

Chapter 4: Getting Watson to talk back

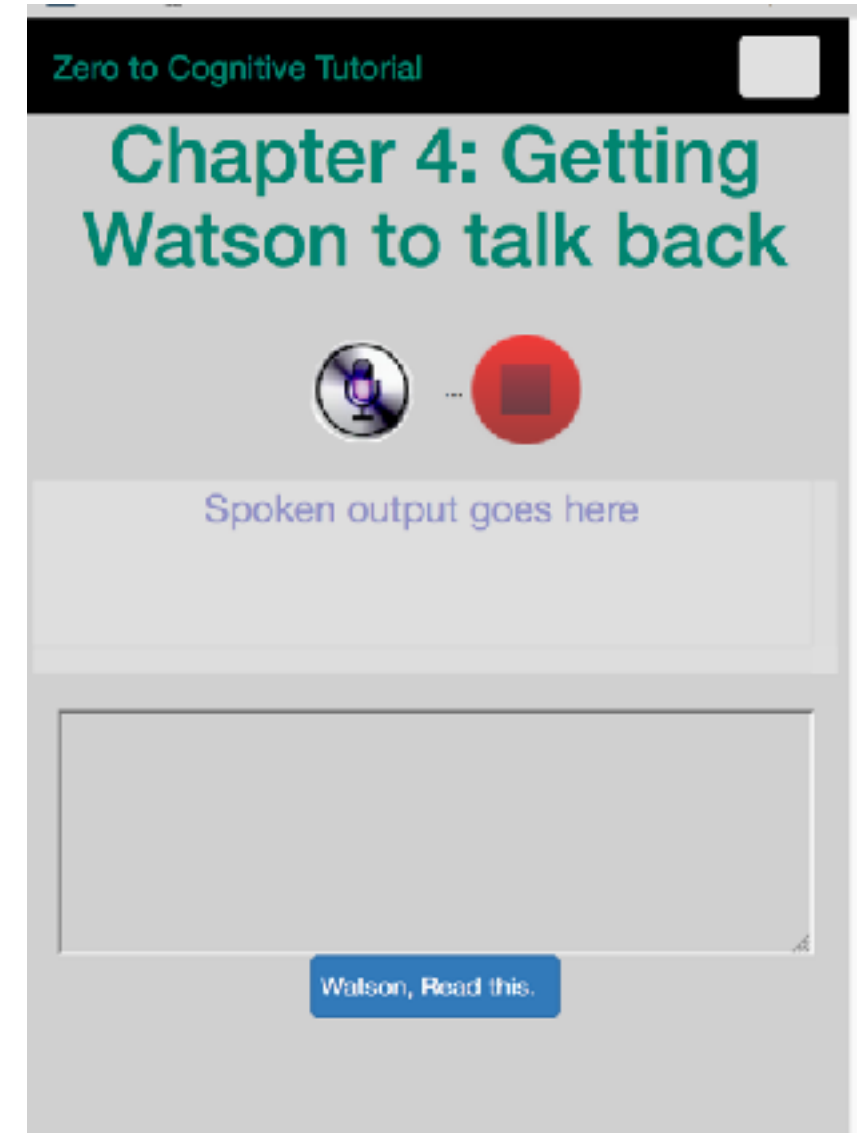
Learning Bluemix & Cognitive

Bob Dill, IBM Distinguished Engineer, CTO Global Technical Sales

Git Repository: <https://github.com/rddill-IBM/ZeroToCognitive>

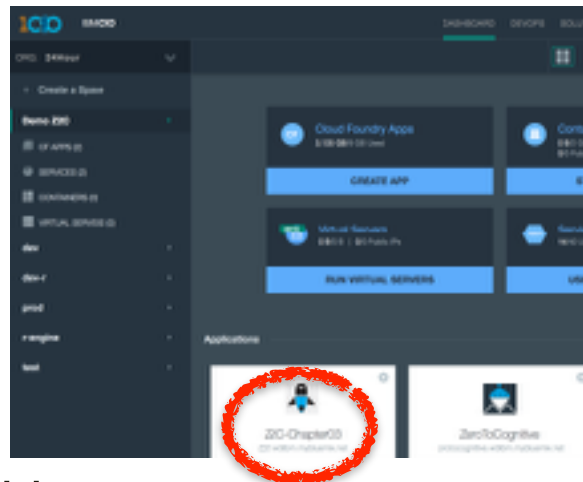
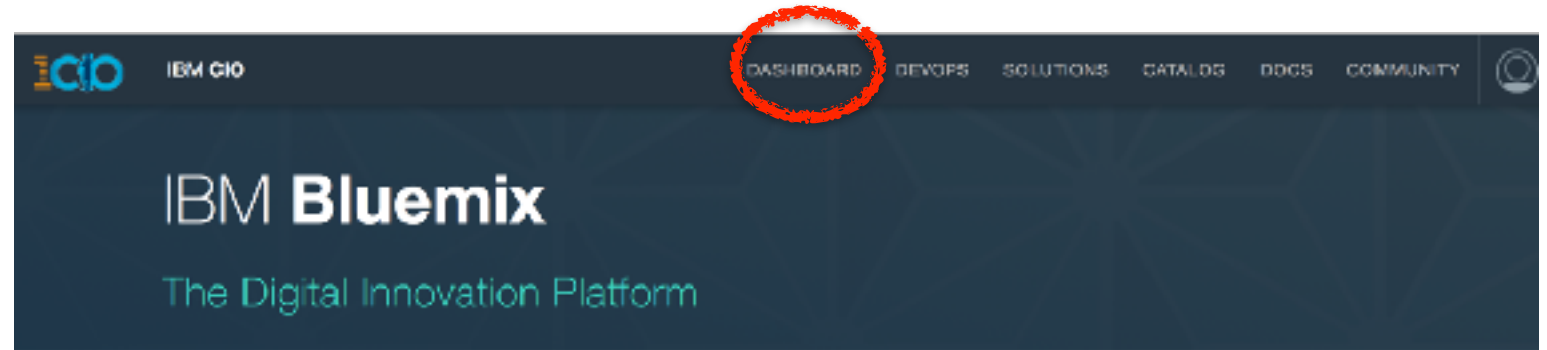
Chapter 4: Getting Watson to talk back to you

- Get the Watson Text to Speech Service
- Accessing your Watson credentials
- Telling Watson what to say
- The interaction flow



Watson Speech to Text

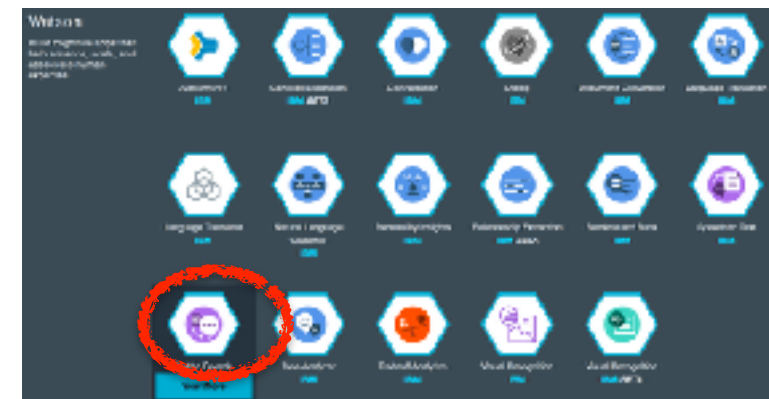
- Add the service:
- Go to your Bluemix dashboard and to your app.



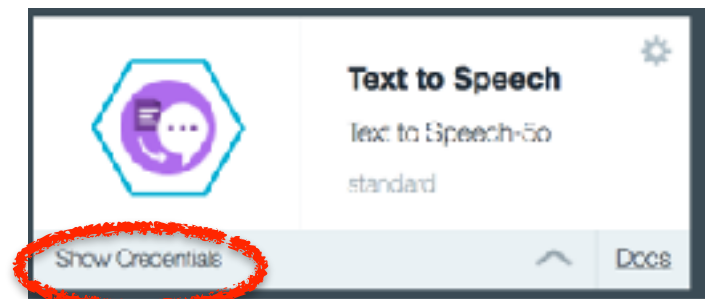
- Add a service or API



- Select Watson Text to Speech



- Get your credentials



Update your env.json file

- add a second JSON object to the file and insert your text to speech credentials.

```
{  
  "speech_to_text": {  
    "version": "v1",  
    "url": "https://stream.watsonplatform.net/speech-to-text/api",  
    "password": "your watson speech to text password",  
    "username": "your watson speech to text user name"  
  },  
  "text_to_speech": {  
    "version": "v1",  
    "url": "https://stream.watsonplatform.net/text-to-speech/api",  
    "password": "your watson text to speech password",  
    "username": "your watson text to speech user name"  
  }  
}
```



Add a new function to the controller speech_to_text file

```
22  
23 exports.tts_synthesize = function(req, res) {  
24   console.log("tts_synthesize entered");  
25  
26 }
```



update index.html

- Add rows to support a input text area, a 'read this text' button, and a player.

```
48     <div class="row">
49         <br/>
50         <div class="col-md-6"><center><textarea class="text-only" id="chat" rows="5" cols="50" >/textarea></ce
51     </div>
52     <div class="row">
53         <div class="col-md-6"><center><a id="readText" class="btn btn-primary" style="padding-left: 0.3em">Wat
54     </div>
55     <div class="row"><div class="col-lg-12 col-md-12 col-sm-12">
56         <div class="audioParent">
57             <audio class="audio" id="a_player">
58                 Your browser does not support the audio element.
59             </audio>
60         </div>
61     </div></div><!-- row -->
```



update z2c-speech

- Add a new event listener to the initPage function:

```
readText.on("click", function() {  
    console.log("initiating text-to-speech service...");  
});
```

- Add a new function to the file

```
48 function onCanplaythrough() {  
49     console.log('onCanplaythrough');  
50  
51 }
```



You've done it!! Congratulations

- At this point, you have successfully used your second Watson service, text to speech.



The Plan: 30 minute Chapters with an hour or two of practice

- | | |
|---|------------------------------------|
| 1. The Story, Architecture for this app | |
| 2. Setting up Bluemix | |
| 3. Building your first Watson App | (Watson Speech to Text) |
| 4. Getting Watson to talk back | (Watson Text to Speech) |
| 5. Understanding Classifiers | (Watson NLC) |
| 6. Creating a custom dialog with Watson | (custom Q&A, session management) |
| 7. Authentication | (puts C2 thru 6 together) |
| 8. Alchemy News | (Watson Alchemy) |
| 9. Visual Recognition and Images | (Watson Visual Recognition) |
| 10. Watson Conversations | (Watson Conversations) |
| 11. Rank & Retrieve | (Watson Alchemy + Rank & Retrieve) |



Chapter 5: Understanding Classifiers

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