



**MISSION
READY**

Professional Software Developer

Mission 2 | vidyasagar katam

Project 2

Natural Language

Processing using Azure LUIS

Natural Language Processing:


Natural Language Processing (NLP) refers to the field of computer science and artificial intelligence that deals with the interaction between computers and human language. It involves the development of algorithms and techniques that enable machines to understand, interpret, and generate human language, allowing them to perform tasks such as language translation, sentiment analysis, and speech recognition



Use Case-Turners Cars

1. If a customer visits the Turner's website and starts a chat with their customer service chatbot.
2. The customer asks a question in natural language, such as "Do you have any SUVs available?"
3. Azure LUIS processes the customer's question and identifies the intent behind it, which in this case is to find out what types of cars available with the Turners.
4. Azure LUIS (CLU) extracts relevant information from the customer's question, such as the fact that they are interested in SUVs.





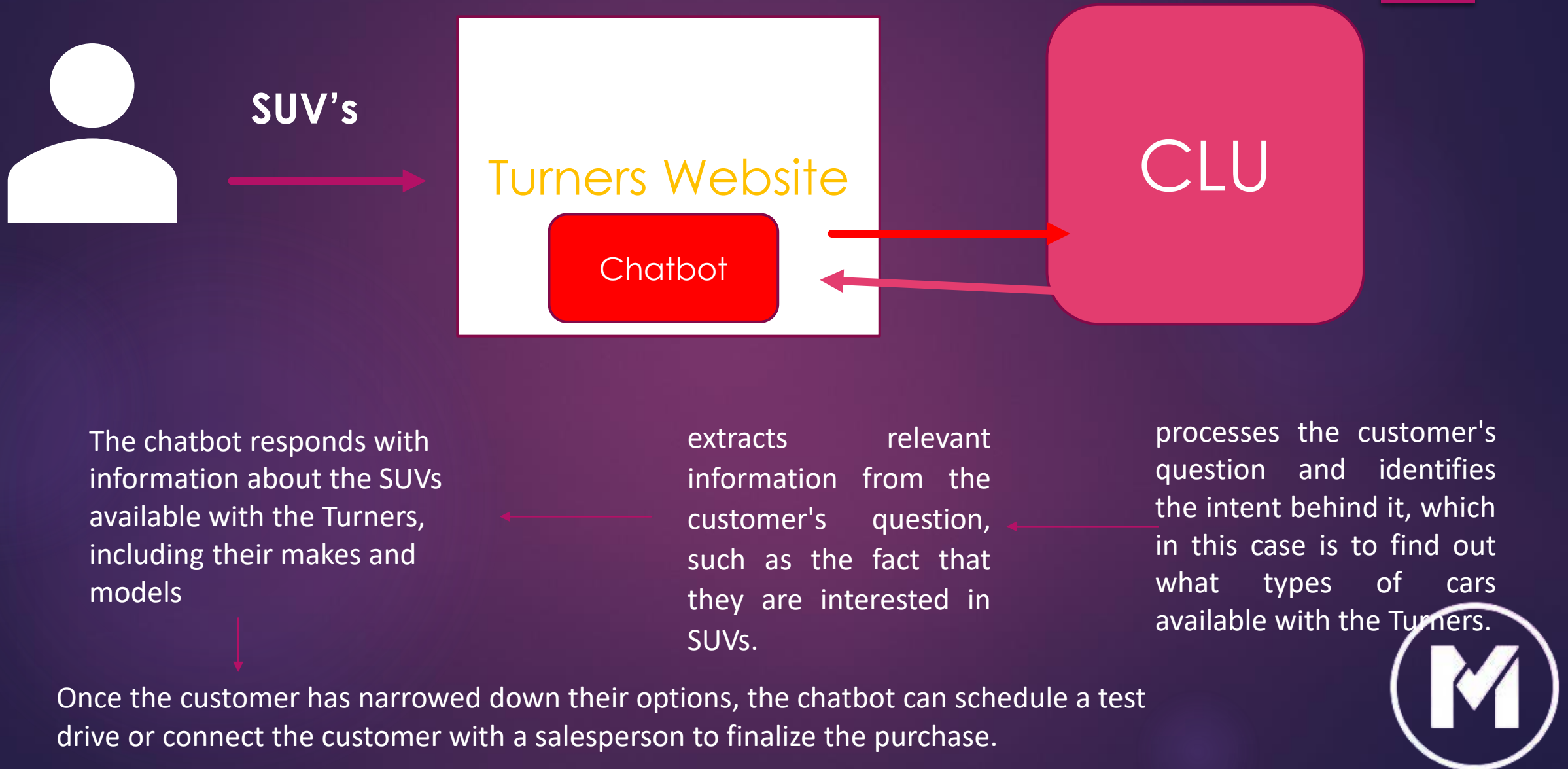
5. The chatbot responds with information about the SUVs available with the Turners, including their makes and models.

6. The customer can ask follow-up questions (e.g., "How many previous owners does this car have?" or "Can I see pictures of the interior?") and the chatbot will use Azure LUIS to extract the relevant entities and provide a response.

7. Once the customer has narrowed down their options, the chatbot can schedule a test drive or connect the customer with a salesperson to finalize the purchase.



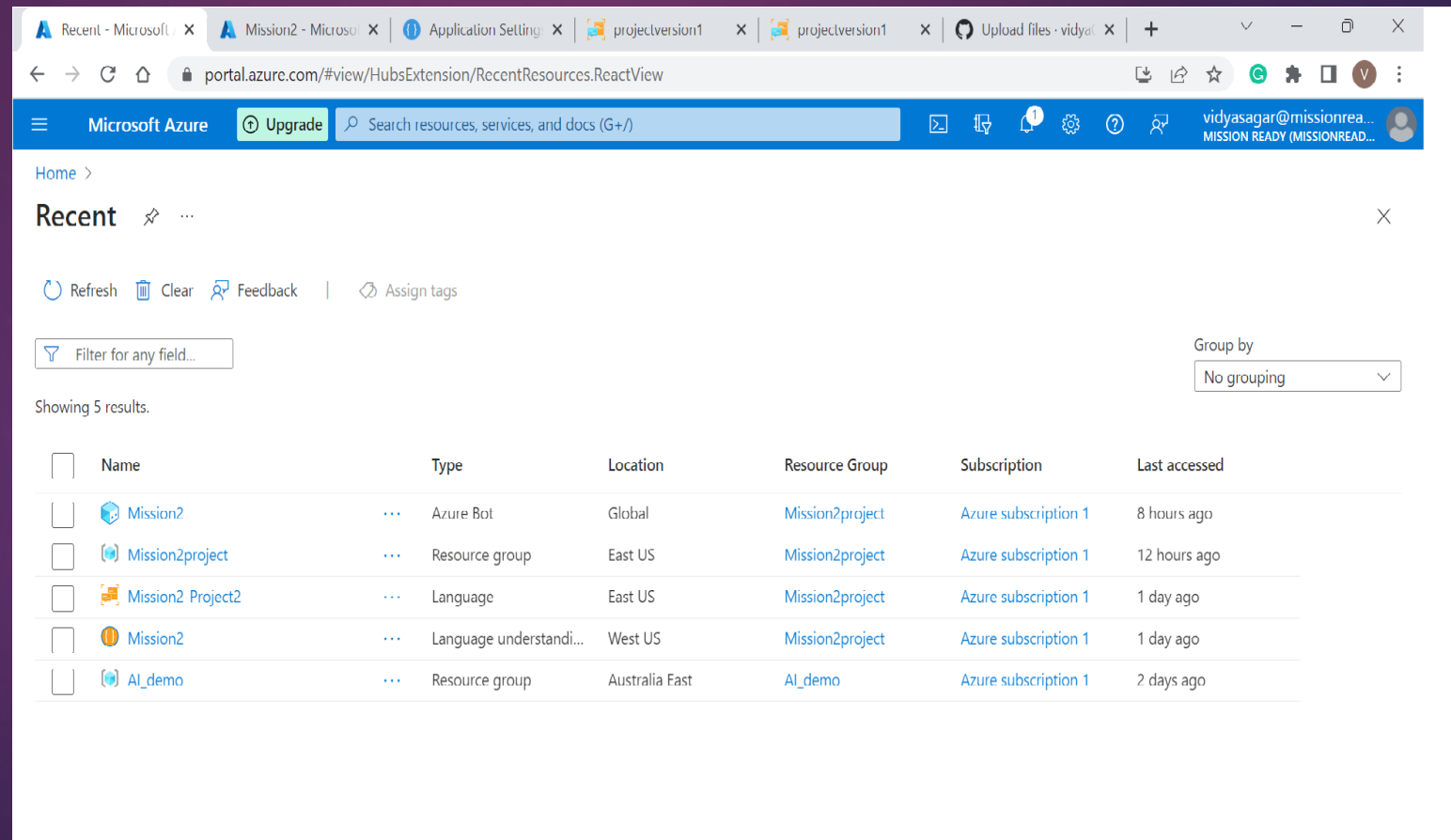
Use Case-Flow



Azure Portal

URL : <https://portal.azure.com/#view/HubsExtension/RecentResources.ReactView>

Screenshot:



The screenshot displays the Azure Portal interface. At the top, there's a navigation bar with the Microsoft Azure logo, an 'Upgrade' button, and a search bar. Below this, the 'Recent' resources section is visible, showing a list of 5 results. The list includes icons, names, types, locations, resource groups, subscriptions, and last accessed times.

Name	Type	Location	Resource Group	Subscription	Last accessed
Mission2	Azure Bot	Global	Mission2project	Azure subscription 1	8 hours ago
Mission2project	Resource group	East US	Mission2project	Azure subscription 1	12 hours ago
Mission2 Project2	Language	East US	Mission2project	Azure subscription 1	1 day ago
Mission2	Language understandi...	West US	Mission2project	Azure subscription 1	1 day ago
AI_demo	Resource group	Australia East	AI_demo	Azure subscription 1	2 days ago

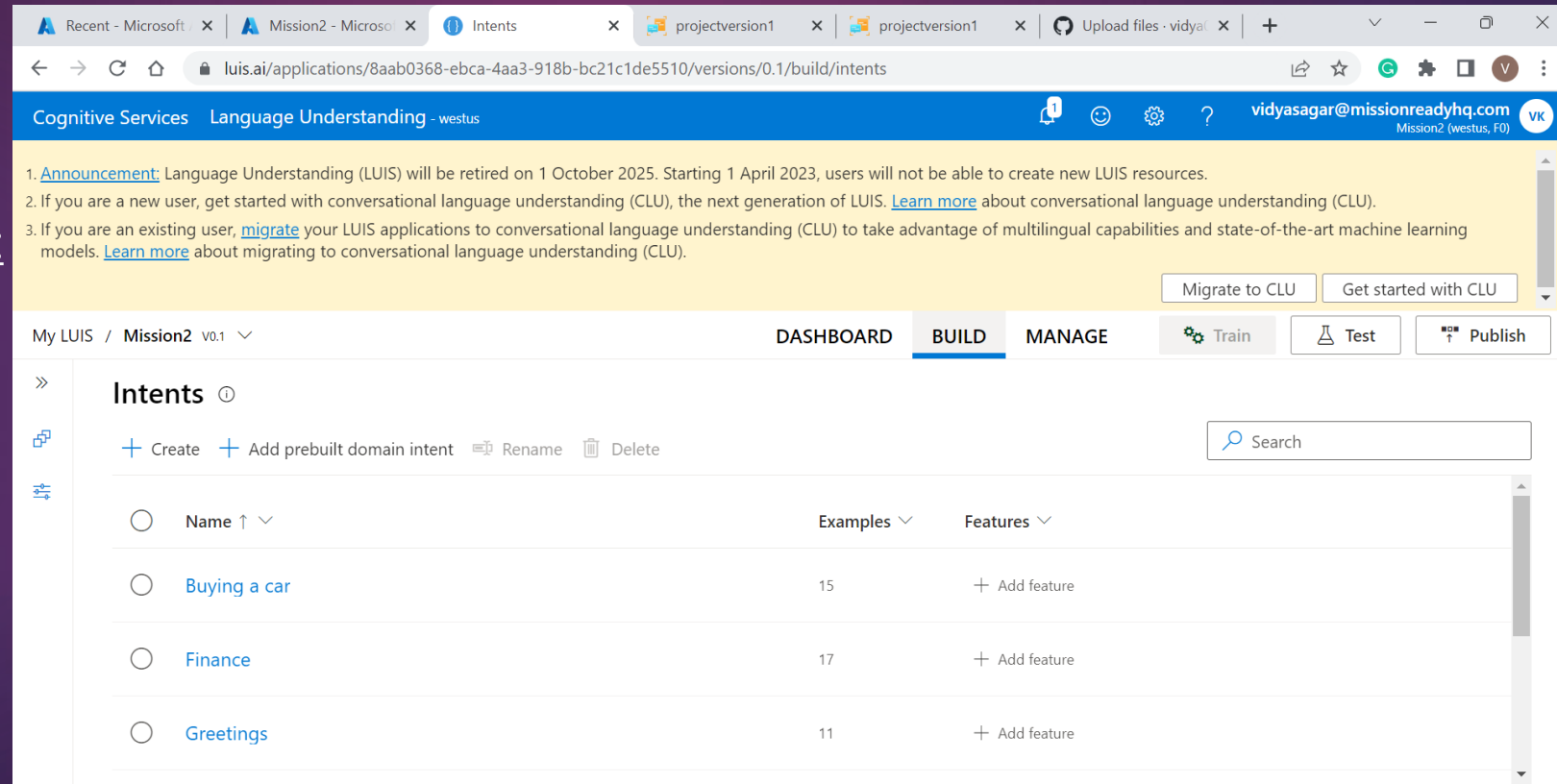


LUIS Portal

URL :

<https://www.luis.ai/applications/8aab0368-ebca-4aa3-918b-bc21c1de5510/versions/0.1/build/intents>

Screenshot:



The screenshot displays the LUIS Portal interface in a web browser. The browser's address bar shows the URL: <https://www.luis.ai/applications/8aab0368-ebca-4aa3-918b-bc21c1de5510/versions/0.1/build/intents>. The page header includes 'Cognitive Services Language Understanding - westus' and a user profile for 'vidyasagar@missionreadyhq.com'. A yellow banner at the top contains an announcement about the retirement of LUIS on October 1, 2025, and provides links for new users to get started with CLU and for existing users to migrate their applications. Below the banner, the navigation bar shows 'My LUIS / Mission2 v0.1' and tabs for 'DASHBOARD', 'BUILD' (which is active), and 'MANAGE'. There are also buttons for 'Train', 'Test', and 'Publish'. The main content area is titled 'Intents' and includes a search bar and a table of existing intents. The table has columns for 'Name', 'Examples', and 'Features'. The following table represents the data shown in the screenshot:

Name	Examples	Features
Buying a car	15	+ Add feature
Finance	17	+ Add feature
Greetings	11	+ Add feature



CLU Portal

URL : <https://language.cognitive.azure.com/clu/projects/project2/tag>

Screenshot:

The screenshot displays the CLU Portal interface in a web browser. The browser's address bar shows the URL: `luis.ai/applications/8aab0368-ebca-4aa3-918b-bc21c1de5510/versions/0.1/build/intents`. The page header includes the text "Cognitive Services Language Understanding - westus" and a user profile for "vidyasagar@missionreadyhq.com". A yellow announcement banner at the top states that LUIS will be retired on 1 October 2025 and provides instructions for migrating to CLU. Below the banner, the "BUILD" tab is selected in the navigation bar. The main content area is titled "Intents" and features a table with three columns: "Name", "Examples", and "Features". The table lists three intents: "Buying a car" (15 examples), "Finance" (17 examples), and "Greetings" (11 examples). Each intent has a "+ Add feature" button next to it. The interface also includes a search bar and buttons for "Create", "Add prebuilt domain intent", "Rename", and "Delete".

Name	Examples	Features
Buying a car	15	+ Add feature
Finance	17	+ Add feature
Greetings	11	+ Add feature

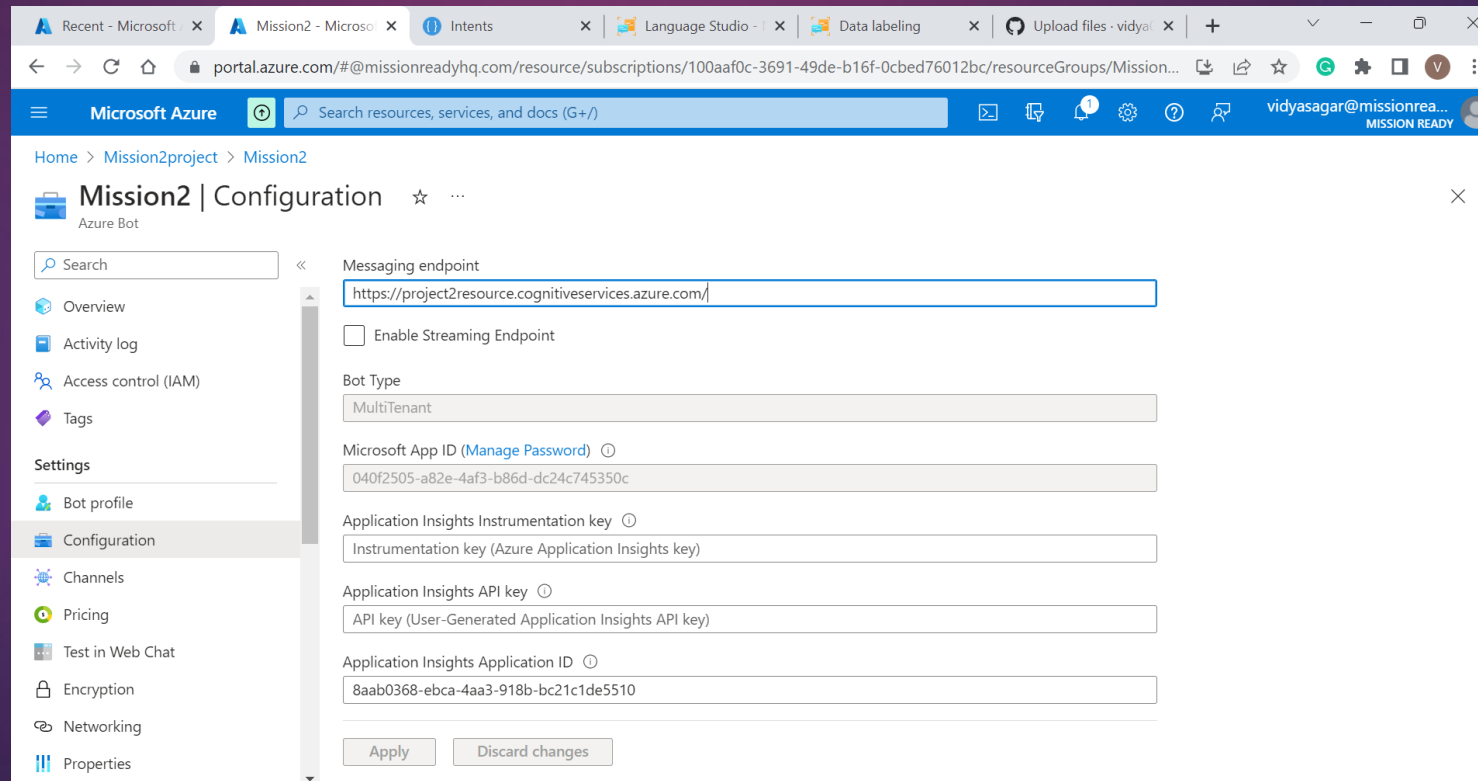


AzureBot Portal

URL :

<https://portal.azure.com/#@missionreadyhq.com/resource/subscriptions/100aaf0c-3691-49de-b16f-0cbed76012bc/resourceGroups/Mission2project/providers/Microsoft.BotService/botServices/Mission2/config>

Screenshot:



The screenshot shows the Azure Bot Configuration page for a bot named 'Mission2'. The page is part of the Azure portal, with the breadcrumb 'Home > Mission2project > Mission2'. The left sidebar contains navigation options: Overview, Activity log, Access control (IAM), Tags, Settings, Bot profile, Configuration (selected), Channels, Pricing, Test in Web Chat, Encryption, Networking, and Properties. The main content area is titled 'Mission2 | Configuration' and includes a search bar. The configuration settings are as follows:

- Messaging endpoint:**
- Enable Streaming Endpoint:** ☐
- Bot Type:**
- Microsoft App ID (Manage Password):**
- Application Insights Instrumentation key:**
- Application Insights API key:**
- Application Insights Application ID:**

At the bottom of the configuration section, there are two buttons: 'Apply' and 'Discard changes'.



Bot Framework Composer

Screenshot:

The screenshot displays the Microsoft Azure portal interface for configuring an Azure Bot. The browser's address bar shows the URL: `portal.azure.com/#@missionreadyhq.com/resource/subscriptions/100aaf0c-3691-49de-b16f-0cbcd76012bc/resourceGroups/Mission...`. The page title is "Mission2 | Configuration" under the "Azure Bot" category. A left-hand navigation pane lists various settings: Overview, Activity log, Access control (IAM), Tags, Settings (highlighted), Bot profile, Configuration (highlighted), Channels, Pricing, Test in Web Chat, Encryption, Networking, and Properties. The main configuration area is titled "Messaging endpoint" and contains the following fields:

- Messaging endpoint:** `https://project2resource.cognitiveservices.azure.com/`
- Enable Streaming Endpoint:** ☐
- Bot Type:** MultiTenant
- Microsoft App ID (Manage Password):** 040f2505-a82e-4af3-b86d-dc24c745350c
- Application Insights Instrumentation key:** Instrumentation key (Azure Application Insights key)
- Application Insights API key:** API key (User-Generated Application Insights API key)
- Application Insights Application ID:** 8aab0368-ebca-4aa3-918b-bc21c1de5510

At the bottom of the configuration area, there are two buttons: "Apply" and "Discard changes".



Thank you..

