# Plan Of Action

## Proposal by Team 61
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## Introduction

Wit.ai is an API that allows developers to convert natural language (in the form of speech or text) into actionable data. Our project will use this API to create a conversational voice bot.

For example, the user can ask "Where is the nearest pharmacy?" or "What restaurants are open now?" and the application would respond accordingly.

## Use Case

Restaurant recommendations using various input parameters such as location, time, cuisine and price. Additional functionality such as making reservations and takeaways to be assessed and added in future iterations. All app interactions will be voice-operable in the final iteration.

### Future Development

Expansion to the Health industry. A user could look up pharmacies or different doctors like dentists or eye doctors based on user requirements. And then order medicines or book an appointment.

## Project Goals

1. Implement the wit.ai API into our app.
2. Have a skeletal implementation of our app approved and uploaded to the Hasura Hub.
3. Introduce further API implementations (Hasura APIs) into our app in accordance with its use case.

# Workflow

## Frontend
1. React-Native - Akshit Bhalla (https://akshitbhalla.co)
2. ReactJS - Debarghya Saha
3. ReactJS - MVS Chamanth

## Backend
1. Python-Flask - Gurankas Singh

# Implementation Details

## Skeletal Iteration
The app will suggest text inputs to the user and will be able to identify intents from the user input given to it.

## Zomato API Implementation
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. /* Zomato API - The API that we'll use for providing data and  metrics --> https://developers.zomato.com/api */
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## Speech Recognition API - wit.ai
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## Text to Voice - Default Assistant/ Assistant API (in case of non-human response voice)
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## Suggesting input choices  to the user (examples about the features of the app i.e making reservations/takeaways)
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Iteration 1
**Front end**
1)Text box:- user can pick enter some text here
2)Display the response sent from the back end

**Back end**
1)Extract the entity from the text sent from the front end, process the substring and send the entity back to the front end.
2) Train the bot with many examples covering most of the possible use cases.

Iteration 2:-
Zomato API, Voice implementation,

Voice Implementation
- Front End:
  - Implementation icons for microphone actions (waiting to listen, listening, response buffering)
  - Implementation of search bar which is similar to google, which can take text inputs as well as voice inputs.