Test Documentation

For all tests ensure the browser console is open and check for errors, warnings and info messages.

# 2. NLU

## 2.1 Training Data

### 2.1.a Examples

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| --- | --- | --- | --- | --- |
| **Test** **No** | **Test Name** | **Test Case** | **Test Result** | **Description** |
| 2.1.a.1 | Adding User utterances | * In training data menu, add user utterances by typing in *User says...* * Once adding user utterances, it will save with an empty intent. * Add the intent name and save it. | * Once the intent is given for the user utterance it will show option to create new intent as shown below. | To test the created new intents and user utterances are saved or not check the training data menu. |
| 2.1.a.2 | Adding Intents | * Added user utterances will be saved with an empty intent. * Add the intent name and save it. | * The saved intents will be appeared in training data as shown in below. | An intent captures the general meaning of a sentence.  The user utterances are saved to a specified intent and can add many utterances to it.  Test in the NLU page, the added intents and user utterances are saved or not. |
| 2.1.a.3 | Adding Entities | * In the NLU page, select the user utterance. * Add the entity name for user utterance as show in below. | * The added entities will be saved and stored in training data as shown below. | Entities are structured pieces of information that can be extracted from a user's message.  Test in the NLU page, the added entities are saved or not.  Add the entities by selecting user utterance text and save it. |
| 2.1.a.4 | Edit Intents | * Select the wrong or misspelled intents and edit it or correct. | * Edited intents will be saved and shown as below. | You can test, the changes are saved or not in the Clai admin in training data menu. |
| 2.1.a.5 | Edit User utterances | Edit the user utterances in examples page.   * Select the user utterances * Click on edit option in the examples tab as shown below. | * The results of the edited user utterances are shown in below. | Once the user utterances are edited you can test those are saved or not in the training data. |
| 2.1.a.7 | Filter by Intents | * Filter the intents by typing intent name in the filter as shown below. | * Matched intents will only be showed as result as shown below. | Test the filtered intent results are showing or not in Clai admin. |
| 2.1.a.8 | Filter by Entities | * Filter the entities by typing entity name in the filter as shown below. | * Matched entities will only be showed as result as shown below. | Test the filtered entity results are showing or not in Clai admin. |
| 2.1.a.9 | Search with user utterances | * Filter the user utterances by searching the text as shown below.   C:\Users\Windows\Pictures\search.png | * Results will be showed as below whenever input is matched with user utterances. | Test the searched results are showing or not in Clai admin. |
| 2.1.a.10 | Sorting intents [A-Z] | To sort the intents in examples menu.   * Select sort type as **Intent** * And choose A - Z or Z - A to sort as shown below.   C:\Users\Windows\Pictures\a.png | * Below are the results for selected sort i.e..,   A-Z or Z-A. | You can test the sorted results are showing or not in Clai admin. |
| 2.1.a.11 | Sort the intents by date | To sort the intents using date.   * Select the sort type as date. * And choose the sort type i.e. [1-9] or [9-1] as shown below   C:\Users\Windows\Pictures\date.png | * The sorted results for the dates are shown as below. | Test the sorted results are showing or not in Clai admin. |
| 2.1.a.12 | Add Canonicals | * Add the canonical or mark as canonical to the user utterances to make more generic. | * The added canonicals will be resultant as shown below. |  |
| 2.1.a.13 | Remove Canonicals | To remove the canonical value from the intents.   * Select the intents and click on canonical icon to remove as shown below. | * After removing the canonical for intents, we cannot see those canonicals for the intents in training data as shown in below. |  |
| 2.1.a.14 | Filter with Canonical examples | * Filter the intents which is having canonicals by enabling the canonicals as shown below. | * Below are the list of intents having canonicals as sho wn below | You can test the results are showing or not after enabling the canonical option in the Clai admin. |

### 2.1.b Synonyms

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| 2.1.b.1 | Adding Synonyms | * Create an entity value and add the synonyms to it separated by comma. * Click on **add** button to save synonyms.   C:\Users\Windows\Pictures\synonyms.png | * The added synonyms and entity value will be show in the Synonyms as shown below. |  |
| 2.1.b.2 | Edit Synonyms and values | * Select the value and edit the name. * Similarly, Select the synonyms and edit. | * The edited synonyms and entity values will be shown as below in training data. |  |
| 2.1.b.3 | Delete synonyms | * To delete the synonyms select the synonym or value. * Click on delete icon as shown below.   C:\Users\Windows\Pictures\dlt synonyms.png | * The deleted synonyms will not be appeared in the list as shown below. |  |

### 2.1.c Gazette

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| 2.1.c.1 | Adding Gazette values | * In gazette create entity name. * Add gazette values and click on save button.      * Add the below pipeline settings to work gazette in NLU pipelines.   - name: rasa\_addons.nlu.components.gazette.Gazette | * The added gazette values and entity names will be save and show in gazette menu as shown in below. |  |
| 2.1.c.2 | Edit Gazette values and Entity names | * Edit the entity names by selecting the entity. * Similarly, edit the gazette values. | * Edited Entity names and Gazette values are saved and showed as below. |  |
| 2.1.c.3 | Delete Gazette and entity name | * Select the entity name or gazette values and click on delete. | * The deleted gazette values will be disappear from the gazette as shown below. |  |

### 2.1.d Out Of Scope

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| 2.1.d.1 | Out Of Scope | * When the user input is not matched with any intent, the user utterances is showed in the incomings as empty intent. * Click on OOS icon (out of the scope) to move that empty intent to out of scope in NLU as shown below. | * After Clicking on *out of scope* button, the results will be shown as below. * Here edit or add the intent name to save into training. |  |

### 2.1.e API

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| --- | --- | --- | --- | --- |
| 2.1.e.1 | Generate API | * In API tab, type user utterances or text. | API will gives the results as mentioned below.   * Matched intents with user input * Confidence score of the intent. * Count of Entities for the matched intent * Intent rankings for the matched intent | Use the HTTP API to interact with a running Rasa server. With the API, you can train models, send messages, run tests, and more.  *Note* that you can use the API tab to explore the JSON response of a NLU request |

### 2.1.f Regex

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| --- | --- | --- | --- | --- |
| 2.1.f.1  2.1.f.2  2.1.f.3 | Adding Regex  Delete Regex  Editing Regex | * Crete the name to regex pattern. * Add the regular expression patterns with various formats. * Click on **Add** button to save.      * Examples for Regex patterns are   Pin\_code is *(^\d{5}$)|(^\d{5}-\d{4}$)*  number\_plate is *[A-Z]{1,3}-[A-Z]{1,2}-[0-9]{1,4}*   * Select the regex name. * Click on delete button.      * Select the regex name. * Edit the name or pattern if anything typed wrong or misspelled. | * The result after adding the regex will be shown as below.      * The deleted regex patterns will no more in the list as shown below.      * The changes in regex are shown as below: | A **regex** is a string of text that lets you create patterns that help match, locate, and manage text. |

## 2.2 Evaluation

Evaluation gives you aggregate metrics and actionable feedback on your NLU model.

### 2.2.1 Use training set

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| --- | --- | --- | --- | --- |
| 2.2.1 | Evaluation using training set | To add the data to training set follow the below steps.   * Train the model. * In the NLU page, go to the **evaluation** menu. * Select *Use training set*. * And click on *Start evaluation* button to start evaluation. | The results of the evaluation of data is shown as below. |  |

### 2.2.2 Upload test set

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| --- | --- | --- | --- | --- |
| 2.2.2 | Upload test set | To upload test set in evaluation menu   * Select the Upload test set. * Click on *Upload file*.      * Upload the NLU data in **JSON format**. * And click on *start evaluation*. | The results after uploading test set in evaluation are shown as below. | The NLU data should be in JSON file format as  Shown below. |

### 2.2.3 User validated examples

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| 2.2.3 | User validated examples | To evaluate the user validated examples.In the incoming 🡪 ***New utterances***, select the utterances and edit intent name and click on *mark this utterance valid*.Click on **Run evaluation** to evaluate the model using the validated examples as a validation set and overwrite your current evaluation results.   Click on ***Yes*** to add the training data to evaluation.  In the NLU🡪 Evaluation, Select *Use validated examples* and click on **% Start Evaluation** to evaluate the uservalidated examples as shown below. | The result of the user validated examples are shown below.The detailed reports of an evaluation.  The misclassification reports of an evaluation. |  |

## 2.3 Statistics

### 2.3.1 Statistics

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| --- | --- | --- | --- | --- |
| 2.3.1 | Examples, Intents, Entities, Synonyms, Gazettes and stories | Here, can see the total number of user utterance examples, Intents, Entities, Synonyms, Gazettes and Stories which are created in dialogue and added in NLU as shown below.These are triggered in chat widget conversation. |  |  |
| 2.3.2 | Examples per intent | Also check the below test cases.The list of intents.The example of an intent (Canonical value of an intent).Number of examples per each intent for a particular language. |  |  |
| 2.3.3 | Download NLU statistics to csv | Click on the download button to download all the NLU statistics data to csv format as shown below. | The downloaded csv results will be shown as below. |  |

## 2.4 Settings

### 2.4.a Pipelines

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| --- | --- | --- | --- | --- |
| 2.4.a.1 | NLU Pipelines | * Here, can add the NLU settings or NLU configuration. * And click on *save* button. | * The added NLU configurations will be saved and shown as below. | Train the model to apply these added configuration. |

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| --- | --- | --- | --- | --- |
| 2.4.a.2 | Delete language | * Default language cannot be deleted. * To delete this language change the default language of the project as shown below. | * Once the language is changed, it will ask to back up the language. * Before deleting the language, click on *backup the data of your model* button to backup as show below.      * After clicking on backup, it will display the delete button to delete and click on it as shown below. |  |