This hackathon has been designed to help you understand and get insight on the way the Chatbot works.

Objective:

Upon successful completion of this Hackathon, you will build a Chatbot with the assigned skillset.

Skills to be developed:

Two skills: Every team's Chatbot should have the Common skill and additional Skill assigned to that team

Common Skill:

Restaurants booking: Book a restaurant based on cuisine, cost type (cheap, medium, expensive), location (east, west, north, south). Final action bookin

Other skills:

Buying a laptop: The user should be asked questions about Brand, RAM, Screen size, Hard Disk, Size/Type, OS and other such parameters. The bot should give a final selection

Buying a mobile phone: The user should be asked questions about Brand, Size, Accessories and other parameters. The bot should give a final selection

Buying Vegetables/Fruits: The bot should ask which items and for each item get additional details. For example, California Grapes, Green Grapes, Shimla Apple, Washington Apple, Fuji Apple

Library: After getting information about author, title, subject and so on the bot should pick the book

Jukebox: After getting choices of Genre, Style, Artist, Album etc., the bot should pick the song

Cab Booking: Assuming that the starting point is fixed as HYD Airport, the bot should gather information about your destination, number of people, luggage quantity and pick a cab for you

Movie Choice: The bot should gather your preferences: language, Actor, Genre and the date you want to go (today, tomorrow, coming Tuesday) and suggest the movie and offer the Movie hall choices

Baby Name Selection: The bot should find out the parameters such as Ethnic Group, Region, Religion, Gender, Starting Letter, Other Numerology constraints and offer a few choices

Doctor Appointment Booking: Gather Specialty, Hospital, Location, Time of Day, Date information and check if a Doctor is free or not

Second Skill Allotment to teams:

Team	Skill
1	Buying a laptop
2	Buying a mobile phone
3	Buying Vegetables/Fruits
4	Library
5	Jukebox
6	Cab Booking
7	Movie Choice
8	Baby Name Selection
9	Doctor Appointment Booking
10	Buying laptop
11	Buying mobile phone
12	Buying Vegetables/Fruits
13	Library
14	Jukebox
15	Cab Booking
16	Movie Choice
17	Baby Name Selection
18	Doctor Appointment Booking
19	Buying a laptop
20	Buying mobile phone
21	Buying Vegetables/Fruits
22	Library
23	Jukebox
24	Cab Booking
25	Movie Choice
26	Baby Name Selection
27	Doctor Appointment Booking
28	Buying a laptop
29	Buying mobile phone
30	Buying Vegetables/Fruits
31	Library
32	Jukebox
33	Cab Booking
34	Movie Choice
35	Baby Name Selection
36	Doctor Appointment Booking

Tasks and Grading Scheme

Task1: Collect 100 possible user utterances each for both the skills and put them in the intent files with relevant names. (**5 m**arks)

Task2: Create a database with all possible combination of all attributes (can be a CSV file) along with an identifier for each combination. Do this for both the Skills. (**5 m**arks)

Task 3 Configuration, Dialogue population and Understanding:

Configure newparams.cfg file for the skills given to you. Setup the Intents and all its required elements like Parameters, actions etc.

We will run your chat bot 6 times, randomly varying the input sentences each time. The Chabot should correctly reach action state with all the relevant information at least

- >=3 times for **15 m**arks

- >0 times for **8 m**arks

- Else **0 m**arks

Task4: Retrieve the data correctly from the DB based on the action state. (**10m**arks)
    Hint: Based on the attributes, action in check_actions function, you can query the

Bonus: (Max: **5 m**arks for implementation of any one of the following)

- Changing an attribute value already given
- Range, regular expressions etc. for getting attributes
- Spelling mistakes handling
- Graceful restart at any stage of the chat
- Adding word2vec for intent identification (replacing ngram match)
- Add a branch based on an incoming attribute value

Note:

Please go through the Material uploaded in the LMS to understand the Chabot's code and the architecture.