There are following segments:

1. NLP
2. Machine Learning model
3. Output
4. UI
5. Admin Console

**NLP:**

Dialogflow

Intents: Phrases used by the user

Entities: Keywords used by the user

**Machine Learning model:**

Multi variate Linear regression model

Dataset:

Initially it uses Pandas to fetch data from excel sheet data

Migrated to IBM Cloudant NoSQL DB

Data processing:

Imputer to remove empty data

Convert dialogflow output to dataset format

Machine Learning model:

Scikit learn linear regression

Model.fit

Model.predict

Post Processing:

Convert ML output into dialogflow speech json format

Send data to Cloudant DB to store input

Bundle entire model into REST webservice with flask

Deploy the python code into heroku

Provide herokuapp webhook url into dialogflow fulfillment

**Output:**

Fetch data from Cloudant DB

Render data into output html using djinja template

Pass data to generate MS word document using python-docx

Create a downloadable doc as attachment

Create a feedback system

Updata feedback variable in output DB based on feedback

**Admin:**

Fetch data from Cloudant DB

Categorise data based on admin flag

Render into admin html

Create dataset approval/rejection events

Update admin flag in output DB based on approval event and move docs to input dataset

Reload page with updated values

**UI:**

1. HTML
2. CSS,Bootstrap
3. JS, AJAX, JQuery