

LMMS ARE **NOT CHATBOTS** 8 DIFFERENCES



8 Ways LLM is Different From Chatbot



WHAT IS A “CHAT-BOT”
PROGRAM THAT AUTOMATES
DIALOGUE WITH HUMANS

WHAT IS A “BOT”
PROGRAM THAT AUTOMATES A
MANUAL PROCESS

- # 8 ways LLM is Different From Chatbot
- 01 Language model generates the next token based on previous token
 - 02 Flow of conversation is directed by the user. Not controllable
 - 03 Can be instructed to do a particular task / action
 - 04 Requires large dataset for training & takes huge time
 - 05 Hardware specification to host and run llms are very costly
 - 06 Number of model parameters ranges in billions for even simplest models
 - 07 There is no automation of a task. there is just generation of data which can controlled through prompts
 - 08 Language models can be used in chatbots for making them intentless

WHAT HAPPENS IN A CHATBOT?

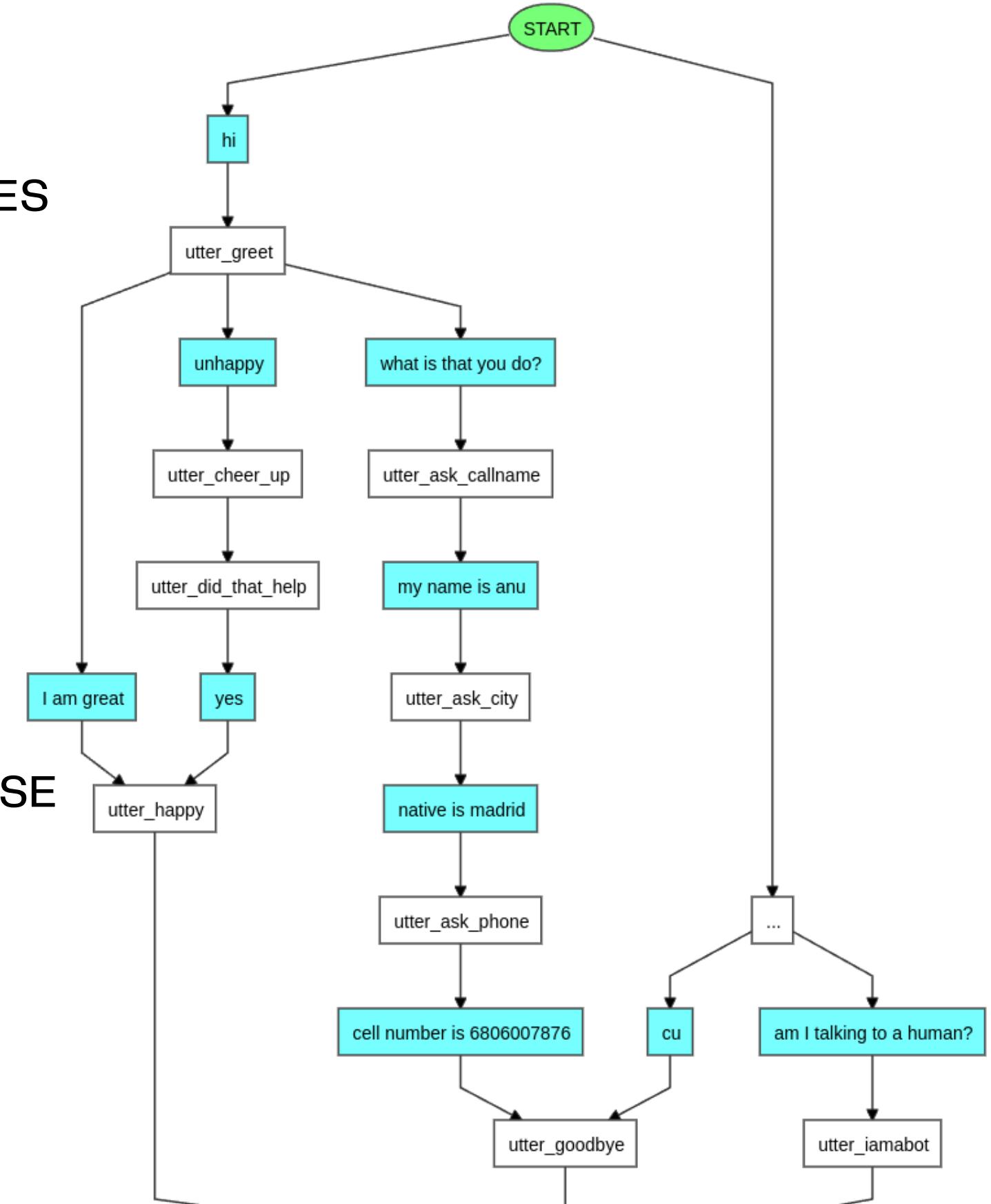
THEN THERE WAS INTENT

- 1) BOT RESPONDS BASED ON THE INTENT OF A STATEMENT
- 2) BOT RESPONSE IS CALLED ACTION
- 3) WHEN A SERIES OF INTENTS & ACTIONS ARE CHAINED, STORIES FORM
- 4) ENTITIES ARE INFORMATION THAT USER PROVIDE IN THE STATEMENT
- 5) ACTIONS CAN DO WORK IN THE BACK-END AND PROVIDE RESPONSES
- 6) THERE IS SEPERATE DIALOGUE MANAGER CODED BY THE DEVELOPER

SIMPLY SAID : INTENT CAN BE USED TO AUTOMATE THE RESPONSE

OBSERVATION:

- ITS A CLASSIFICATION AND PREDICTION PROBLEM
- INTENTS / ENTITIES HAVE TO BE CLASSIFIED
- NEED TO PREDICT WHICH ACTION WILL COME NEXT



WHAT HAPPENS INSIDE LLM?

THERE IS JUST PROMPT

- 1) USER PROVIDES A SERIES OF WORDS, CALLED PROMPT AND INFORMS HOW MANY WORDS TO BE PREDICTED
- 2) MODEL PREDICTS THE NEXT WORDS
- 3) USER THEN CONTINUES WITH THE NEXT PROMPT

SIMPLY SAID: ITS A SERIES OF PREDICTION PROBLEM

OBSERVATION:

- 1) THERE IS NO PRE-DETERMINED FLOW OR DIALOGUE MANAGER INVOLVED
- 2) LLM CANNOT BE MADE TO ASK PRE-DEFINED QUESTIONS & EXTRACT DATA
- 3) AGENTIC NATURE OF THE LLM CAN BE LEVERAGED TO CREATE MINIMAL AUTOMATION. THE CONTROL OF THE FLOW IS VERY FLUID & UN-PREDICTABLE

THANKS FOR WATCHING

 **LIKE**

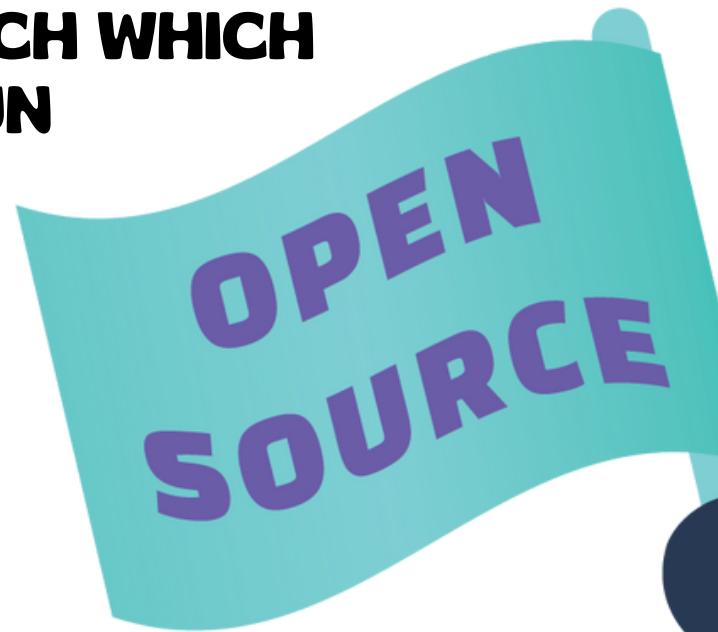
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WHAT RASA FEATURES?

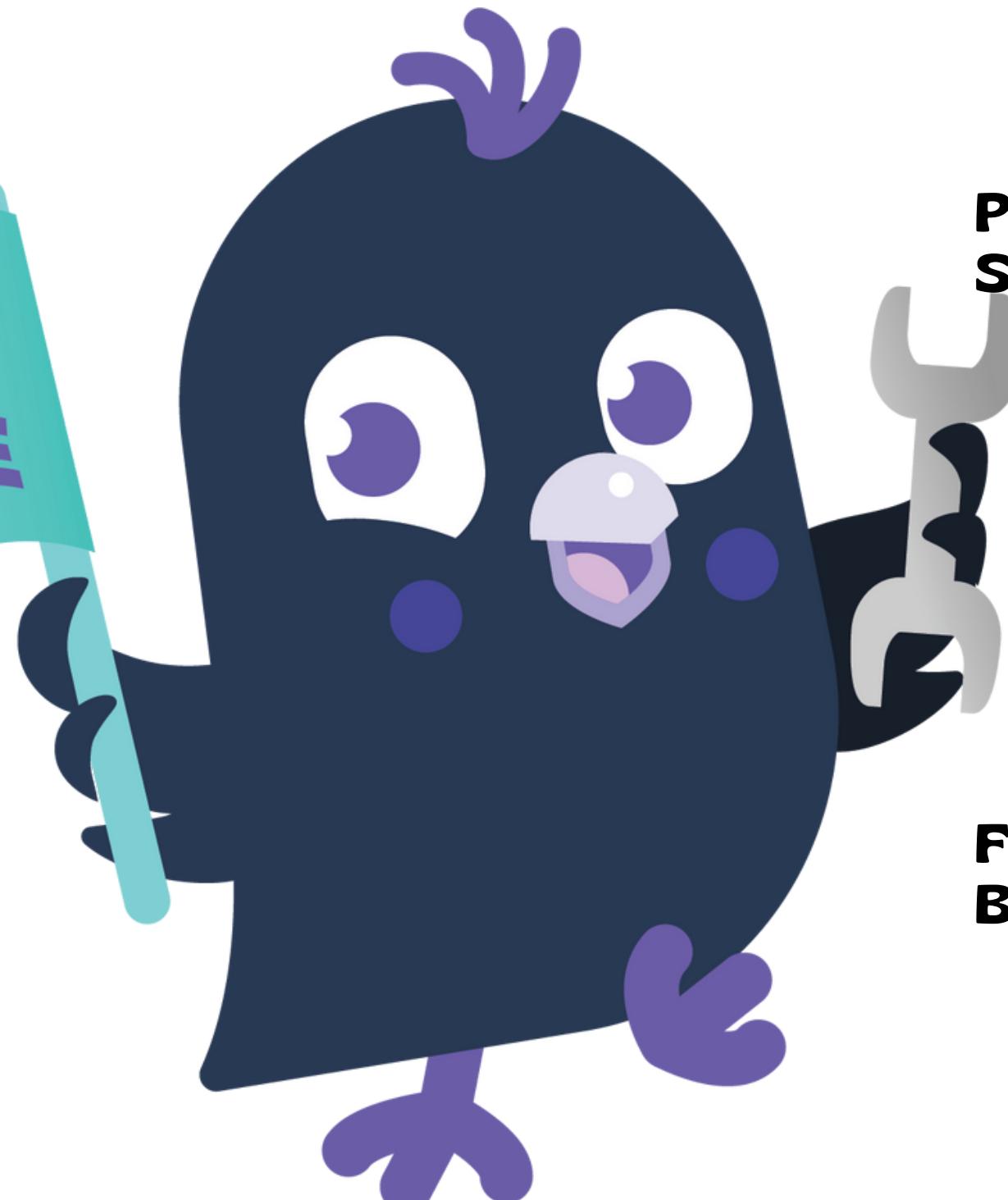
ENTITIES

PARTS OF SPEECH WHICH
SIGNIFIES A NOUN



MODELS

LANGUAGE MODELS THAT
EXTRACT INTENTS & ACTIONS



INTENTS

PARTS OF SPEECH WHICH
SIGNIFIES A VERB / OBJECTIVE

STORIES

FLOW OF CONVERSATION
BETWEEN HUMAN & BOT

ACTIONS

ACTION THAT CAN BE TAKEN ON
THE BACK-END WITH HELP OF
PYTHON / LOGIC

RASA CHATBOT PROJECT

- DOMAIN.YML : DEFINES INTENTS, ENTITIES, SLOTS, REONSES & ACTIONS
- NLU.YML: CONTAINS DATA FOR INTENTS & ENTITIES CLASSIFICATION
- RULES / STORIES.YML : CONTAINS INTENTS + ACTIONS FLOW DATA FOR PREDICTING THE NEXT STEP IN THE CONVERSATION
- ACTIONS.PY: CONTAINS THE PYTHON CLASS FOR ACCESSING THE ENTITIES PROVIDED BY USERS USING SLOTS AND ACTING ON THEM
- CONFIG.YML: CONTAINS THE MODELS, THEIR CONFIGURATION
- REST OF THE FILES SUPPORT THE ACTIONS AND RASA CORE SERVERS

THANKS FOR WATCHING

 **LIKE**

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