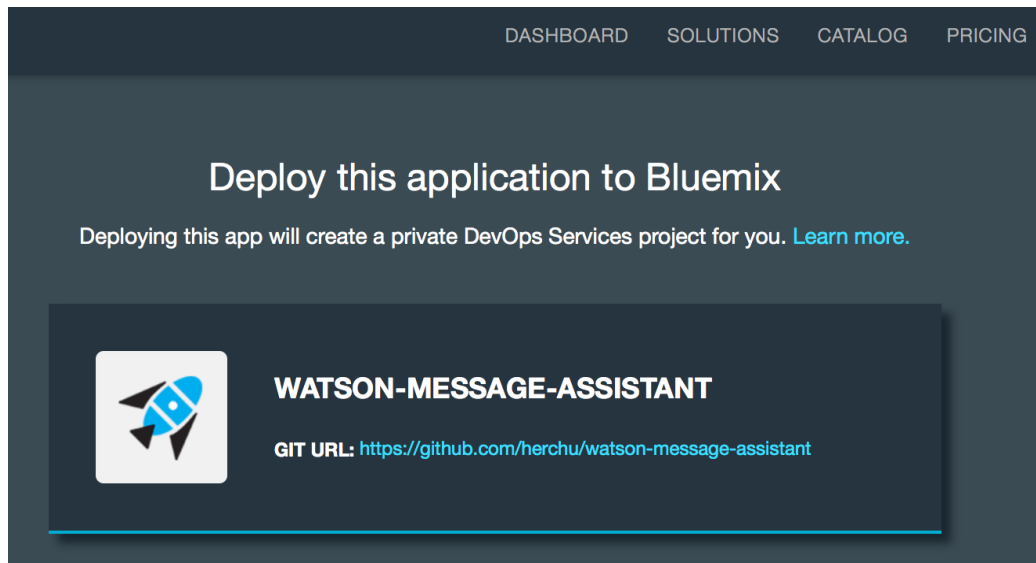

Deploy this application to Bluemix

Deploying this app will create a private DevOps Services project for you. Learn more.

WATSON-MESSAGE-ASSISTANT

GIT URL: https://github.com/herchu/watson-message-assistant

APP NAME

watson-message-assistant-jeffa-35

REGION

US South

ORGANIZATION

jtarn@us.ibm.com

SPACE

dev

DEPLOY

Note: use the default settings for Region / Organization / Space on the Bluemix landing page

__4. Once you have named your application, click the deploy button to begin the deploy process to Bluemix. During this process, Bluemix will automatically build and deploy our starter application based on the Github repository that we accessed at the start of the lab

.   __5. Once the application is finished deploying, you will see a "Success!" message. At this point, scroll to the top of the page and select "Dashboard" from the header bar

1.1.3 Test Out the new app.

__1. Now that we have deployed our application to Bluemix, the next step is to test out the application in its current state. Afterwards we will build out more functionality into the application.

Message Assistant

This app helps you write a Twitter direct message by telling you information about the recipient and the tone of your message. It uses the Tone Analyzer and Personality Insights Watson services.

Build your own:
- Fork and Deploy on Bluemix
- Fork on Github

Message composer

To: @...

Message:
Hi Team,

I know the times are difficult! Our sales have been disappointing for the past three quarters for our data analytics product suite. We have a competitive data analytics product suite in the industry. But we need to do our job selling it!

We need to acknowledge and fix our sales challenges. We can't blame the economy for our lack of execution! We are missing critical sales opportunities. Our product is in no way inferior to the competitor products. Our clients are hungry for analytical tools to improve their business outcomes. Economy has nothing to do with it. In fact, it is in times such as this, our clients want

[Clear] [Analyze]

Tips

To start, type the recipient Twitter ID. *Message Assistant* will an analysis of this person's personality using IBM Watson Personality Insights. Use this information to compose a message that will resonate better in this person.

While you are composing the message, click **Analyze** to validate your desired message tone, with an analysis built by Text Tone Analyzer service.

Learn more about these and other services from Watson Developer Cloud.

This demo simulates you are composing a direct message to a twitter user. You will se a pre-populated text in the message. To inspect the starter application that we will be adding onto, select "Analyze"

Tone Analysis

Emotion Tone: Cheerfulness (0.36) Negative (0.99) Anger (0.99)
Writing Tone: Analytical (0.77) Confident (0.61) Tentative (0)
Social Tone: Openness (0) Agreeableness (0.98) Conscientiousness (0.12)

This is the analyzed text. Colors are related to traits. Click on a word for synonym expansion:

Hi Team,

I know the times are difficult! Our sales have been disappointing for the past three quarters for our data analytics product suite. We have a competitive data analytics product suite in the industry. But we need to do our job selling it!

We need to acknowledge and fix our sales challenges. We can't blame the economy for our lack of execution! We are missing critical sales opportunities. Our product is in no way inferior to the competitor products. Our clients are hungry for analytical tools to improve their business outcomes. Economy has nothing to do with it. In fact, it is in times such as this, our clients want to get the insights they need to turn their businesses around. Let's buckle up and execute.

In summary, we have a competitive product, and a hungry market. We have to do our job to close the deals.

[Back]

The Watson Tone Analyzer service will show a report or your message's tone in various dimensions. This helps you understand how the recipient will receive the message: are you being too negative? Overly confident, cheerful? This service can also suggest synonyms for replacements, if you want to customize your message by going higher or lower in the different traits measured. Click on any colored word to get a list of suggested synonyms.

We are going to demonstrate how easy it is to use the Watson services on Bluemix to add functionality to existing applications.

While this application already uses Watson cognitive capabilities by understanding your message's tone, we are also adding an understanding of the recipient's as an individual to better help you compose a message that resonates on him/her.

1.2 Modify the existing application

___1. Let's edit our source code. Back on the application home page in Bluemix, you will see a link to the Jazz Hub repository, and a button to 'Edit Code'.   Click on **Edit Code**

GIT URL: https://hub.jazz.net/git/hbadenes/watson-message…   EDIT CODE   ⚙
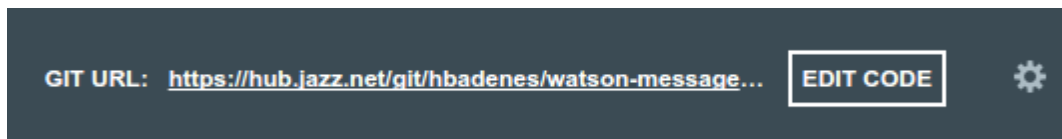
___2. Within the repository, navigate to public/js/personality-insights.js **and open that file to view the application source code**
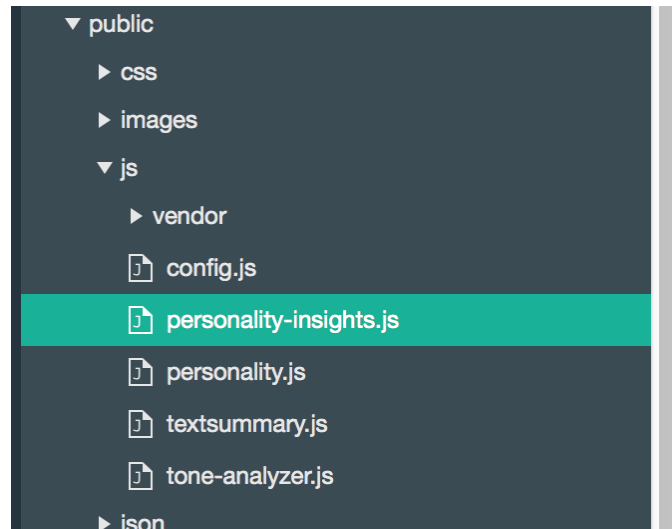
__3. Locate the comment starting in line 43: "Hook the onBlur event ....". Close this comment, and remove the comment closing mark "*/" which appears after function startPersonalityAnalysis() in line 87.

Note that now the new function listens for the onBlur event of the "To:" entry field. When you type a twitter screen name, it will GET an API URL in the application, which first imports the twitter data of this user, then uses the Personality Insights API to analyze its personality traits.

The UI will now show a summary of the recipient's personality with a visualization when you type the user name.

1.2.6 Deploy

First we are deploying the changes to the internal Git repository. Switch to the Git view, the 3rd icon in the left nagivation bar.

Commit

adding Personality Insights with Build&Deploy from DevOps!|

☐ Amend previous commit   more ...
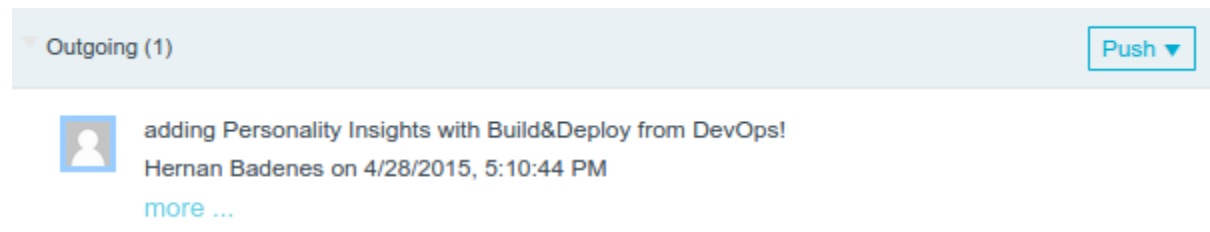
☐ Select All   1 file selected   ⊞ ⊟

☐ ▶ ⊞ launchConfigurations/watson-message-assistant-hbadenes.launch

☐ ▶ ⊞ project.json

☑ ▶   public/js/personality-insights.js
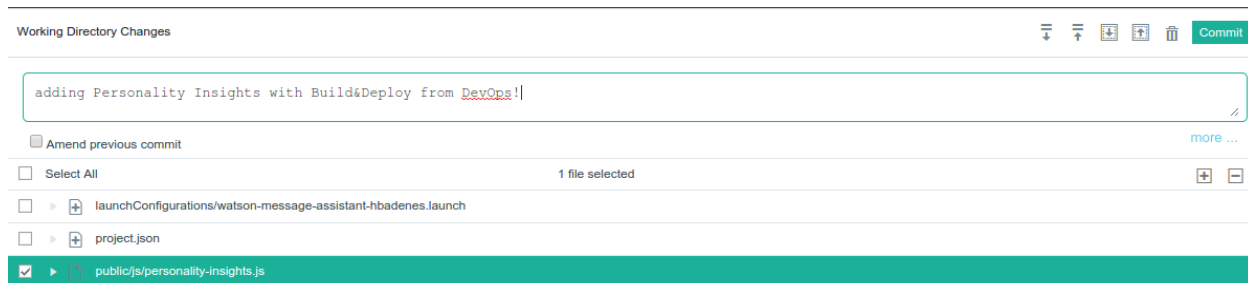
Locate your change to personality-insights.js file. Check it (select it), add a commit message, and click "Commit".

▼ Outgoing (1)   Push ▼

adding Personality Insights with Build&Deploy from DevOps!
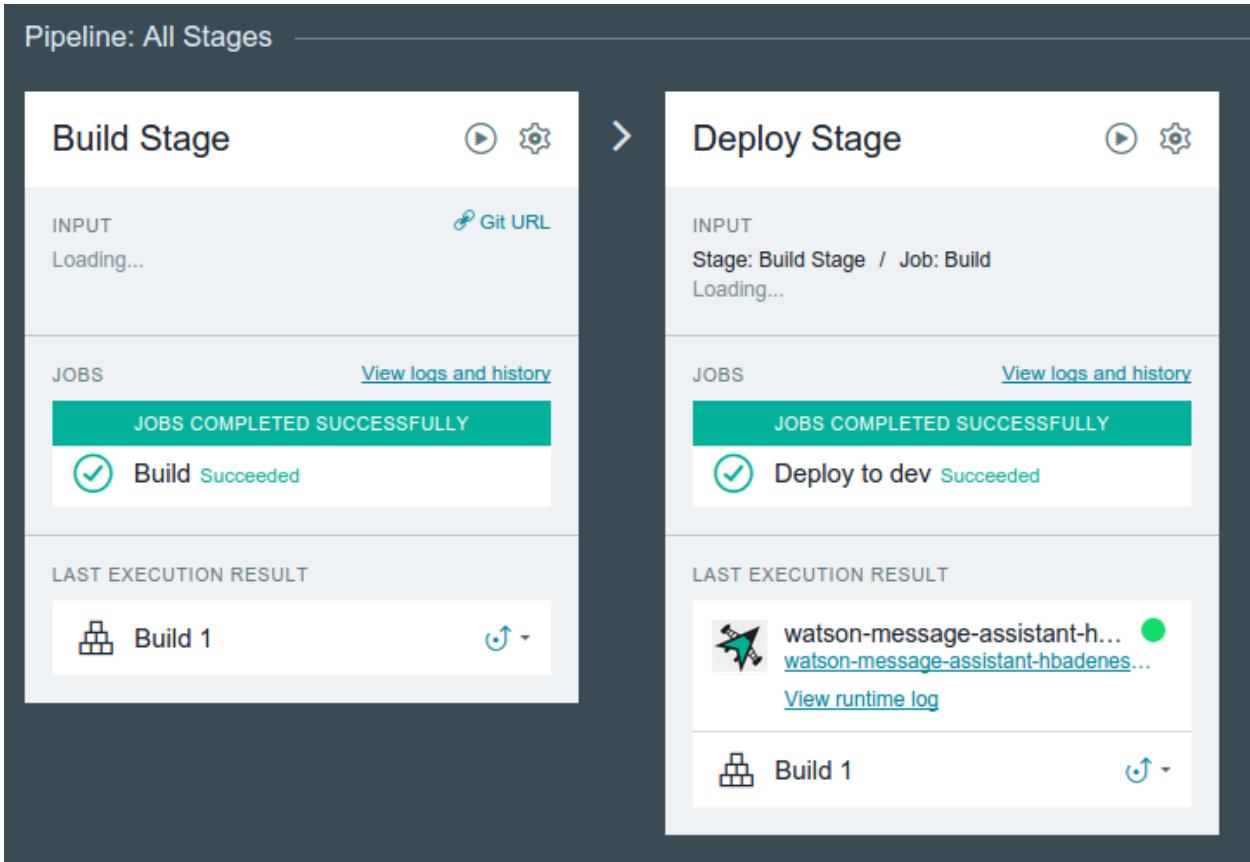Hernan Badenes on 4/28/2015, 5:10:44 PM
more ...

Finally, click "Push" to send your changes from this workspace to the main repository.

Note: While this may show as overly complicated, we show it here to illustrate you can have exactly the same source management practices you could have your local environment connected to a Git repository, in the Bluemix DevOps environment. In fact, there is even an easier way to deploy changes! (Not pictured here – ask your assistants in the lab!)
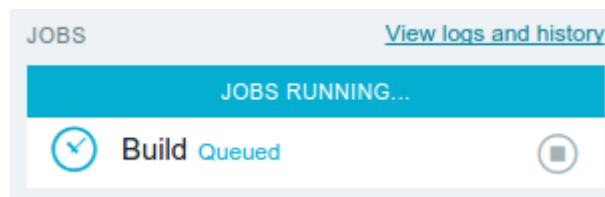
.   __1. Now that we have added the functions needed to call our Personality Insights, it is time to update the application. Click

EDIT CODE   TRACK & PLAN   BUILD & DEPLOY   ⚙

"Build and Deploy" button in the top right.

Pipeline: All Stages

Build Stage ▶ ⚙ > **Deploy Stage** ▶ ⚙

INPUT 🔗 Git URL
Loading...

INPUT
Stage: Build Stage / Job: Build
Loading...

JOBS View logs and history
JOBS COMPLETED SUCCESSFULLY
✓ Build Succeeded

JOBS View logs and history
JOBS COMPLETED SUCCESSFULLY
✓ Deploy to dev Succeeded

LAST EXECUTION RESULT
⛁ Build 1 ↺ ▾

LAST EXECUTION RESULT
watson-message-assistant-h... ●
watson-message-assistant-hbadenes...
View runtime log

⛁ Build 1 ↺ ▾

.   __2. Click the "Play" (>) button which will kick off the deploy to Bluemix

JOBS View logs and history
JOBS RUNNING...
⊘ Build Queued ▪

And wait for the jobs to finish:

JOBS View logs and history
JOBS COMPLETED SUCCESSFULLY
✓ Build Succeeded just now

JOBS View logs and history
JOBS COMPLETED SUCCESSFULLY
✓ Deploy to dev Succeeded just now

1.3 Test

__1. Test Personality Insights

To test out our application, navigate back to your application homepage on Bluemix. Select the URL next to "Route" in the same way that we launched our previously unfinished application before.

Tone Analysis

Emotion Tone: Cheerfulness (0.36) Negative (0.99) Anger (0.99)
Writing Tone: Analytical (0.77) Confident (0.61) Tentative (0)
Social Tone: Openness (0) Agreeableness (0.98) Conscientiousness (0.12)

This is the analyzed text. Colors are related to traits. Click on a word for synonym expansion:

Hi Team,

I know the times are difficult! Our sales have been disappointing for the past three quarters for our data analytics product suite. We have a competitive data analytics product suite in the industry. But we need to do our job selling it!

We need to acknowledge and fix our sales challenges. We can't blame the economy for our lack of execution! We are missing critical sales opportunities. Our product is in no way inferior to the competitor products. Our clients are hungry for analytical tools to improve their business outcomes. Economy has nothing to do with it. In fact, it is in times such as this, our clients want to get the insights they need to turn their businesses around. Let's buckle up and execute.

In summary, we have a competitive product, and a hungry market. We have to do our job to close the deals.

Back

hbadenes's personality

You are skeptical, inner-directed and analytical.

You are reserved: you are a private person and don't let many people in. You are solemn: you are generally serious and do not joke much. And you are authority-challenging: you prefer to challenge authority and traditional values to help bring about positive changes.

More than most people, your choices are driven by a desire for stability.

You consider achieving success to guide a large part of what you do: you seek out opportunities to improve yourself and demonstrate that you are a capable person. You are relatively unconcerned with taking pleasure in life: you prefer activities with a purpose greater than just personal enjoyment.

Compared to most people who participated in our surveys.

Visualization of Personality Data
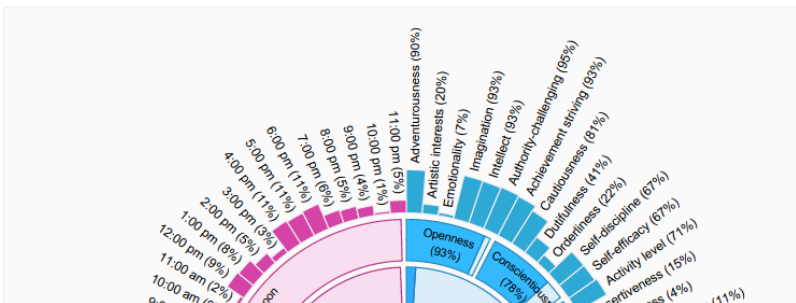
On the application page, type a username (e.g. "@IBMWatson") and press the Tab key, or click the message composer. A background will be started, showing IBMWatson's personality, values and needs traits from Personality Insights service. You could use this information to tailor your message to better resonate on your recipient.

Congratulations, you have completed the Conversational Insights Lab! We encourage you rate your experience with the labs in a 1 minute survey that can be accessed here: http://www.surveygizmo.com/s3/2131113/World-of-Watson-Lab-Feedback-Form