

ch_hr_assistant_latest_mm_v4_webhook_trail1

August 20, 2021

```
[1]: #trying to integrate into webex with webhook process
```

```
[2]: def warn(*args, **kwargs):  
      pass  
      import warnings  
      warnings.warn = warn
```

```
[3]: import os
```

```
[4]: import mindmeld as mm  
      mm.configure_logs()
```

```
[5]: bp_name = ('ch_assistant')  
      #mm.blueprint(bp_name)
```

```
[6]: from mindmeld.components import QuestionAnswerer
```

```
[7]: config = {"model_type": "elasticsearch"}
```

```
[8]: QUESTION_ANSWERER_CONFIG = {  
      "model_type": "elasticsearch", # although recommended to use elasticsearch,  
      ↪if you wish not to use elasticsearch for some reason, specify 'native'  
      "model_settings": {  
          "query_type": "embedder_text", # previously passed-in as model_type  
          "embedder_type": "bert",  
          "pretrained_name_or_abspath": "bert-base-cased", # any valid name from  
          ↪https://huggingface.co/models or https://www.sbert.net/docs/  
          ↪pretrained_models.html  
          "bert_output_type": "cls", # if you wish to use mean-pooled output from  
          ↪BERT's output, other choices: "cls" (same as BERT's convention)  
          "quantize_model": False, # True if you wish use a quantized BERT for  
          ↪inference time speed-ups  
          "embedding_fields": {  
              "ch_faqs_data": ["question", "answer", "name"]  
          }  
      }  
}
```

```
[9]: qa = QuestionAnswerer(app_path=bp_name, config=QUESTION_ANSWERER_CONFIG)
```

```
/home/rupa/anaconda3/envs/mm_new_env/lib/python3.7/site-  
packages/torch/cuda/__init__.py:52: UserWarning: CUDA initialization: Found no  
NVIDIA driver on your system. Please check that you have an NVIDIA GPU and  
installed a driver from http://www.nvidia.com/Download/index.aspx (Triggered  
internally at /pytorch/c10/cuda/CUDAFunctions.cpp:100.)
```

```
    return torch._C._cuda_getDeviceCount() > 0  
404 Client Error: Not Found for url: https://huggingface.co/sentence-  
transformers/bert-base-cased/resolve/main/config.json
```

```
Could not initialize name/path `sentence-transformers/bert-base-cased` directly  
through huggingface-transformers. Successfully initialized name/path `bert-base-  
cased` directly through huggingface-transformers.
```

```
[10]: qa.load_kb(app_namespace=bp_name, index_name='ch_faq_data',  
↳data_file='ch_assistant/data/ch_faq_data.json', clean=True)
```

```
Deleting index 'ch_faq_data'  
Creating index 'ch_faq_data'
```

```
Loading Elasticsearch index ch_faq_data: 0%|          | 0/165 [00:00<?, ?it/s]
```

```
Loaded 165 documents
```

```
Embedder cache dumped at ch_assistant/.generated/indexes/51fe365e36fb55d5e0b45d5  
acab6f8829185cdfb_cache.pkl
```

```
[11]: ch_faq_data = qa.get(index='ch_faq_data',size=165)  
ch_faq_data[0]
```

```
[11]: {'question': 'What is Balance of the Planet Challenge?',  
  'answer': "Here is some information on the bop challenge. First, create a new  
  team or join an existing one. The best teams have complementary skills and  
  interests (people with different strengths), as well as an openness to different  
  ways of working. Then propose a solution to one or more of the Sustainable  
  Development Goals (SDG). There is no specific problem set for your team; your  
  solution is for you to decide! You need to identify an SDG that interests you,  
  refine your ideas, conduct your own creative research and clearly report to  
  others so the ideas can be judged. Finally, submit by 'April 30th' or 'October  
  31st' to compete for placement as a top team of the contest, to receive letters  
  of recognition, and to eligible for scholarship offers. The minimum requirement  
  for entry is completion of 'Technical Innovation Plan', after that your team is  
  able to increase its impact by creating a comprehensive 'Global Business Plan'  
  and/or a 'Video'. Teams can win in the 'Technical Innovation Plan' category  
  alone, or in combination with one, or both, of the other two deliverables. ",  
  'name': 'balance of the planet',  
  'id': 'bopfaq1',  
  '_score': 1.0}
```

```
[12]: from mindmeld.components.nlp import NaturalLanguageProcessor
      nlp = NaturalLanguageProcessor('ch_assistant')
      nlp.build()
```

```
Fitting entity recognizer: domain='faq', intent='all_topics'
No entity model configuration set. Using default.
Loading queries from file ch_assistant/domains/faq/all_topics/train.txt
Loading query cache into memory
There are no labels in this label set, so we don't fit the model.
Saving entity classifier: domain='faq', intent='all_topics'
Unloading entity recognizer: domain='faq', intent='all_topics'
Loading entity recognizer: domain='faq', intent='all_topics'
```

```
[13]: from mindmeld.components.dialogue import Conversation
```

```
[14]: conv = Conversation(nlp=nlp, app_path='ch_assistant')
```

The application package ch_assistant is already imported.

```
[15]: conv.say('Hello!')
```

```
[15]: ["Hi, I am your Challenge assistant. Ask me about an sdg or Balance of Planet
challenge or general sustainable development goals questions. You can say 'What
is the goal of SDG5?' or 'Short description of Balance of Planet' or 'What is
the goal of SDG2?'" ]
```

```
[16]: conv.say("Give me some hints on the title page?")
```

```
[16]: ["Here is some information on the title page. Prepare a title based on what is
the name of your product, service or process. This name has a big role in
creating 'brand awareness' of your idea. A good brand creates a positive
response in people and a desire to want or learn more about the brand. For tips
visit https://balanceoftheplanet.wordpress.com/category/global-business-plan/title-page/ "]
```

```
[17]: nlp.process("Hello")
```

```
[17]: {'text': 'Hello', 'domain': 'faq', 'intent': 'all_topics', 'entities': []}
```

```
[18]: conv.say("what should I do for title page?")
```

```
[18]: ["Here is some information on the title page. Prepare a title based on what is
the name of your product, service or process. This name has a big role in
creating 'brand awareness' of your idea. A good brand creates a positive
response in people and a desire to want or learn more about the brand. For tips
visit https://balanceoftheplanet.wordpress.com/category/global-business-plan/title-page/ "]
```

```
[19]: conv.say("what kind of resources can be used")
```

```
[19]: [" The team can be mentored and helped by as many people as you like. You are allowed to use all kinds of resources in your solution - scientists, business people, parents, friends, authoritative websites (make sure you know they are!), scientific articles and other people's bright ideas - but it is vitally important that you publically acknowledge all the help, people, and borrowed or adapted ideas that you find and use. Originality in this contest comes from synthesizing new combinations of ideas and approaches, finding new ways to implement ideas, and new ways to think about the problems. "]
```

```
[20]: conv.say("What is Goal2 Target2c?")
```

```
[20]: ['Aim of Goal2 Target 2c - Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.']
```

```
[21]: conv.say("Give me some information about the executive summary section?")
```

```
[21]: ["It's generally a good idea to create the Executive Summary after you have worked on the main content of your submission. However, sometimes it is useful to envision the 'short story' in the Executive Summary, then add details and support in the main body of the submission. Either way, the Executive Summary should be closely aligned to the rest of the submission and everything promised here should have detailed support in the main submission."]
```

```
[22]: conv.say("hints on the title page")
```

```
[22]: ["Here is some information on the title page. Prepare a title based on what is the name of your product, service or process. This name has a big role in creating 'brand awareness' of your idea. A good brand creates a positive response in people and a desire to want or learn more about the brand. For tips visit https://balanceoftheplanet.wordpress.com/category/global-business-plan/title-page/ "]
```

```
[23]: conv.say("which sdg talks about ending poverty")
```

```
[23]: ['The goal of SDG1 is to End poverty in all its forms everywhere.']
```

```
[24]: conv.say("which sdg aims to esures sustainabe management?")
```

```
[24]: ['The goal of SDG6 is to Ensure availability and sustainable management of water and sanitation for all']
```

```
[26]: from mindmeld.components import NaturalLanguageProcessor
      from mindmeld.bot import WebexBotServer
```

```

from mindmeld import configure_logs

if __name__ == '__main__':
    # Create web hook here: https://developer.webex.com/docs/api/v1/webhooks/
    ↪ create-a-webhook
    WEBHOOK_ID = os.environ.
    ↪ get('Y21zY29zcGFyazovL3VzL0FQUEXJQOFUSU90Lzc4NDJkZWQ2LWVhZDMtNDBkNi05MzJiLWRLZTVhNWE3MzUwOA

    # Create bot access token here: https://developer.webex.com/my-apps/new
    ACCESS_TOKEN = os.environ.
    ↪ get('ZmQzNjViNTUtZTZmYy00ZWZhLWJmZmMtYjYxYzhiOGNjNDQyNDMON2U2YjMtZWY1_Pf84_6866e3a8-2167-48

    configure_logs()
    nlp = NaturalLanguageProcessor('ch_assistant')
    nlp.build()

    server = WebexBotServer(name=__name__, app_path='ch_assistant', nlp=nlp,
    ↪ webhook_id=WEBHOOK_ID,
        access_token=ACCESS_TOKEN)

    port_number = 8080
    print('Running server on port {}'.format(port_number))

    server.run(host='localhost', port=port_number)

```

The application package ch_assistant is already imported.
Fitting entity recognizer: domain='faq', intent='all_topics'
No entity model configuration set. Using default.
Loading queries from file ch_assistant/domains/faq/all_topics/train.txt
Loading query cache into memory
There are no labels in this label set, so we don't fit the model.
Saving entity classifier: domain='faq', intent='all_topics'
Unloading entity recognizer: domain='faq', intent='all_topics'
Loading entity recognizer: domain='faq', intent='all_topics'
The application package ch_assistant is already imported.

```

-----
WebexBotServerException                                Traceback (most recent call last)
<ipython-input-26-f4aa0b1f7b21> in <module>
    15
    16     server = WebexBotServer(name=__name__, app_path='ch_assistant',
    ↪ nlp=nlp, webhook_id=WEBHOOK_ID,
----> 17                                     access_token=ACCESS_TOKEN)
    18
    19     port_number = 8080

```

```
~/mindmeld/mindmeld/bot/webex_bot_server.py in __init__(self, name, app_path,
↳ nlp, webhook_id, access_token)
    55
    56         if not self.webhook_id:
----> 57             raise WebexBotServerException("WEBHOOK_ID not set")
    58         if not self.access_token:
    59             raise WebexBotServerException("BOT_ACCESS_TOKEN not set")
```

WebexBotServerException: WEBHOOK_ID not set

```
[ ]: #import mindmeld as mm
      #mm.configure_logs()
      #bp_name = 'ch_assistant'
      #mm.blueprint(bp_name)
```

```
[ ]: #cd ch_assistant
```

```
[ ]: #export WEBHOOK_ID
      ↳='Y2lzY29zcGFyazovL3VzL0FQUEXJQOFUSU9OLz4NDJkZWQ2LWVhZDMtNDBkNi05MzJiLWRLZTVhNWE3MzUwOA '
```

```
[ ]: #cd ch_assistant
      #export WEBHOOK_ID
      ↳='Y2lzY29zcGFyazovL3VzL0FQUEXJQOFUSU9OLz4NDJkZWQ2LWVhZDMtNDBkNi05MzJiLWRLZTVhNWE3MzUwOA '
      #export BOT_ACCESS_TOKEN
      ↳='ZmQzNjViNTUtZTZmYy00ZWZhLWJmZmMtYjYxYzh0GNjNDQyNDMON2U2YjMtZWY1_Pf84_6866e3a8-2167-4898-
      #python webex_bot_server.py
```

```
[ ]: #cd ..
```

```
[ ]:
```

```
[ ]:
```

```
[ ]:
```

```
[ ]:
```