**Text Based Chatbot**

**Source Code Details:**

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| Serial No. | File Name | Type of Language | Type of File (or File Extension) | Functionality | Dependency |
| 1 | DSAI\_Model\_Training.ipynb | Python | .ipynb  Implemented using OOP concepts | Used to train the model and save it as DSAI\_Chatbot\_Model.h5. | Input: DSAI\_intents.json,  DSAI\_words.pkl,  DSAI\_classes.pkl  Output: DSAI\_chatbot\_model.h5 |
| 2 | DSAI\_Chatbot\_Flask.py | Python | .py | Used to create text based chatbot in Web Interface | Input: DSAI\_Chatbot\_Model.h5, DSAI\_Intents.json, DSAI\_Words.pkl, DSAI\_Classes.pkl, DSAI\_Index.html |
| 3 | DSAI\_Chatgui.py | Python | .py | Used to create text based chatbot as Desktop application software | Input: DSAI\_Chatbot\_Model.h5, DSAI\_Intents.json, DSAI\_Words.pkl, DSAI\_Classes.pkl |
| 4 | jquery.scrollbar.js | JavaScript | .js | Used to define interaction behavior of scrollbar in web interface | - |
| 5 | DSAI\_index.html | Html | .html | Used to define the web interaction page | - |

**Run Instructions:**

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| Step Number | Run Command | Run Dependency | Run Instruction |
| 1 | Run DSAI\_Model\_Training.ipynb file |  | This creates pickle files and trained model |
| 2 | Run ‘python DSAI\_Chatbot\_Flask.py’ |  | This runs text based chatbot in web interface |
| 3 | Run ‘python DSAI\_Chatgui.py’ |  | This runs text based chatbot as desktop application |

**Source Code Steps:**

1. DSAI\_Model\_Training.ipynb
   1. Import dataset DSAI\_Intents.json
   2. Store classes and words in pickle format
   3. Prepare training data and testing data
   4. Create model
   5. Compile model
   6. Train and save the model as DSAI\_chatbot\_model.h5
2. DSAI\_Chatbot\_Flask.py
   1. Get user message
   2. Predict class of user message
   3. Get response for the predicted class
   4. Display the chatbot response
3. DSAI\_Chatgui.py
   1. Create GUI for Desktop application
   2. Get user message
   3. Predict class of user message
   4. Get response for the predicted class
   5. Display the chatbot response
4. jquery.scrollbar.js

JavaScript code for customizable scrollbar effects

1. DSAI\_index.html

HTML design code for chatbot