

# Scoring Project

This is a project similar like the virtual assistant that proved the best response to the given input based on the data store in the database.

Task:

- 1.) Creating the sample code
- 2.) Creating the database and preparing the excel sheet that contain the all input and response
- 3.) Integrate the database with the speech recognition code
- 4.) Testing code

## Getting Started

These instructions will get you a copy of the project up and running on your local machine for development and testing purposes. See deployment for notes on how to deploy the project on a live system.

## Programming Language and Frameowork

- Python

Version Used

Python: 3.7.3

You can download the python interpreter from this link (  
'<https://www.python.org/downloads/>')

- **Frameowork**

### 1. Pandas

Description :

In computer programming, pandas is a software library written for the Python programming language for data manipulation and analysis. In particular, it offers data structures and operations for manipulating numerical tables and time series.

To install pandas :

Open command Prompt and Anaconda prompt and type 'Pip install pandas' and link (<https://pypi.org/project/pandas/>)

## **2. sqlite3**

Description :

SQLite is a C library that provides a lightweight disk-based database that doesn't require a separate server process and allows accessing the database using a nonstandard variant of the SQL query language. Some applications can use SQLite for internal data storage. It's also possible to prototype an application using SQLite and then port the code to a larger database such as PostgreSQL or Oracle.

To install db-sqlite3:

Open command Prompt and Anaconda prompt and type 'Pip install db-sqlite3 ' and link <https://pypi.org/project/db-sqlite3/>)

## **3. SQLAlchemy**

Description :

SQLAlchemy is the Python SQL toolkit and Object Relational Mapper that gives application developers the full power and flexibility of SQL. SQLAlchemy provides a full suite of well-known enterprise-level persistence patterns, designed for efficient and high-performing database access, adapted into a simple and Pythonic domain language.

To install SQLAlchemy :

Open command Prompt and Anaconda prompt and type 'Pip install SQLAlchemy ' and link (<https://pypi.org/project/SQLAlchemy/>)

## **4. SpeechRecognition**

Description :

Library for performing speech recognition, with support for several engines and APIs, online and offline

To install pandas :

Open command Prompt and Anaconda prompt and type 'Pip install SpeechRecognition ' and link (<https://pypi.org/project/SpeechRecognition/>)

## 5. **pyttsx3**

Description :

`pyttsx3` is a text-to-speech conversion library in Python. Unlike alternative libraries, it works offline, and is compatible with both Python 2 and 3.

To install pyttsx3:

Open command Prompt and Anaconda prompt and type 'Pip install `pyttsx3`' and link (<https://pypi.org/project/pyttsx3/>).

6. Run this command in terminal to install `espeak` : 'sudo apt-get install `espeak python-espeak` '