



This document explains how you can quickly create a Web UI for Watson Assistant Service using a sample app posted on GitHub.



# Download the sample app



We will use a sample node.js application and slightly modify it for our purpose.

## 1. Download the sample node.js application from github

- Go to: <https://github.com/rferenc/assistant-simple>
- Click on button **Clone or Download**, then click on **Download ZIP**

**rferenc / assistant-simple**  
forked from [watson-developer-cloud/assistant-simple](#)

[Code](#) [Pull requests 0](#) [Projects 0](#) [Insights](#)

A simple sample application demonstrating the Watson Assistant api. <https://assistant-simple.ng.bluemix.net/>

254 commits 1 branch 8 releases 27 contributors Apache-2.0

Branch: master ▾ New pull request Create new file Upload files Find file **Clone or download ▾**



# Obtain the service credentials



## 2. Obtain your Watson Assistant service's credentials:

- a) Go to: <https://console.bluemix.net/>, then login with your IBM Cloud ID
- b) Under **Cloud Foundry Services**, find your Watson Conversation service
- c) Click on it, then open **Service credentials** on the left hand side
- d) In column **ACTIONS**, click on **View credentials**.

<input checked="" type="checkbox"/> KEY NAME	DATE CREATED	ACTIONS
<input checked="" type="checkbox"/> Credentials-2	Aug 3, 2017 - 08:21:43	<a href="#">View credentials</a> 

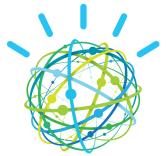
```
{  
  "url": "https://gateway.watsonplatform.net/conversation/api",  
  "username": "REDACTED",  
  "password": "REDACTED"  
}
```



- e) Copy the **username** and **password** and save them in convenient place (i.e. some file). You will need them later.



# Obtain the workspace credentials



3. Obtain the ID of the Workspace where your conversation was created.
  - a) In menu on the left, click on **Manage**, then click **Launch tool**.

Assistant / Watson /

Conversation-2p 0.02% Used | 9998 Api calls available

Location: United Kingdom Org: iiicl.jst Space: dev

Get started by launching the tool.

**Launch tool** Getting started tutorial API reference

- b) In menu on top, click on **Workspaces**, then click on **three vertical dots** in your Workspace , then click on **View details**.

WEB-SLO-BELA-KRAJINA

Turistični vodič po B... View details

za Web UI

English (U.S.)

Last modified: 8 days ago

⋮

Edit

Duplicate

Download as JSON

Delete

- c) Copy the Workspace ID and save it in convenient place (i.e. some file). You will need it later.

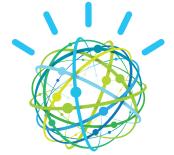
Created: 11/10/2017, 9:08:24 AM Last modified: 11/10/2017, 12:59:12 PM Documentation Bluemix

Workspace ID: [REDACTED]

8 11 37



# Install node.js and Cloud Foundry CLI



## 4. Install Node.js and Cloud Foundry CLI to your workstation

- Node.js is needed for testing and updating this app on your workstation. You can install node.js from here: <https://nodejs.org/en/#download>
- Cloud Foundry CLI will be used to deploy our application code from the workstation to IBM Cloud. You can install Cloud Foundry CLI from github at <https://github.com/cloudfoundry/cli#downloads>



## Modify the env file



5. Modify the apps environment file so your app will be able to connect to your Watson Assistant service on Cloud
  - a) On your workstation, unzip the sample app to a folder
  - b) In the newly created folder rename the *hidden* file **.env.example** into **.env**
  - c) Open the **.env** file with a text editor and update all three environment variables with your own Workspace ID, your Conversation username and your Conversation password. After the updates, the file should look like this

```
⚙ .env •  
1 # Environment variables  
2  
3 WORKSPACE_ID="xxx-xxx-xxx-xxx-xxx"  
4 CONVERSATION_USERNAME="xxx-xxx-xxx-xxx-xxx"  
5 CONVERSATION_PASSWORD="xxx"
```



# Run the app on your workstation



6. Install the node.js project modules on your workstation by typing into your command line *npm install*
7. Start your application with *npm start* command.
8. Test the app locally in your web browser at: <http://localhost:3000> It will look like this

Dobrodošli v virtualnem vodniku po Beli krajini. Kako Vam je ime?

```
Watson understands
1 {
2   "intents": [],
3   "entities": [],
4   "input": {},
5   "output": {
6     "text": [
7       "Dobrodošli v virtualnem vodniku po Beli krajini. Kako"
8     ],
9     "nodes_visited": [
10       "Welcome"
11     ],
12     "log_messages": []
13   },
14   "context": {
15     "conversation_id": "963f9ec9-d161-4258-b292-034f051f2518",
16     "system": {
17       "dialog_stack": [
18         {
19           "dialog_node": "Welcome"
20         }
21       ],
22       "dialog_turn_counter": 1,
23       "dialog_request_counter": 1,
24       "_node_output_map": {
25         "node_1_1508754688870": [
26           0
27         ]
28       }
29     }
30   }
31 }
```

Type something



# Remove the JSON view from your screen



9. If you do not want to see JSON data with the conversation responses on the right hand side, you can hide it this way:

- In your text editor open the file *app.css* (it is located in subfolder */public/css*)
- In section *#payload-column*, insert the following line:

*display: none;*

```
# app.css
248 #payload-column {
249   display: none;
250   font-family: Monaco, monospace;
```

- In section *#view-change-button*, change the *display* property to *none*

```
#view-change-button {
  display: none;
  position: absolute;
  width: 3.125rem;
  height: 3.125rem;
  border-radius: 1.5625rem;
  background: #AB72F8;
  top: 0.3125rem;
  right: 0.3125rem;
  line-height: 3.125rem;
  vertical-align: middle;
}
```



## Make your page prettier



9. We made our page prettier and more readable by updating files *index.html* and *app.css* as follows:

- Added a background image.
  - Added two logos at the bottom of the page
  - Added a meaningful title
  - Removed the disclaimer text
- 
- Next few pages show how we did it.



# Add background image to your page



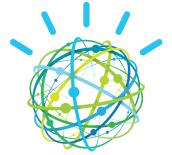
9. If you want to add a background image to your app, do following:

- Copy the file with the image into folder /public/img
- add several lines into the file app.css, section *body* so it will look like below. In this example, the name of the image file is background.jpg

```
7  body {  
8 |   background: url("../img/background.jpg") no-repeat center center;  
9 |   font-family: Helvetica Neue for IBM, Helvetica Neue, Helvetica,  
10 |   Arial, sans-serif;  
11 |   margin: 0;  
12 |   padding: 0;  
13 |   -webkit-background-size: cover;  
14 |   -moz-background-size: cover;  
15 |   -o-background-size: cover;  
16 |   background-size: cover;  
17 }
```



# Creating the Web UI 8/10



## 10. Deploy the app from your workstation to IBM Cloud

- a) In your text editor, open file **manifest.yml**
- b) Change two variables:
  - a) *name*: any-name-you-want (but it must be unique)
  - b) *services*: name-of-your-Watson-Conversation-service

```
! manifest.yml ✘

1  ---
2  declared-services:
3    my-conversation-service:
4      label: conversation
5      plan: free
6  applications:
7    - name: [REDACTED]
8      command: npm start
9      path: .
10     memory: 256M
11     instances: 1
12     services:
13       - [REDACTED]
14     env:
15       NPM_CONFIG_PRODUCTION: false
```



# Creating the Web UI 9/10



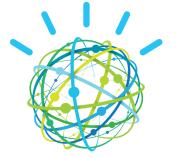
11. In your terminal window, navigate to folder **conversation-simple-master** and:
  - Log in to Cloud Foundry with *cf login* command
  - When prompted, enter your IBM Cloud user ID and password
  - Deploy the application with *cf push* command
12. This will take few minutes. When done, see messages in terminal. Near the bottom you will see your apps' URL.

```
requested state: started
instances: 1/1
usage: 256M x 1 instances
urls: workshop-zagreb.eu-gb.mybluemix.net
last uploaded: Thu Nov 16 16:23:39 UTC 2017
stack: cflinuxfs2
buildpack: SDK for Node.js(TM) (ibm-node.js-6.11.4, buildpack-v3.15-20171024-1528)

      state      since          cpu    memory     disk   details
#0  running  2017-11-16 05:27:25 PM  0.0%   0 of 256M  0 of 1G
acos:conversation-simple-master Aco$
```



# Creating the Web UI 10/10



13. You can now access your app in Cloud.

The screenshot shows a web browser window with the URL `workshop-zagreb.eu-gb.mybluemix.net` in the address bar. The browser interface includes standard navigation buttons (back, forward, home), a search bar, and a toolbar with various icons. Below the address bar, there is a menu of links such as 'Most Visited', 'Box', 'TULIP portal', 'Business', 'Chatbots & Convers...', 'Cognitive', 'DBG', 'DEG', 'Education', 'IBM', 'Programming', 'Reference', and 'Reporting'. The main content area displays a purple vertical bar on the left containing the text: 'Dobrodošli v virtualnem vodniku po Beli krajini. Kako Vam je ime?'. The rest of the page is blank white space.