

```
from nltk.chat.util import Chat, reflections
import pyttsx3
import speech_recognition as sr
import wolframalpha
app_id = "HPEGVV-T8WLEEJ734"
client = wolframalpha.Client(app_id)
r = sr.Recognizer()
mic_list = sr.Microphone.list_microphone_names()
# initialisation
engine = pyttsx3.init()
```

```
engine.setProperty('rate', 150)
engine.setProperty('volume', 10.0)
voices = engine.getProperty('voices')
engine.setProperty('voice', voices[1].id)
```

```
# testing
##engine.say("My first code on text-to-speech")
```

```
pairs = [

    [
        r"How are you?(.*)",
        [
            "i am doing good. What about you"]
    ],
    [
        r"Hello(.*)",
        [
            "hii"]
    ],
    [
        r"Who are you(.*)",
        [
            "I am G L A assistant...You can ask me about G L A University."]
    ],
    [
        r"(.*)Who is the chancellor of GLA Univercity(.*)",
        ["Mr.Narayan Das Agrawal."]
    ],
    [
        r"(.*)Who is the pro Chancellor of GLA University(.*)",
        ["Mr. Professor D. S. Chauhan"]
    ],
    [
        r"(.*)Who is the GLA University registrar(.*)",
        ["Mr. Ashok Kumar Singh."]
    ],
    [
        r"(.*)Who is the HOD of CSE Department(.*)",
        ["Dr. Rohit Aggrawal H.O. D. & Professor, Department of Computer Engineering & Applications"]
    ]
]
```

],

[
r"(*)Who is the Pro Vice Chancellor of GLA University(*)",

[
"Dr. Anoop Kumar Gupta is currently positioned as the Director at G L A University, Mathura. Dr. Gupta has implemented the e-Governance project at GLA University as well as overseen the website and brochure of the University."]

],

[
r"(*)Who is the Founder of GLA University(*)",
["It was the year 1991 Shri Narayan Das Agrawal decided to fulfil the dream of his father, Late Shri Ganeshi Lal Agrawal, of establishing an institute for quality education to the people and the region & beyond."]]

[
r"(*)GLA University cafeteria Facility(*)",
["We have 4 cafeterias in campus that helps the students to fulfil their cravings as and when they want. The cafeteria offers a good menu of multi-cuisine delights, amidst a lively, jolly atmosphere."]]

],

[
r"(*)GLA University medical facility(*)",
["24*7 hours medical facility is available in our university"]]

],

[
r"(*)Gla University Full address(*)",
["17km Stone, NH-2, Mathura-Delhi Road Mathura, Chaumuhan, Uttar Pradesh 281406"]]

],

[
r"(*)code of conduct and Ethics policy(*)",
["For information about code of conduct and ethics policy, please visit:http://www.gla.ac.in/Uploads/image/98imguf_GLA-University--Code-of-Conduct-and-Ethics-Policy-Updated.pdf"]]

],

[
r"(*)Who is Your Project Mentor(*)",
["Dr. Robin Singh Bhadauriya Sir is our project mentor. He is Assistant Professor in GLA University Mathura Institute of Engineering & Technology. Department of Computer Engineering & Applications."]]

],

[
r"(*)How many areas does GLA have?(*)",
["110 acres Spread across 110 acres of land, the university is home to more than 10,500 students enrolled in a variety of professional courses."]]

],

[
r"(*)Which company comes in GLA University?(*)",
["The major recruits of GLA University in 2022 includes Wipro, Accenture, Microsoft, Capgemini, Durafloor concrete Solution LLP, etc."]]

],

[

r"(.*)Is GLA University Degree valid(.*)",

["Yes,Since GLA University has been accredited and approved by bodies such as UGC, AICTE, NAAC(A), AIU etc."]

],

[

r"(.*)GLA University training and placement department(.*)",

[

"G L A University has training and placement department i.e Placement training plays a major role in shaping up the career goals of students. It is the dream of every engineering student to get placed in a top organization visiting their campus for recruitment.Training of students and equipping them with life skills has become an important responsibility of the institution."]

],

[

r"(.*)GLA University training and development department(.*)",

[

"G L A University has training and development department i.e. Training and development refers to educational activities within a company created to enhance the knowledge and skills of employees while providing information and instruction on how to better perform specific tasks."]

],

[

r"(.*)executive Council(.*)",

[

"Mr. Narayan Das Agrawal (Business)Chairperson and many more.for further details visit : <https://www.gla.ac.in/about-us/executive-council>."]

],

[

r"(.*)Who creates you(.*)",

["I created By Ujjawal Tripathi with the help of N L T K library...Thank You"]

],

[

r"(.*)GLA University attendance criteria(.*)",

["It is mandatory to fulfill 75% attendance for each student"]

],

[

r"(.*)is there any in GLA University entrepreneurship cell(.*)",

[

"At E-Cell G L A U members from various backgrounds and departments combine their meticulous talents to help the youth achieve their dreams"]

],

[

r"(.*)GLA University library information(.*)",

["There are more than 175000 books available in our library."]

],

[

r"(.*)GLA University library Timings(.*)",

["Library timings is from 8 am to 11 pm for boys and for girls it is from 8 am to 6 pm."]

```

],

[
    r"(.*)GLA University library facilities(.*)",
    [
        "the Central Library has more than 169899 books over 4,500 CD-ROMs and subscribes to more than 95 national and international journals/magazines in print besides a larger number of e-journals through INDEST-AICTE Consortium for Subscription of International Journals of IEEE/IEE (IEL Online+ASPP), ASME are available to the academic community all over the campus. "]
    ],

[
    r"(.*)GLA University clubs of our College(.*)",
    ["There are different different clubs in our college such as natraj club, udaan , aashayein, abacus, ASME etc"]
],

[
    r"my name is (.*)",
    ["Hello %1, How are you today ?", ]
],

[
    r"what is your name ?",
    ["My name is G L A Assistant and I know almost everything about G L A University"]
],

[
    r"how are you?",
    ["I'm doing good\nHow about You ?", ]
],

[
    r"sorry(.*)",
    ["Its alright", "Its OK, never mind", ]
],

[
    r"i'm(.*)doing good",
    ["Nice to hear that", "Alright :)", ]
],

[
    r"hi|hey|hello",
    ["Hello", "Hey there", ]
],

[
    r"(.*)age?",
    ["I'm a computer program dude\nSeriously you are asking me this?", ]
],

],

[
    r"(.*)IQAC(.*)",
    [
        "The Internal Quality Assurance Cell (IQAC) was constituted in GLA University on January 4, 2016,with the aim of working towards realization of the goals of quality enhancement and sustenance through internalization of quality culture and institutionalization of best practices."
    ]
],

[
    r"(.*)aim of GLA University(.*)",
    [

```

```

    "The aim of G L A is to provide education of high quality to fulfill the needs of higher education in the societ
y."
],

[
    r"(.*)NIRF(.*)",
    [
        "The methodology draws from the overall recommendations broad understanding arrived at by a Core Comm
ittee set up by MHRD, to identify the broad parameters for ranking various universities and institutions."
    ],

    [
        r"i work in (.*)?",
        ["%1 is an Amazing company, I have heard about it. But they are in huge loss these days.", ]
    ],

    [
        r"(.*)raining in(.*)",
        ["No rain since last week here in %2", "Damn its raining too much here in %2"]
    ],

    [
        r"how(.*)health(.*)",
        ["I'm a computer program, so I'm always healthy ", ]
    ],

    [
        r"(.*)recruiters(.*)",
        [
            "Our recruiters are Tata, HCL, capgemini, accenture, amazon, honda, infosys, wipro, samsung, microsoft, ho
nda, oppo, alight, VVDN, any many more."
        ],

        [
            r"(.*)top 5 recruiters at GLA University (.*)",
            ["Our top recruiters are:Amazon, microsoft, accenture, salesforce, samsung."
        ],

        [
            r"(.*)number of hostlers(.*)",
            [
                "We have 15 boys hostels and 4 girls hostels that have about 5000+ residents,our college has 4500+ boys and
1500+ girls hostlers."
            ],

            [
                r"(.*)GLA University hostel details(.*)",
                ["There are facilities for indoor and outdoor games. Green lawns are provided,24x7 electric and power supply."
            ]
        ],

        [
            r"(.*)GLA University no Ragging policy(.*)",
            ["Ragging is strictly prohibited in our campus."
        ],

        [
            r"(.*)GLA University hostel security(.*)",
            [
                "hostels are provided 24 hours security with our best group of guards. Students are 24 hours under surveillan
ce and biometric is compulsory for every student."
            ],

            [

```

```

    r"(*)about GLAMS portal(*)",
    ["for the ease of students to access their information, we have provided an online portal."],
  ],
  [
    r"(*)GLA University attendance criteria(*)",
    ["It is mandatory to fulfill 75% attendance for each student"],
  ],
  [
    r"(*)GLA University leave and Outing details(*)",
    [
      "girls are provided outing till 6.30 pm whereas boys till 8pm and it is compulsory for everyone to follow the timing criteria of leave and outing"],
    ],
  ],
  [
    r"(*)why GLA University(*)",
    [
      "At G L A University we offer a nurturing environment that fosters sharp learning skills, a top-of-the-line curriculum that offers the best in education along with pioneering placement opportunities."],
    ],
  ],
  [
    r"(*)GLA University sports Facilities(*)",
    [
      "All the playing grounds are located strategically across the university thereby making sports part of one's life no matter where the person is in the university. G L A IPL (G L A Cricket Championship), Volleyball, Football, Badminton, Basketball, Chess tournaments every year."],
    ],
  ],
  [
    r"(*)GLA University campus Facilities(*)",
    ["Security ,Medical facility ,play ground ,24 hr electricity ,etc"],
  ],
  [
    r"(*)GLA University rules and Regulations(*)",
    ["Intentionally damaging property and equipment of the hostel,Gambling in Any Form is not allowed"],
  ],
  [
    r"(*)alumni of our GLA University (*)",
    ["More than 4000+ G L Aians are Working Abroad with the most reputed companies."],
  ],
  [
    r"(*)average placement of GLA University(*)",
    ["The average placement rate of G L A University is 80 to 85 %"],
  ],
  [
    r"(*)clubs of our College GLA University (*)",
    ["There are different different clubs in our college such as natraj club, udaan , aashayein, abacus, ASME etc"],
  ],
  [
    r"(*)admission help/ helpline(*)",
    ["For admission related information, you can call : 6399020004, 6399020005"],
  ],
  [
    r"(*)total number of students in GLA University (*)",
    ["More than 16000 students."],
  ],
],

```

```
[
    r"(.*)nuumber of faculty in GLA university(.*)",
    ["There are over 700 faculty in G L A."]
],
[
    r"quit",
    ["Bye bye take care It was nice talking to you See you soon "]
],
]
```

```
chat = Chat(pairs, reflections)
```

```
while 1:
```

```
    with sr.Microphone(device_index=1, sample_rate=48000, chunk_size=1024) as source:
```

```
        r.adjust_for_ambient_noise(source)
```

```
        print("Say Something")
```

```
        audio = r.listen(source)
```

```
text = 'GLA University'
```

```
try:
```

```
    text = r.recognize_google(audio)
```

```
    print("you said: " + text)
```

```
except:
```

```
    print("Something error\n Please Try Again ")
```

```
res = chat.respond(text)
```

```
if not res:
```

```
    value = client.query(text)
```

```
    res = next(value.results).text
```

```
print(res)
```

```
engine.say(res)
```

```
engine.runAndWait() ##chat.converse()
```

```
if text in ('quit' , 'bye', 'goodbye'):
```

```
    break
```