

CALIBER 2020 Hackathon Submission

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Activity

Chat

Teams

Calendar

Calls



Cognizant WoW Bot+

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About

More from CALIBER

Privacy and Permissions

AI powered Cognizant WoW bot

The AI powered 'Ways of Working' WoWBot augments policies posted on company portals. Based on an associates specific situation, the WoWBot personalizes recommended actions.

Bots

Chat with the app to ask questions and find info

Created by: [preTrainedModels](#)

Version 1.1.0

Our 'Ways of Working' have been disrupted

The AI powered 'Ways of Working' WoWBot augments policies posted on company portals. Based on an associates' specific situation, the WoWBot personalizes recommended actions.

Quick Resources

One size fits all push notifications

Policies

- Updates to sick leave policy for self-quarantine
- Temporary WFH guidelines (NA, India and LATAM)
- Associate guidelines for WFH
- Travel restrictions extended
- Guidelines for timesheet and absence reporting
- Office safety measures including increased cleanings
- Many countries and regions have additional geo-specific updates on their HR pages. Click on "Associate Life" in the top navigation and scroll through the "Human Resources" box to find your HR page.

Health Information

- Health Benefits and testing information for the US and Puerto Rico
- EAP benefits for mental health
- Tips to stay healthy

Business Continuity

- Face-to-face meeting requirements
- Selling With Physical Distance for our sales team
- Client Partner Page restricted to those in senior client facing roles

Resources for Resilience

- Working Parent Yammer group
- Virtual Volunteering opportunities
- The Community Resource Center
- The US benefits page

Extended GSD Support for Working from Home

By MUKHERJEE, SREEMOYEE (Cognizant) Manager - Projects - Tue, Mar 24, 2020 3:05 PM



Personalized, interactive info

For India-based associates working from home, we have enhanced our GSD services to provide expedited support. If you require any technical assistance, please note the following contact information:

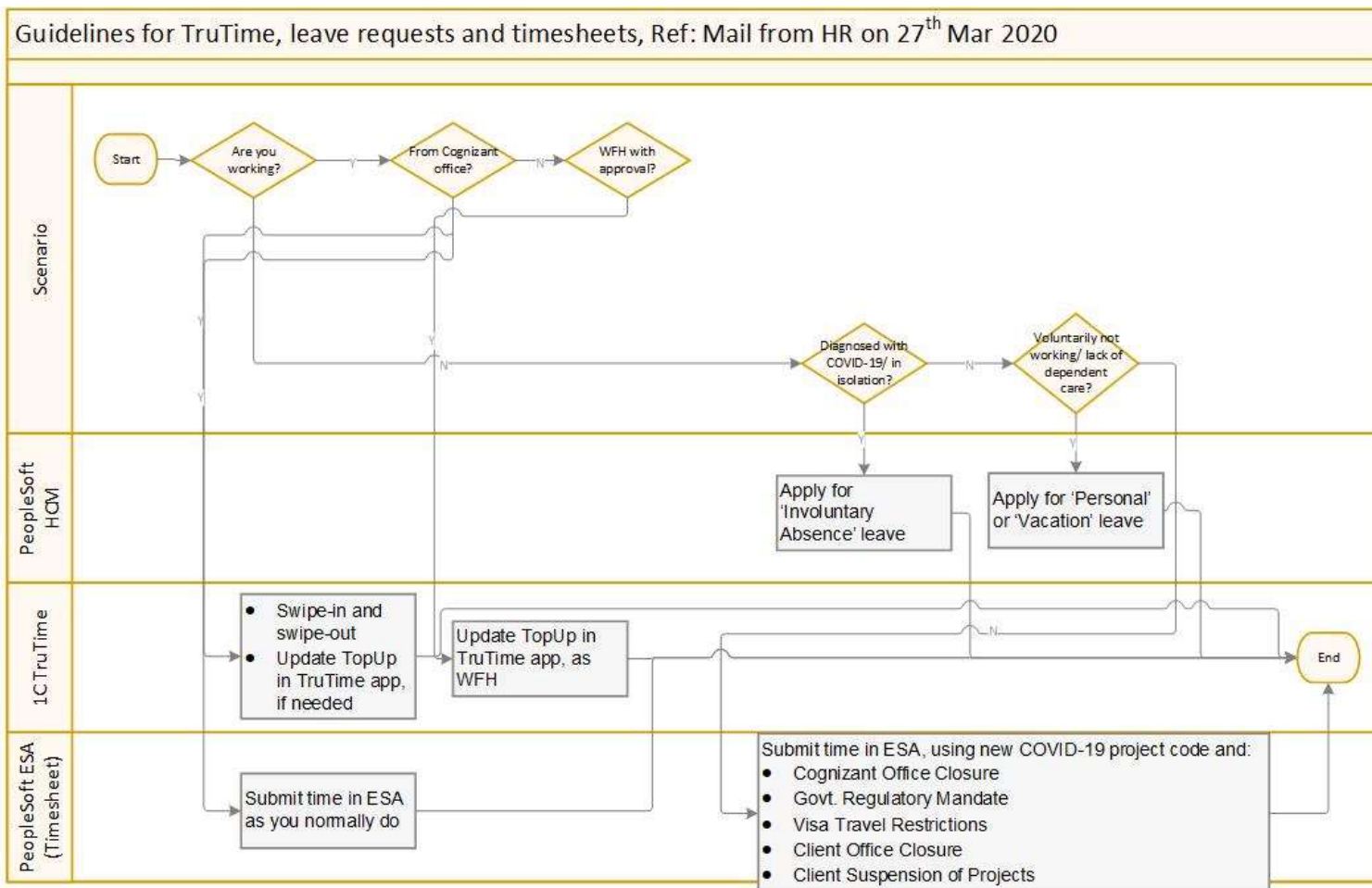
For GSD Chat (preferred), click here

For GSD Voice (alternative), dial 18005720473 and select option 1, followed by 3

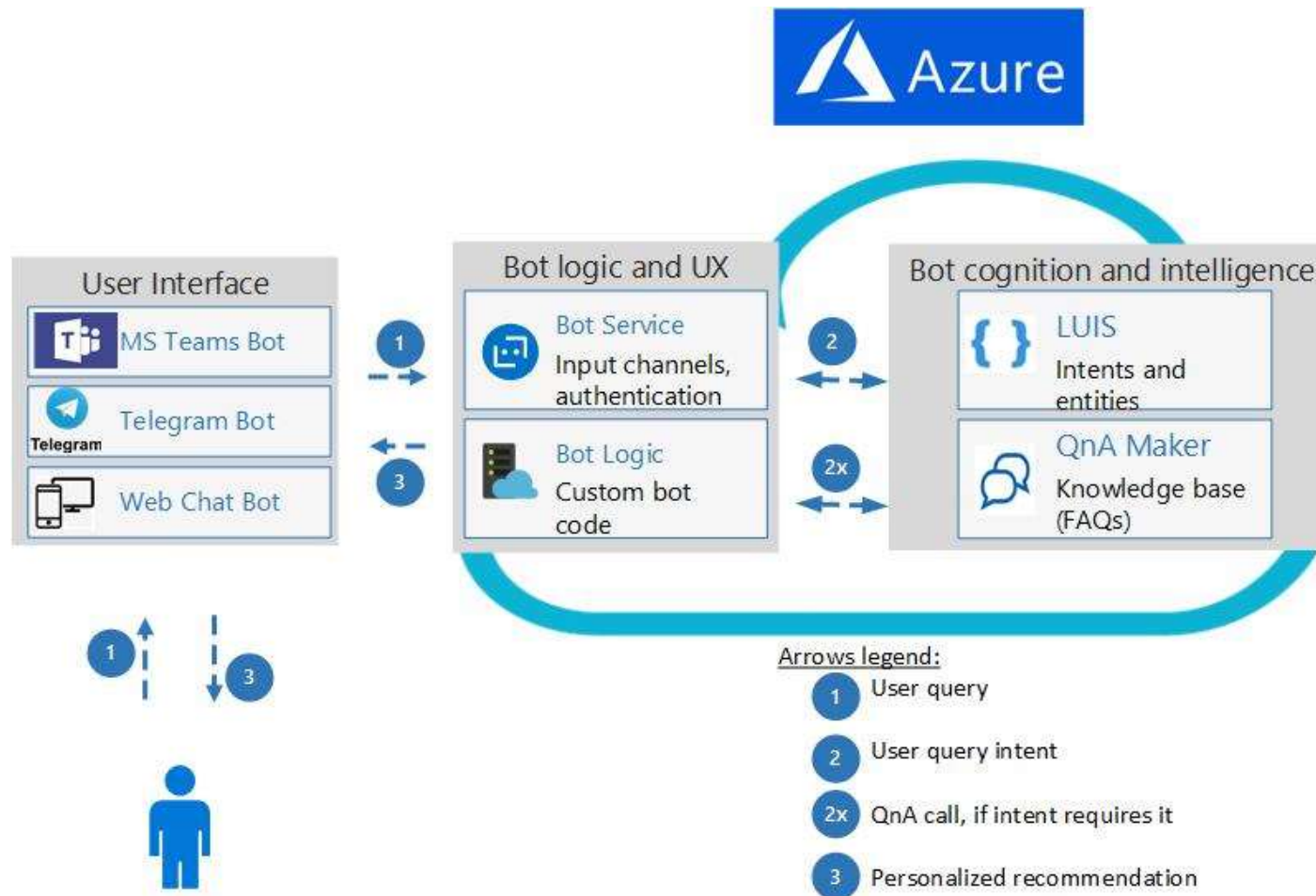
Given the volume of associates working remotely, wait times might be longer than usual. Thank you for your patience during this time.

Challenges: Time-to-"market", scalability & service quality

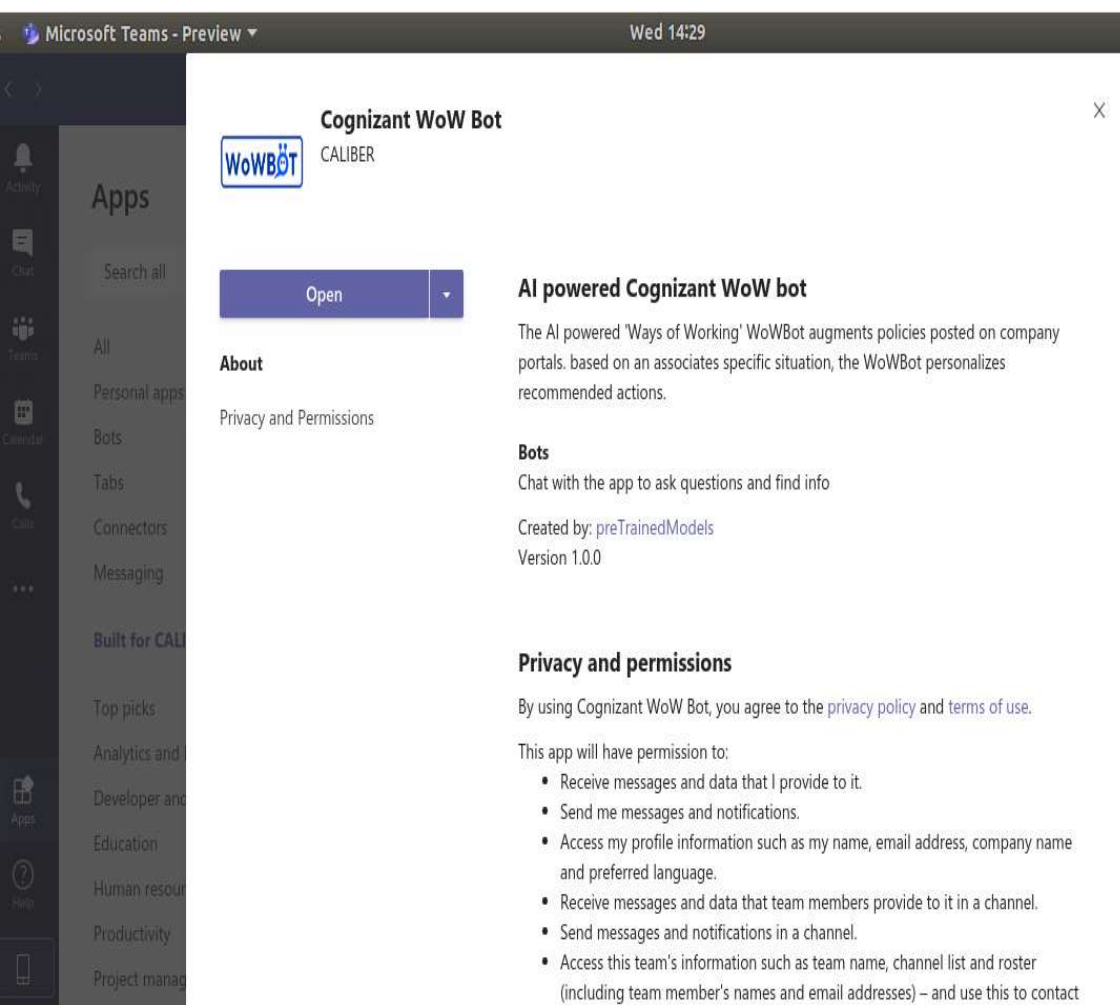
Swimlane diagram



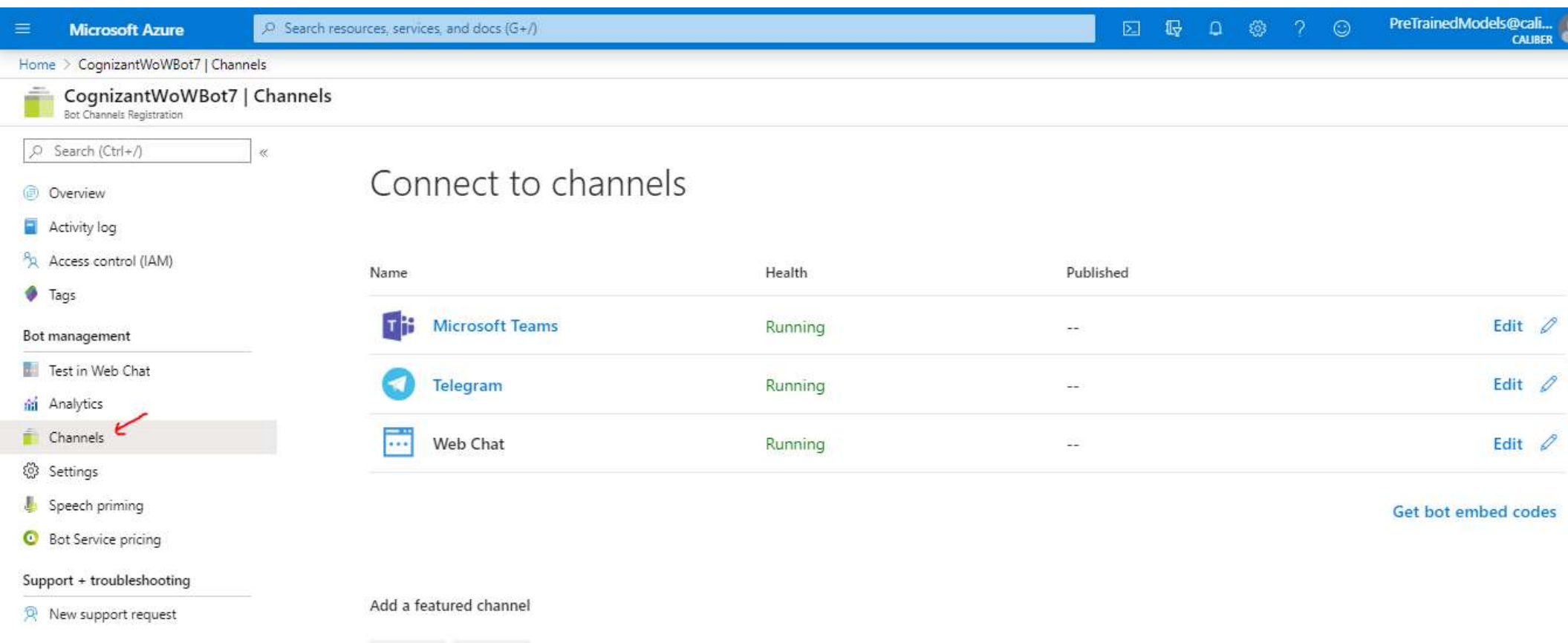
Solution Architecture



PreTrainedModels



```
{
  "$schema": "https://developer.microsoft.com/en-us/json-
schemas/teams/v1.5/MicrosoftTeams.schema.json",
  "manifestVersion": "1.5",
  "version": "1.0.0",
  "id": "02cfa5aa-0e47-4487-a301-d220229753a4",
  "packageName": "com.teams.sample.CognizantWoWBot",
  "developer": {
    "name": "preTrainedModels",
    "websiteUrl": "https://www.cognizant.com",
    "privacyUrl": "https://www.cognizant.com",
    "termsOfUseUrl": "https://www.cognizant.com"
  },
  "icons": {
    "outline": "wowLogo.png",
    "color": "wowbotLogo.png"
  },
  "name": {
    "short": "Cognizant WoW Bot",
    "full": "Cognizant WoW Bot"
  },
  "description": {
    "short": "AI powered Cognizant WoW bot",
    "full": "The AI powered 'Ways of Working' WoWBot
augments policies posted on company portals. based on an
associates specific situation, the WoWBot personalizes
recommended actions."
  },
  "accentColor": "#FFFFFF",
  "bots": [
```



Microsoft Azure

Search resources, services, and docs (G+/I)

Home > CognizantWoWBot7 | Channels

CognizantWoWBot7 | Channels
Bot Channels Registration

Search (Ctrl+/)







Overview
Activity log
Access control (IAM)
Tags

Bot management

Test in Web Chat
Analytics
Channels
Settings
Speech priming
Bot Service pricing

Support + troubleshooting
New support request

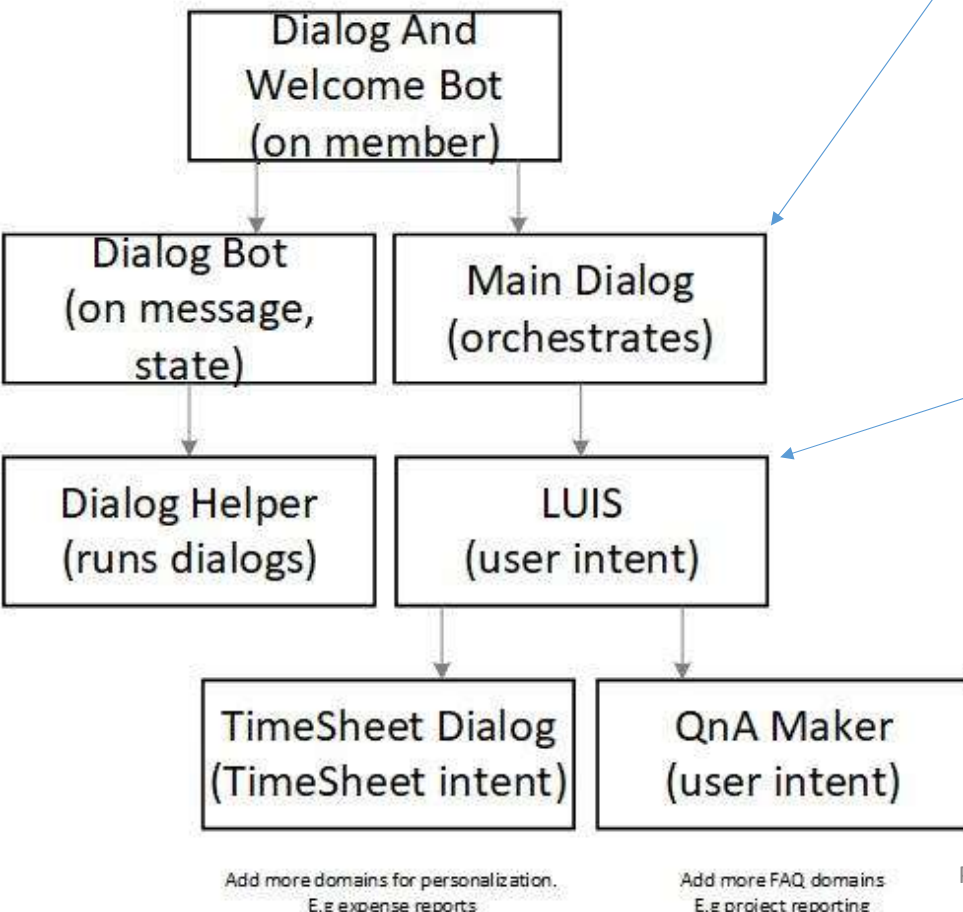
Connect to channels

Name	Health	Published	
 Microsoft Teams	Running	--	Edit 
 Telegram	Running	--	Edit 
 Web Chat	Running	--	Edit 

[Get bot embed codes](#)

Add a featured channel

Solution Architecture – key dialogs



```

async def act_step(self, step_context: WaterfallStepContext) -> DialogTurnResult:
    # Call LUIS to identify the user's intent.
    intent, luis_result = await LuisHelper.execute_luis_query(
        self._luis_recognizer, step_context.context
    )

    if intent == Intent.TIME_SHEET.value:
        # Run the TimeSheetDialog giving it whatever details we have from the LUIS call.
        return await step_context.begin_dialog(self._timesheet_dialog_id, luis_result)

    elif intent == Intent.SME.value:
        # Call QnAMaker with the user's query
        await self._process_sme(step_context.context)
    
```

```

class Intent(Enum):
    CANCEL = "Cancel"
    NONE_INTENT = "NoneIntent"
    TIME_SHEET = "TimeSheet"
    SME = "SME"
    
```

```

def top_intent(intents: Dict[Intent, dict]) -> TopIntent:
    max_intent = Intent.NONE_INTENT
    max_value = 0.0

    for intent, value in intents:
        intent_score = IntentScore(value)
        if intent_score.score > max_value:
            max_intent, max_value = intent, intent_score.score

    return TopIntent(max_intent, max_value)
    
```

```

async def _process_sme(self, turn_context: TurnContext):
    results = await self.qna_maker.get_answers(turn_context)
    
```

PreTrainedModels

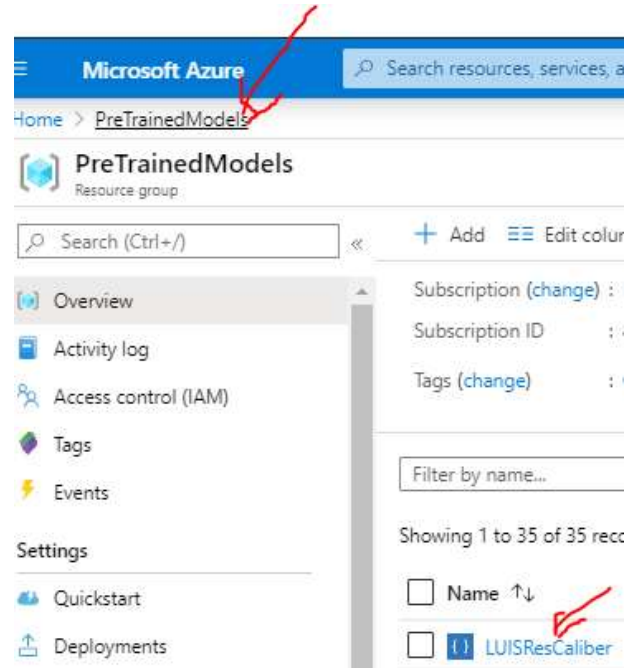
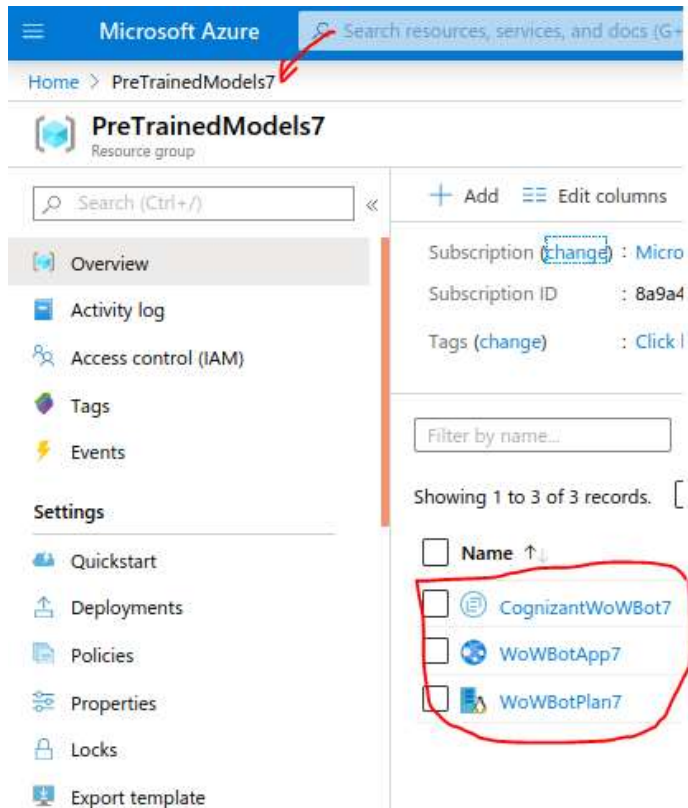
Solution Architecture – LUIS

The screenshot displays the LUIS interface for an application named 'WoWBotLUIS (V 0.1)'. The 'BUILD' tab is active, showing the 'TimeSheet' application. The 'Example utterance' section contains the text 'my client has asked me to work from home', with the word 'client' highlighted. The 'Test' panel shows the same utterance with a score of 0.984 for the 'TimeSheet' intent. The 'Entities' table lists the following:

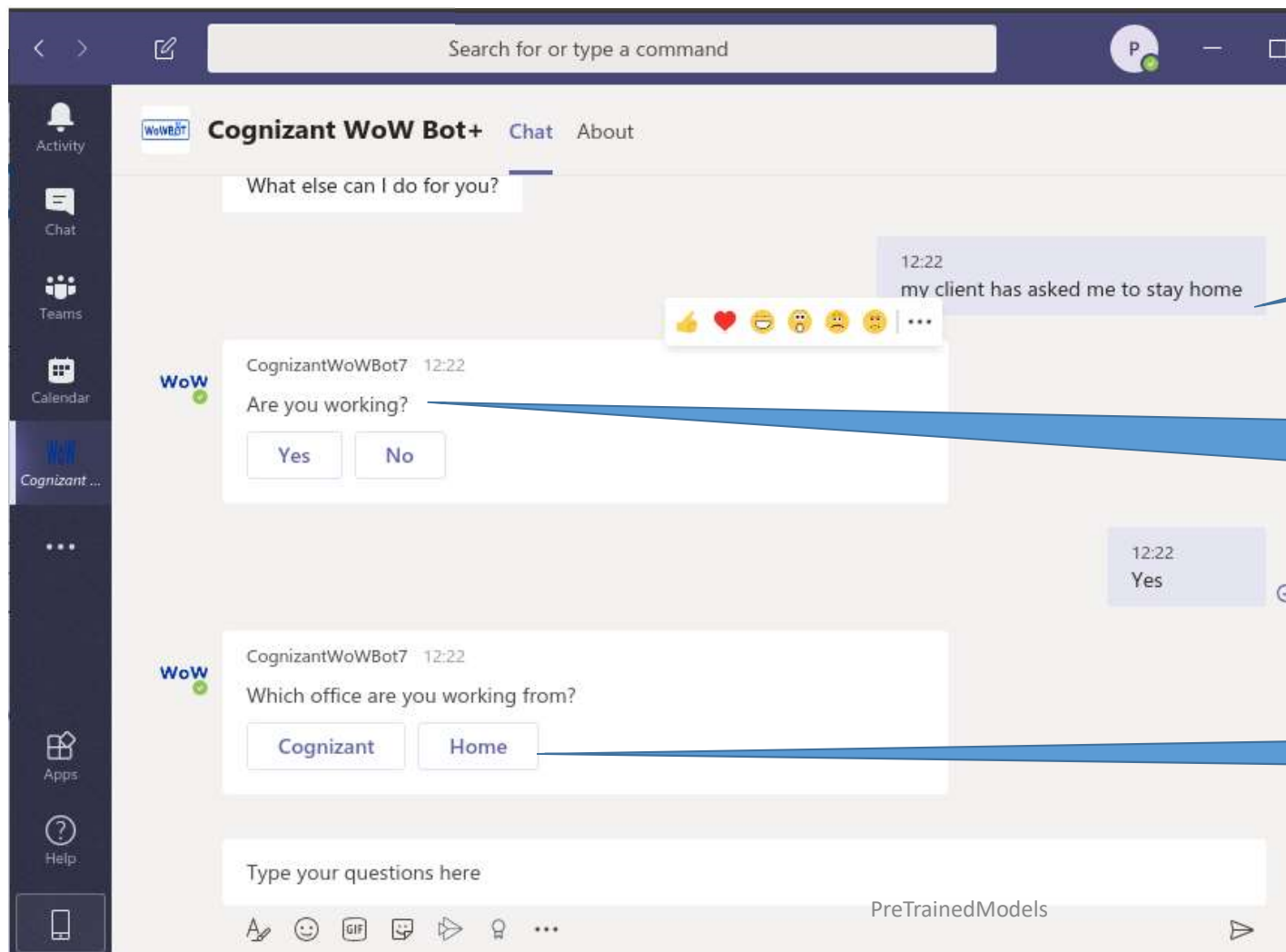
Text	Entity
"client"	client
"work"	work
"home"	home

The screenshot displays the Microsoft QnA Maker web application. The browser tabs show 'PreTrainedModels - Micro...', 'LUIS: Intent Page', and 'QnA Maker'. The address bar shows the URL 'https://www.qnamaker.ai/Edit/KnowledgeBase?kbid=cf3f51ea-ccac-494c-a54f-43c5d468...'. The navigation bar includes 'Cognitive Services | QnA Maker | My knowledge bases | Create a knowledge base'. The main header shows 'pretrainedqnamodel' and tabs for 'EDIT', 'PUBLISH', 'SETTINGS', 'Save and train', and 'Test'. The 'Knowledge base' section has a search bar and a count of '91 QnA pairs'. Below this is a table with columns 'Context', 'Question', and 'Answer'. The 'Context' column shows 'Source: SMEList.xlsx' and 'AWS Networking'. The 'Question' column shows 'AWS Networking', 'Core Java', 'JavaScript', and 'Shell scripting'. The 'Answer' column shows '5ca619ab45; Manager - Projects; RCGTH-Travel & Hospitality'. Red arrows point to the '91 QnA pairs' count, the 'Question' column header, and the 'Answer' column header.

Solution Architecture – multiple RG



Note: The bot logic (WoWBotApp7 written in Python + Azure SDK) + bot channel registration (CognizantWoWBot3) are hosted in a different resource group (PreTrainedModels3) from the LUIS service (LUISResCaliber hosted in resource group PreTrainedModels) per Microsoft's instructions [here](#).



Free text, intent correctly identified

Guided conversation to arrive at personalized recommendation

'Click-on' buttons for user's ease

Open ▾ *Added... Save ≡

Original use case: Personalized action recommendation. LUIS + Dialogs.
(work, office, home, time, hours, client)

It's the season of going the extra mile.
Extra time = Add another use case.

Add on use case: Collaboration during remote working. LUIS + QnAMaker.
(100+ skills like Informatica, JQuery, Xamarin, AWS, DevOps, Tivoli, ABAP)
(sme, expert)

Activity
Chat
Teams
Calendar
Calls
...
Apps
Help

WoW CognizantWoWB... Chat About

Search for or type a command

12:42
cancel

CognizantWoWB7 12:42
Cancelling

What else can I do for you?

12:42
I need to consult an expert on AWS

CognizantWoWB7 12:42
Here is the SME to contact (names obfuscated):

5ca619ab45; Manager - Projects; RCGTH-Travel & Hospitality

What else can I do for you?

Type your questions here

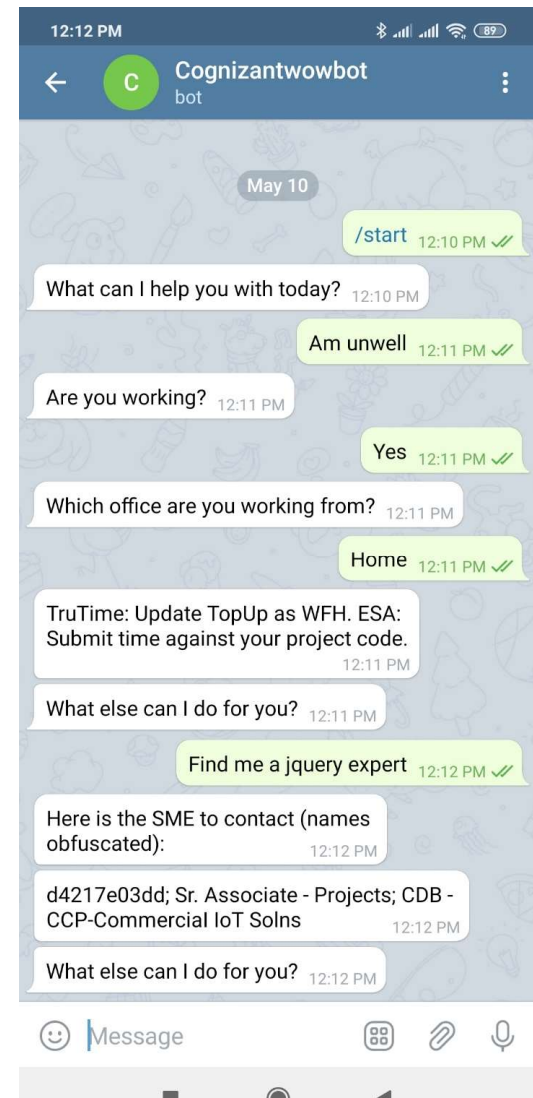
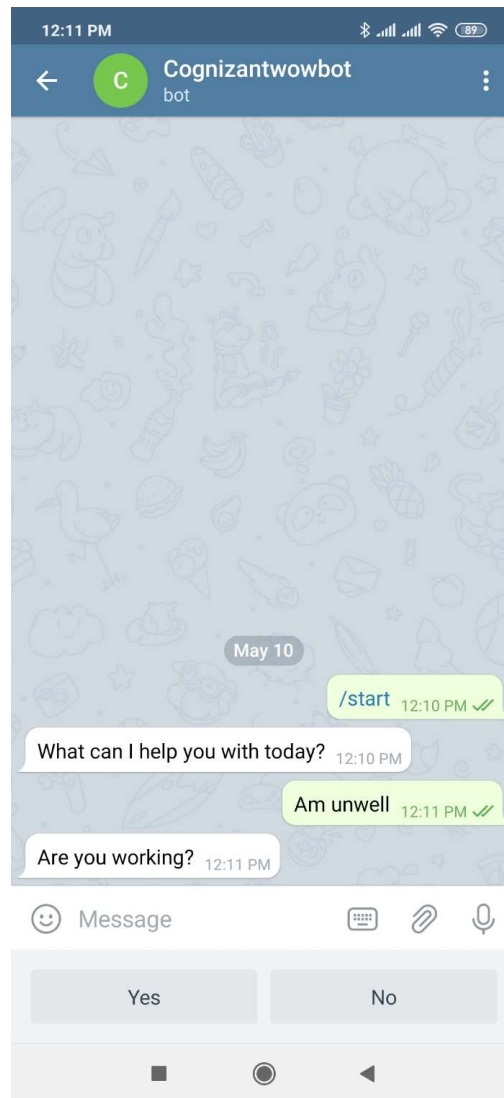
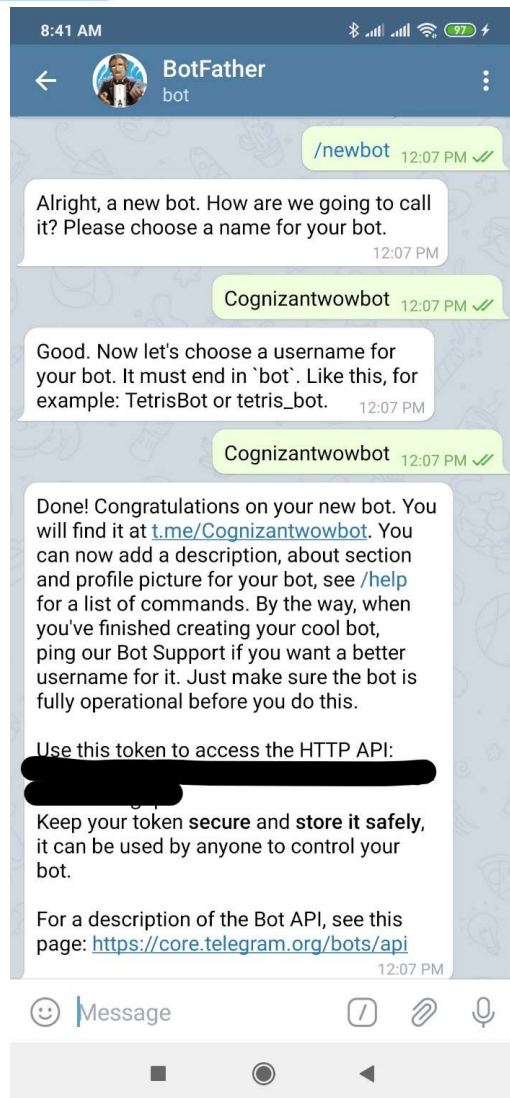
Tab Width: 8 ▾ Ln 11, Col 13 ▾ INS

Cancel & help

Including "sme" or "expert" triggers QnA

InfoSec needs to approve prod content

Telegram





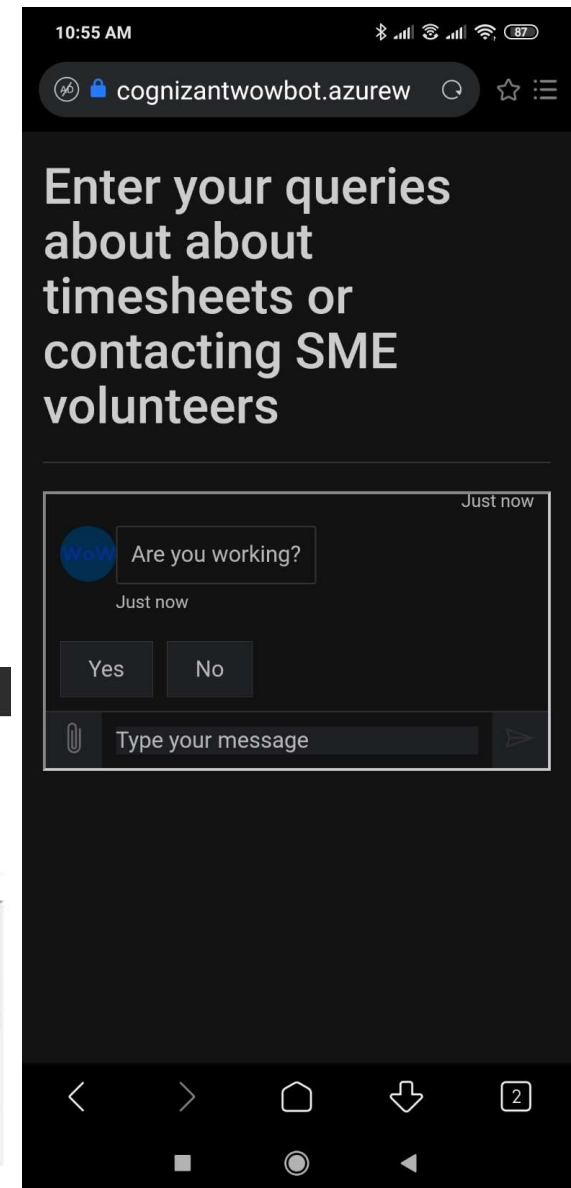
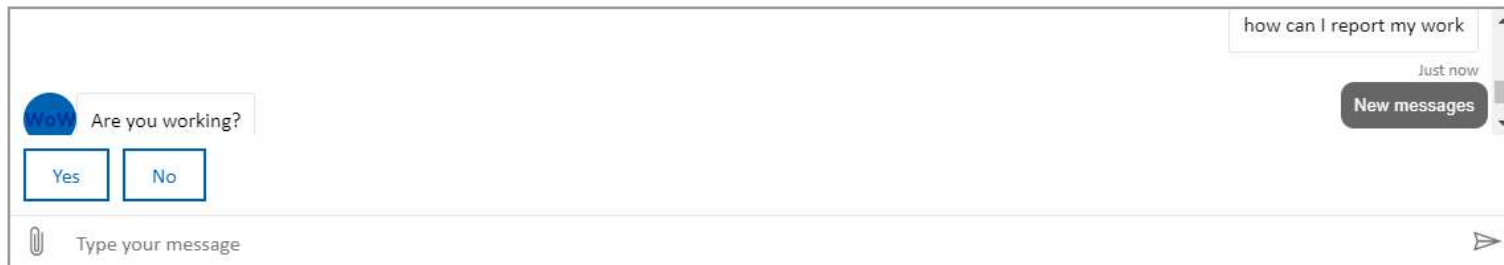
Web Chat

Inline frame to insert the bot into a website (accessible from PC, tablet, mobile etc.)

```
<iframe  
src='https://webchat.botframework.com/embed/CognizantWoWBot7?s=YOUR_SECRET_HERE'  
style='min-width: 400px; width: 100%; min-height: 500px;'></iframe>
```



Enter your queries about about timesheets or contacting SME volunteers



The 'Ways of Working' WoWBOT augments policies posted on company portals. Based on an associates' specific situation, the WoWBOT personalizes recommended actions.

The future of work has irrevocably changed – Cognizant, [TCS](#), [Infosys](#) etc.

The more the change, the greater the utility of the WoWBOT.

Personalization: information security while working remotely, BYOD configuration, outcome based performance appraisals & WFH expense reimbursement

Collaboration: Internal Stack Overflow?