ACHELOIS

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INTRODUCTION

- Human-Computer Interaction (HCI) researches the design and use of computer technology, focused on the interfaces between people (users) and computers

- A dialog system or conversational agent (CA) is a computer system intended to converse with a human, with a coherent structure

- Chatbots are typically used in dialog systems for various practical purposes and use sophisticated NLP systems

HOW ACHELOIS WAS BORN?

Achelois was developed using **Dialogflow**

Platforms	wit.ai	luis.ai	Dialogflow
Description	• Developed by wit.ai and now, acquired by Facebook.	• Introduced by Microsoft	• Formerly known as api.ai and now, it is a Google acquired platform .
Pros	• Allows control of conversation flow using branches and conditions on actions. • Request processing for training using "Inbox".	• More feasible for professional purposes and .NET developers. • Enhanced functionalities using Microsoft Azure.	• One-click integration with several platforms like Slack, Twitter, Google Assistant etc. • Built-in voice interface and support for Node.js, Ruby SDKs.
Cons	• wit.ai has integration with Facebook messenger only. • Difficult to control the flow of the conversation	• luis.ai allows only 10,000 transactions for each month and is priced after that.	• Priced for enterprises requiring high utilization of Dialogflow • It is impossible to block the matching of an intent if a context is present.
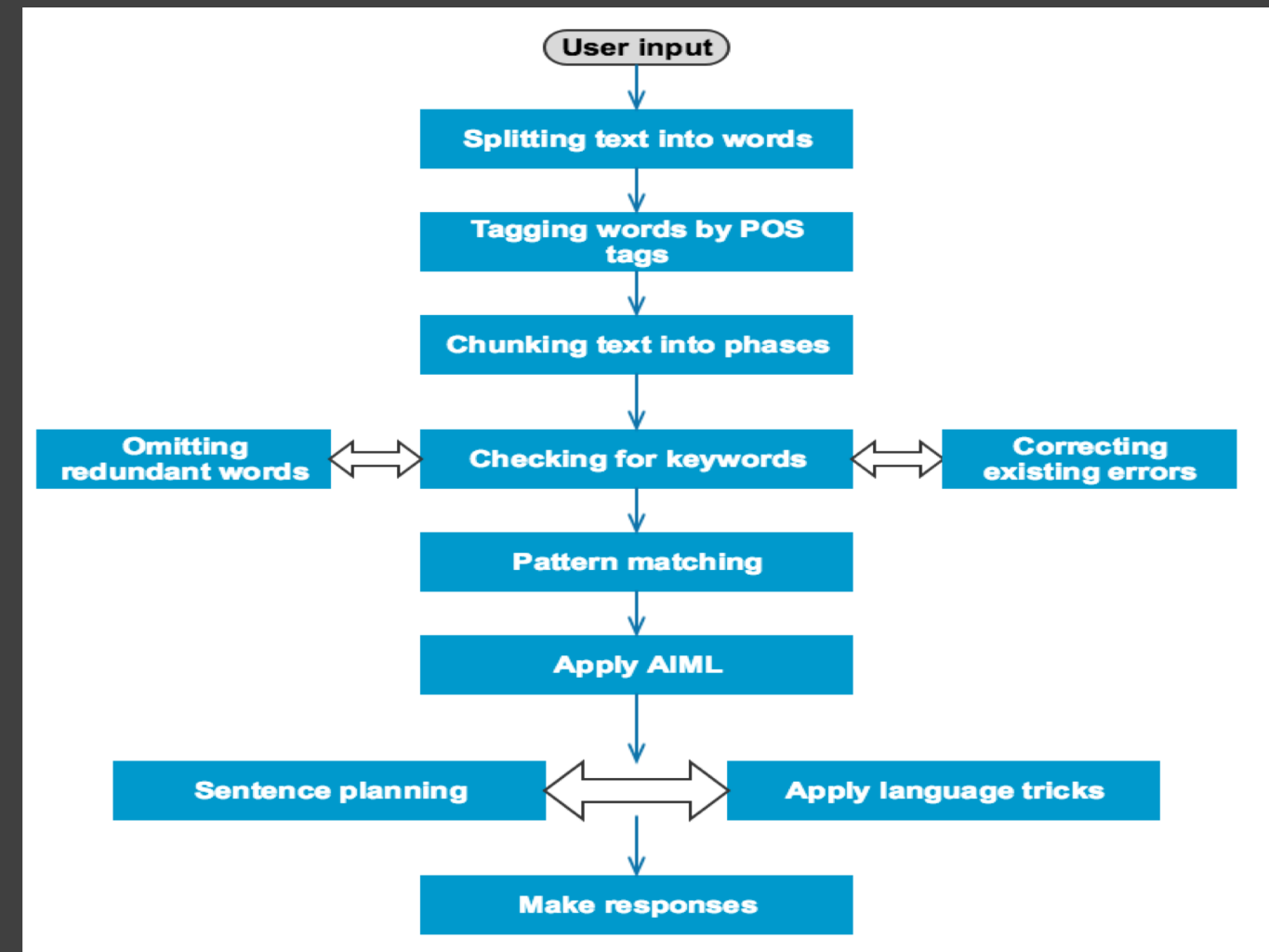
WHY HEALTHCARE?

Technical advancements in the healthcare domain are growing at a rapid pace. Numerous chatbots are already available in the areas of hotel management, travel, food delivery and home automation.

Development of chatbots that are customized to individual needs will make healthcare widely available. Some chatbots already being used for general healthcare services like Your.MD, Florence and GYANT


- **Agents:** can be designed to manage a conversation flow in a specific way

- **Intent**: represents a mapping between what a user says and what action should be taken

- **Entity**: a powerful tool used for extracting parameter values from natural language inputs

- **Context**: is helpful in differentiating phrases which may be vague or have different meanings depending on the user's preferences, location or the topic of conversation. Contexts represent the current context of a user's request
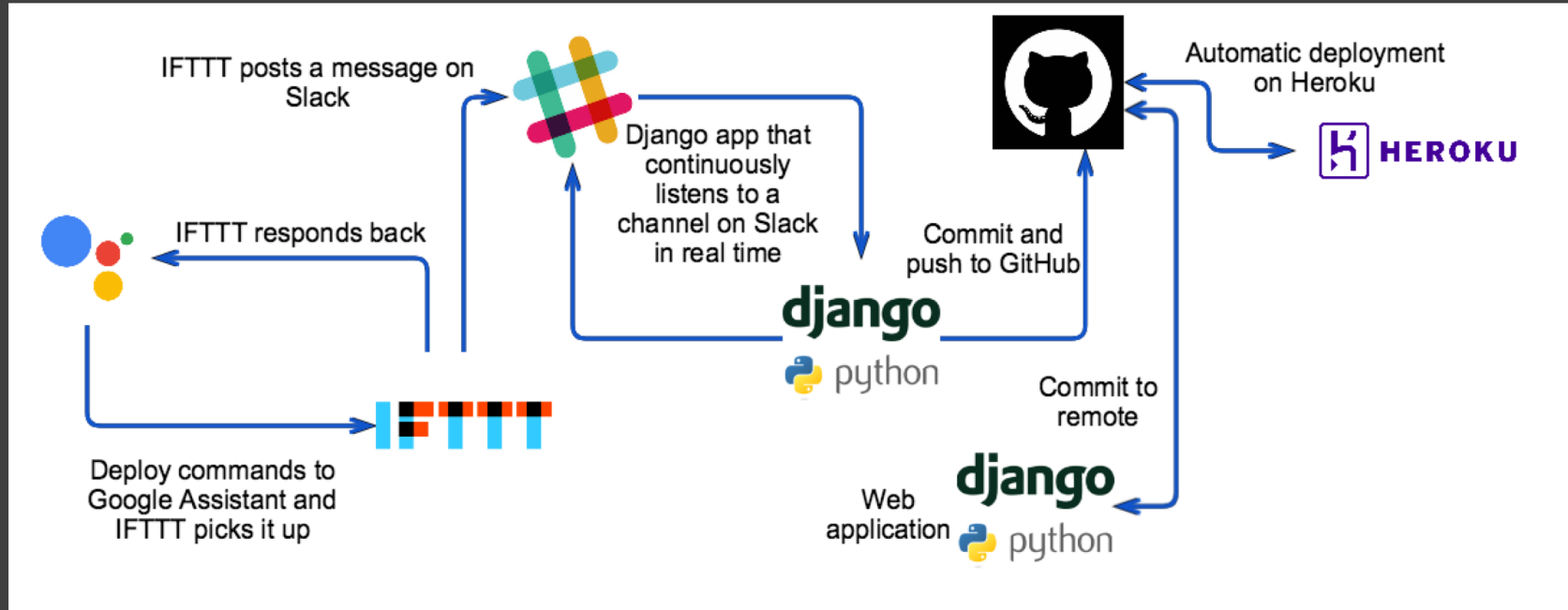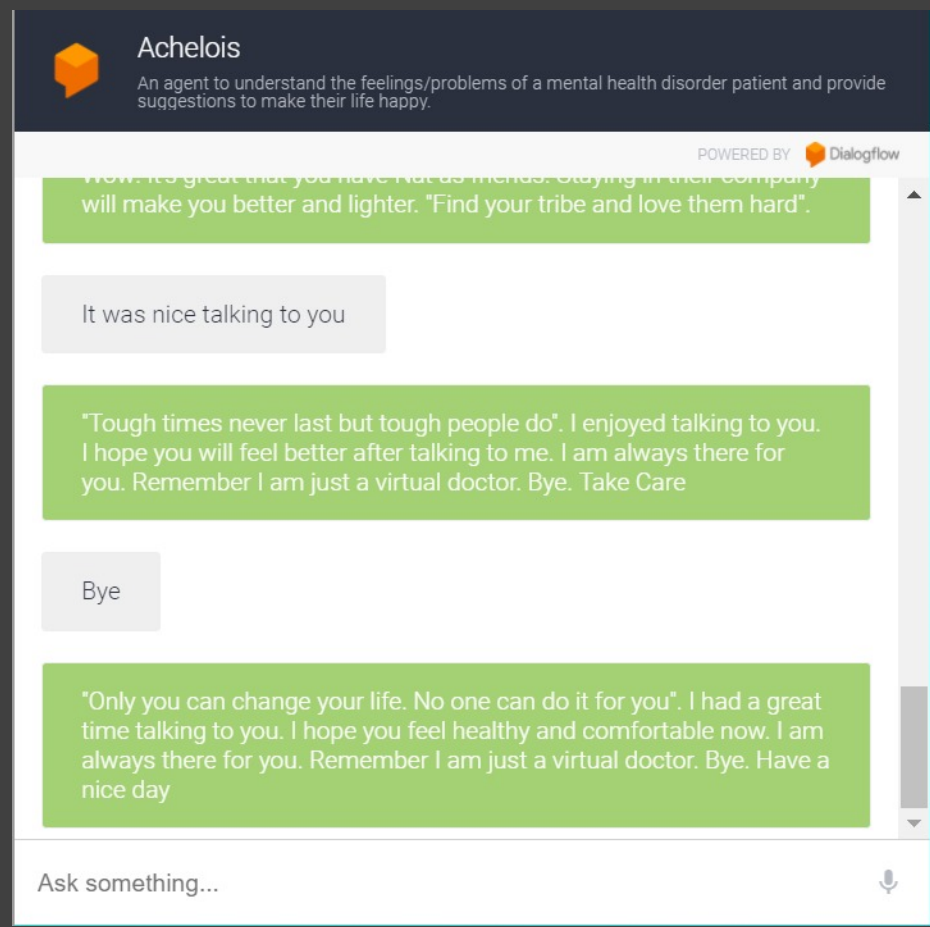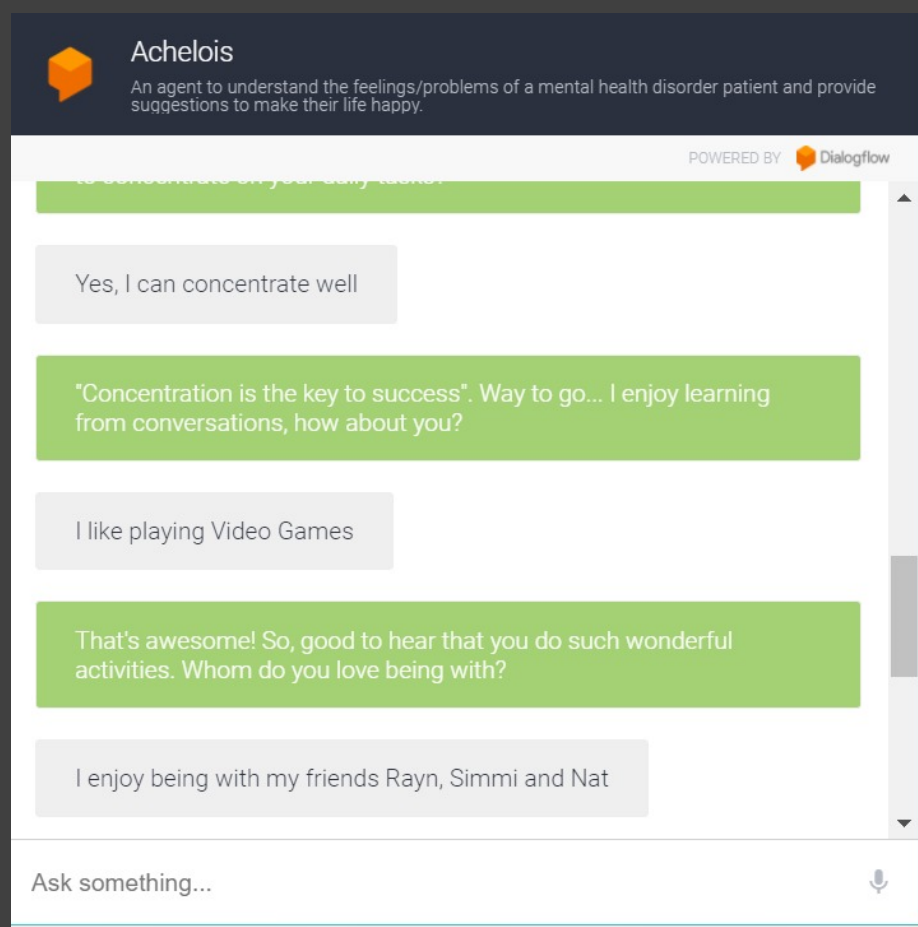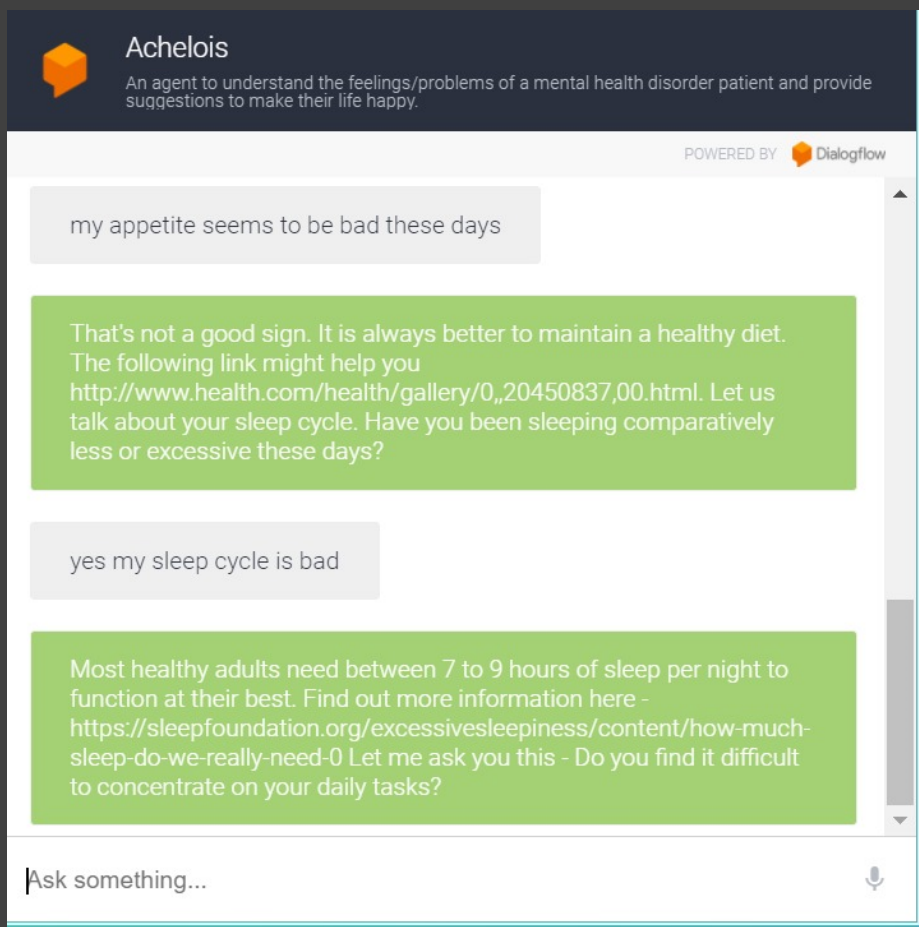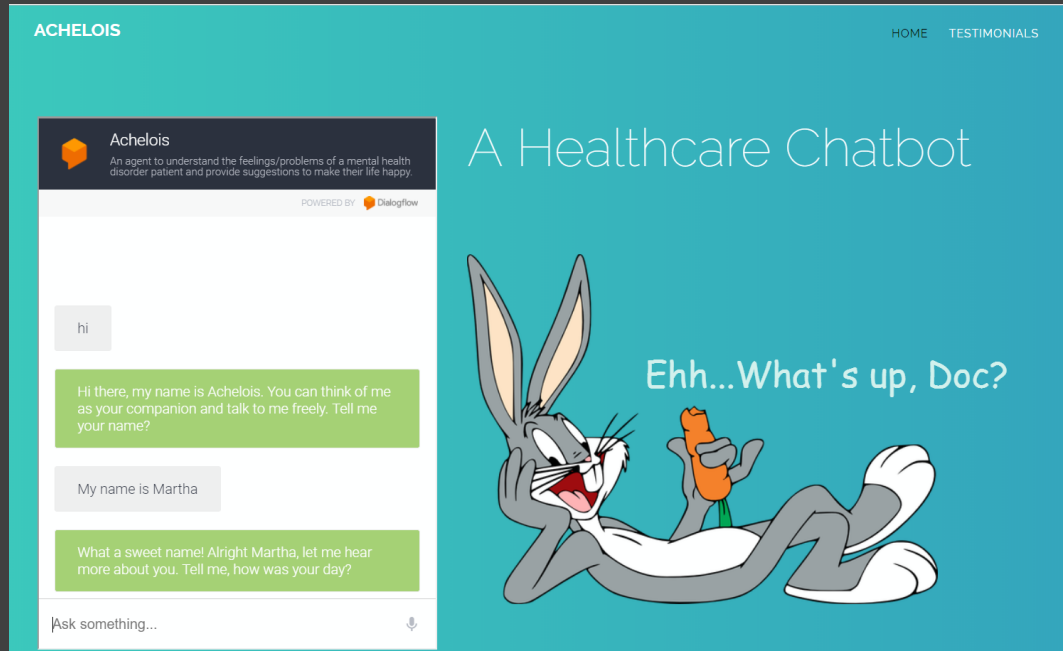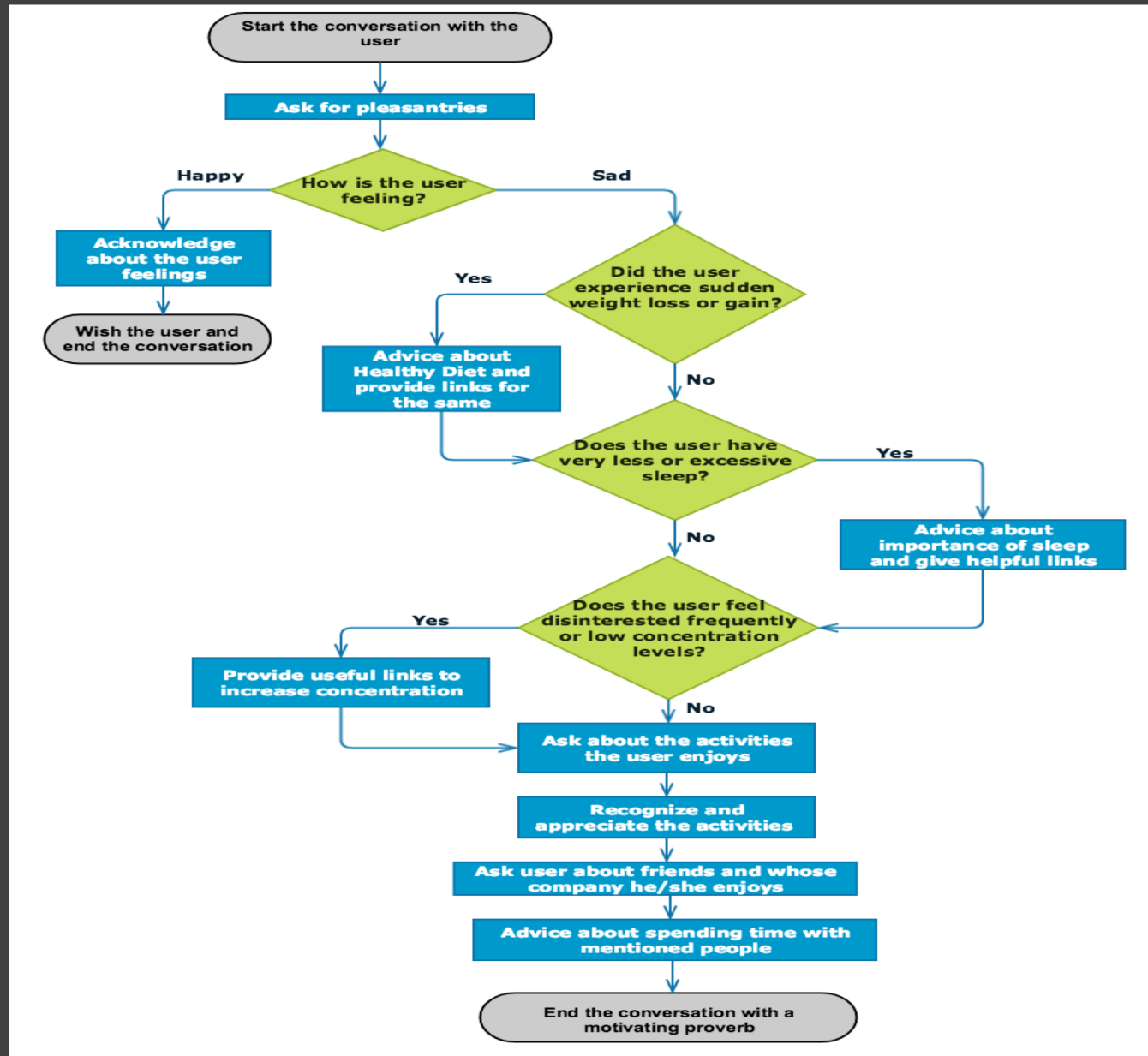
FUTURE OF CHATBOTS IN HEALTHCARE

- The most challenging aspect of advancement in the development of chatbots is that, tools in healthcare must meet our basic technology expectations, informing and connecting, but they must also comfort us in our time of need. They must make things bearable, hopeful

- Another challenge with respect to healthcare domain in general is that the data is sparse. Even if large datasets are available, it is difficult to feed them to the bot as the responses from patients are unpredictable