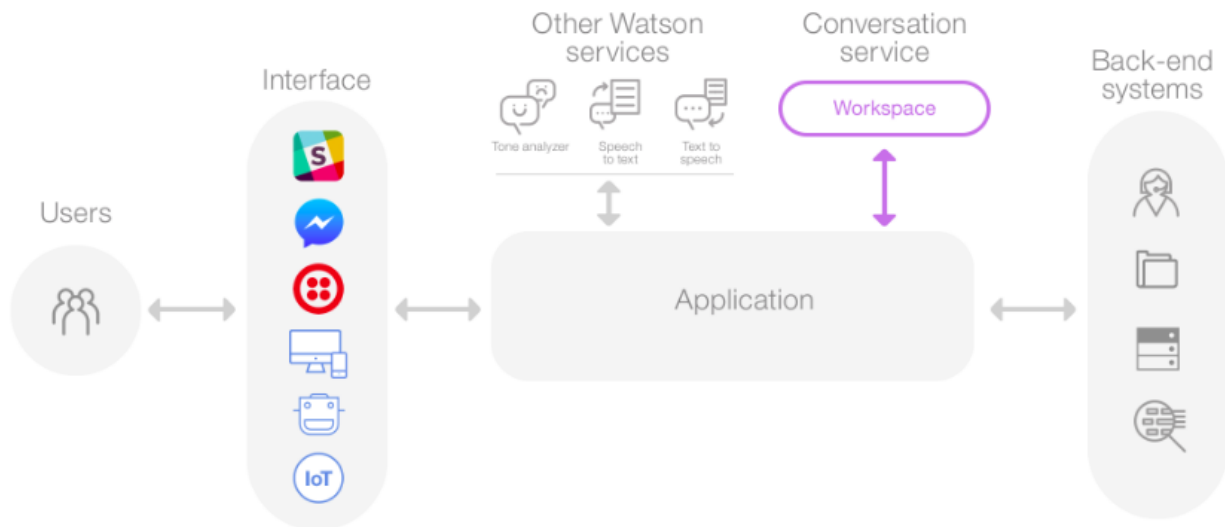


## ABOUT THE CHALLENGE

In this coding challenge, you will demonstrate the power of digital and Cognitive technologies to create and rapidly deploy a complex mass personalized application.

To motivate the need for this challenge, consider scenarios where an organization, institution, or government needs to rollout a new capability for its constituents. It could be a large migration / promotion (e.g. switching users to 4G), a citizen service (e.g. a mass preventive vaccination program for H1N1, mass deployment of a benefits program for farmers), etc. The key is that the scenarios required "personalization at scale" - vs one size fits all.



In a non-digital world, such mass rollouts would involve a lot of human capital, operational coordination, logistics etc. In addition, there would be risks around process compliance and training, and and delays in human validation. Not to mention all of this will require huge cost, time, errors and potentially a lot of paperwork. Tracking the success of the program after rollout will further entail similar challenges.

However, in a digital and Cognitive world, these are no longer issues. Digital technologies become the execution fabric, whereas Cognitive provides the required levels of human engagement, expertise, personalization and continuous, data-driven improvement.

**You can choose a scenario (corporation vs govt etc) of your choice.** Through Bluemix, you have the industry's broadest set of cloud APIs at your disposal. Your submission will be judged based on the breadth and impact of the usecase.

Assume you are the technical program director for this entire program. Your code has to run this scenario end-to-end.

### Task 1: Create a Cognitive bot

This will be your engagement channel with your constituents. The bot has to be trained to answer questions, provide clarifications, and help the constituents execute the required authentication and

deliver the service. The obvious choice of 'channel' here is a smartphone. - Leverage the Watson Conversation and related services to build your bot.

1. Try Watson APIs on Bluemix by registering using the link given below

<https://www.ibm.com/watson/>

2. Click on "Watson" in the Services tab and then build cognitive apps that help enhance, scale, and accelerate human expertise using any service listed there.

**For example,** If you are using "Conversation" service to build your app which will redirect you to <https://console.ng.bluemix.net/catalog/services/conversation>. Now follow the following steps to create your app

1. Choose free pricing plan and then click on "Create" button.
2. Either you can click on Demo or Documentation from Developer resources links to further elaborate this tool, click on "Launch tool" button to proceed.
  - *Create workspace*  
*Workspaces enable you to maintain separate intents, user examples, entities, and dialogs for each use or application.*
  - *Create your bot service in newly created workspace*

3. Deploy your bot service on clicking "Deploy"

a. Get your **Service Credentials and Workspace Details**

b. Choose "Connect to your app" from the Deployment page to connect your app to consuming bot service

Reference-

<https://www.ibm.com/watson/developercloud/services-catalog.html>

<https://www.ibm.com/watson/developercloud/doc/conversation/develop-app.html#setting-up-the-service>

<https://www.ibm.com/watson/developercloud/doc/conversation/index.html>

<https://guides.github.com/activities/hello-world/>

**Task 2:** Once you've successfully rolled out the initiative, it is time to track the outcomes.

## EVALUATION CRITERIA

1. Creativity (30 %)
2. Scalability (20 %)
3. Security (25 %)
4. Performance (10 %)
4. Documentations (15 %)

## DELIVERABLES

1. *Application source:* should contain all the necessary source files.
2. *Documentation:* This should contain clear step-by-step instructions to deploy, usages of the bot and other API usages, technologies usage, **Service Credentials and Workspace Details of**

**deployed bot service** and a link of GitHub repositories. You can also deploy application on any free cloud platform in case of web application.

Please Note : **Create zip file with deliverables and upload it.**

## **RULES AND REGULATIONS**

1. This is an individual/team hackathon.
2. The hackathon will start on 8th May, 2016 and end on the 15th of May, 2016. You can submit the deliverables during the allotted time only.
3. It's an online hackathon, you can participate from anywhere.
4. Once the hackathon starts, you will get an option to submit your deliverables. You can submit any number of times.
5. Any case of code plagiarism will result in disqualification.
6. By participating in this hackathon, you agree to the terms & conditions of Techgig.
8. Each qualified proposal is reviewed and evaluated by the Committee. The committee's decision will be final.
9. Keep your *Service Credentials* and *Workspace Details* safe until you submit it.
10. You need to provide url of application in documentation, deployed web application.