

CODE FOR CHATBOT:

THE CODE IS IN THE JSON FORMAT. WE HAVE USED THE IBM WATSON SERVICES AND API TO CREATE THE CHATBOT. THE CHATBOT WAS MODIFIED USING THE JSON EDITOR. BELOW IS THE COMPLETE CODE IN THE JSON FORMAT AND WITH THE NODE NAME.

JSON CODE: (JAVA SCRIPT OBJECT NOTATION)

WELCOME NODE:

DIALOGUE 1

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Hello. Welcome to A&R Healthcare, My name is Medicus I'm a medical chatbot. I can prescribe medicines, book an appointment, manage bill payments, calculate BMI, and provide health tips 🤖."
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      },
      {
        "values": [],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

BOOK AN APPOINTMENT NODE:

DIALOGUE 2

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Is this your first time here?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

```
}  
}
```

DIALOGUE 3:

```
{  
  "output": {  
    "generic": [  
      {  
        "values": [  
          {  
            "text": "Heyy...I'm not sure if it's nice to say Welcome back 😊. "  
          },  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      },  
      {  
        "values": [  
          {  
            "text": "Here: \" \" ... please sign in to your account to book the appointment."  
          },  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      }  
    ]  
  }  
}
```

DIALOGUE 4:

```
{  
  "output": {  
    "generic": [  
      {  
        "values": [  
          {  
            "text": "Please sign up here: \" \", after this, you can easily book your appointment."  
          },  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      }  
    ]  
  }  
}
```

MIGRAINE NODE

DIALOGUE 5:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Ahh, headaches are really irritating!... Do you usually experience some kinds of aura?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      },
      {
        "values": [
          {
            "text": "Aura's as in... You may see a little jagged line...that will develop some cross hatches, and it might sort of move in a curved direction."
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 6:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Can you say that you have major mood swings at times?... as you may suddenly feel really depressed or really high?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 7:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Do you lack restful sleep?... Do you Wake up tired or have trouble falling asleep?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 8:

```
{
  "output": {
    "generic": [
      {
        "response_type": "text",
        "values": [],
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 9:

```
{
  "output": {
    "generic": [
      {
        "response_type": "text",
        "values": [],
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 10:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
```

```
      "text": "Do you have sinus symptoms, such as the stuffy nose, clear nasal drainage, droopy eyelids, or tearings?"
```

```
    }  
  ],  
  "response_type": "text",  
  "selection_policy": "sequential"  
}  
]  
}
```

DIALOGUE 11:

```
{  
  "output": {  
    "generic": [  
      {  
        "values": [  
          {  
            "text": "Before the headache starts do you crave certain food items like chocolate or any such item?"
```

```
          }  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      },  
      {  
        "values": [  
          {  
            "text": "Please answer \"Yes\" or \"No\"."   
          }  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      }  
    ]  
  }  
}
```

DIALOGUE 12:

```
{  
  "output": {  
    "generic": [  
      {  
        "values": [  
          {  
            "text": "Do you feel the throbbing in any one side of the head?"  
          }  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      }  
    ]  
  }  
}
```

```

}
DIALOGUE 13:
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Does your eye hurt quite frequently?... and even after seeing an Ophthalmologists
or taking certain precautions or taking meds didn't make the headache any better?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

```

DIALOGUE 14:
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Does your neck get stiff whenever you have a headache?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

```

DIALOGUE 15:
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Do you urinate quite frequently?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 16:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Before you get a headache do you yawn more than usual?... Unlike regular \"I'm
tired\" yawning, is it excessive and occurs every few minutes."
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 17:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Do you feel any part of the body that gets too numb at times or maybe do you have
a temporary lack of sensation or a pins-and-needles feeling, typically on one side of the body,
moving from the fingertips through the arm and across the face?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 18:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Do you think that sometimes even a bit of light, noise, or some kind of smell
worsens the pain?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 19:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "These were some of the major symptoms that are verified by people suffering from a migraine. I can tell that you are at risk of having it, I would highly recommend you to visit a neurologist ASAP!"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

EAR PAIN NODE:**DIALOGUE 20:**

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Ear pains are really irritating!..how long have you been facing this problem?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 21:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Are you feeling pain in both of the ear?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```



```

    ]
  }
}
DIALOGUE 22:
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Are you also suffering from teeth pain?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

```

DIALOGUE 23:
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "So can you please specify, is it the left or the right ear?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

```

DIALOGUE 24:
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Don't worry, sometimes the teeth pain gets radiated up the jaw to the ear."
          }
        ],
        "response_type": "text",

```

```

    "selection_policy": "sequential"
  },
  {
    "values": [
      {
        "text": "I won't say you go for any medicines for a day or two, what you can do is use ice packs or warm compresses, like a heating pad or damp washcloth, to relieve pain. Place the ice pack or warm compress over the ear and alternate between warm and cold after 10 minutes. Still, if you feel like talking to our expert please enter \"Yes\"."
      }
    ],
    "response_type": "text",
    "selection_policy": "sequential"
  }
]
}

```

DIALOGUE 25:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Some common reasons for ear pain include ear infection (otitis media), swimmer's ear (infection of the skin in the ear canal), pressure from a cold or sinus infection."
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      },
      {
        "values": [
          {
            "text": "I'm expecting it could be a viral infection... in cases like these, it's better to see your pediatrician, I would prefer Amoxicillin it is an antibiotic for ear infections—except when there is an allergy to penicillin or chronic or recurrent infections. Doses: Adults, teenagers, and children weighing 40 kilograms (kg) or more—250 to 500 milligrams (mg) every 12 hours.\nChildren and infants older than 3 months of age weighing less than 40 kg—20 to 40 milligrams (mg) per kilogram (kg) of body weight per day, divided and given every 8 hours, or 25 to 45 mg per kg of body weight per day, divided and given every 12 hours.\nInfants 3 months of age and younger-30 mg per kg of body weight per day, divided and given every 12 hours. Chewing a gum also helps😊"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      },
      {
        "values": [
          {
            "text": ""
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

```

    }
  ],
  "response_type": "text",
  "selection_policy": "sequential"
},
{
  "values": [
    {
      "text": "Please enter \"Yes\" to get in touch with an expert."
    }
  ],
  "response_type": "text",
  "selection_policy": "sequential"
}
]
}
}

```

DIALOGUE 26:

```

{
  "output": {
    "generic": [
      {
        "response_type": "connect_to_agent"
      }
    ]
  }
}

```

DIALOGUE 27:

```

{
  "output": {
    "generic": [
      {
        "response_type": "text",
        "values": [],
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 28:

```

{
  "output": {
    "generic": [
      {
        "response_type": "connect_to_agent"
      }
    ]
  }
}

```

```

    }
  }
  DIALOGUE 29:
  {
    "output": {
      "generic": [
        {
          "response_type": "text",
          "values": [],
          "selection_policy": "sequential"
        }
      ]
    }
  }

```

```

  DIALOGUE 30:
  {
    "output": {
      "generic": [
        {
          "values": [
            {
              "text": "Ear infections are the most common cause of ear pain. When the ear
becomes infected, inflammation and buildup of pressure cause pain that can be intense or
it may occur when air and fluid build-up behind the eardrum."
            }
          ],
          "response_type": "text",
          "selection_policy": "sequential"
        }
      ]
    }
  }

```

```

  DIALOGUE 31:
  {
    "output": {
      "generic": [
        {
          "response_type": "text",
          "values": [],
          "selection_policy": "sequential"
        }
      ]
    }
  }

```

FEVER NODE:

DIALOGUE 32:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Are you having a Fever?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 33:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Ohh!..How long!?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 34:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Well, that's great!!"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      },
      {
        "values": [
          {
            "text": "What can I do for you today?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 35:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Do you have a headache?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 36:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {

```

```
        "text": "Do you have a sore throat?"
    }
    ],
    "response_type": "text",
    "selection_policy": "sequential"
}
]
```

DIALOGUE 37:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Are you having headache?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 38:

```
{
  "output": {
    "generic": [
      {
        "response_type": "text",
        "values": [],
        "selection_policy": "sequential"
      }
    ]
  }
}
```

DIALOGUE 39:

```
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Do you feel nausea?"
          }
        ],

```

```

        "response_type": "text",
        "selection_policy": "sequential"
    }
]
}

```

DIALOGUE 40:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Cold, flu, or stomach flu. These viral illnesses can give you nausea and a bad headache. But unlike migraine headaches, you'll usually have other symptoms, too, like a runny nose, diarrhea, chills, body aches...So are you suffering from any of these?"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 41:

```

{
  "output": {
    "generic": [
      {
        "response_type": "text",
        "values": [],
        "selection_policy": "sequential"
      }
    ]
  }
}

```

DIALOGUE 42:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Are you having a sore throat?"
          }
        ],
        "response_type": "text",

```



```

        "selection_policy": "sequential"
    }
]
}
}
DIALOGUE 43:
{
    "output": {
        "generic": [
            {
                "values": [
                    {
                        "text": "The most common cause of a sore throat (pharyngitis) is a viral infection,
such as a cold or the flu"
                    }
                ],
                "response_type": "text",
                "selection_policy": "sequential"
            }
        ]
    }
}
DIALOGUE 44:
{
    "output": {
        "generic": [
            {
                "values": [
                    {
                        "text": "Hmm..is there any other such symptoms that you're facing with high
fever?"
                    }
                ],
                "response_type": "text",
                "selection_policy": "sequential"
            },
            {
                "values": [
                    {
                        "text": "Please enter \"Yes\" if any."
                    }
                ],
                "response_type": "text",
                "selection_policy": "sequential"
            }
        ]
    }
}

```

```

}
DIALOGUE 44:
{
  "output": {
    "generic": [
      {
        "response_type": "connect_to_agent"
      }
    ]
  }
}

```

```

DIALOGUE 45:
{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Try to do some hot water gargle at least twice a day, avoid oily food, drink
as much water as possible as the body needs to stay hydrated to keep mucus thin. When a
person is sick with a cold, drinking extra fluids can thin the mucus and help the sinuses to
drain, Water helps to avoid the congestion!"
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      },
      {
        "values": [
          {
            "text": "If you want to talk to a specialist doctor please enter \"Yes\"."
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

```

DIALOGUE 46:
{
  "output": {
    "generic": [
      {
        "response_type": "connect_to_agent"
      }
    ]
  }
}

```

```
}  
}
```

PATIENT PORTAL NODE:

DIALOGUE 48:

```
{  
  "output": {  
    "generic": [  
      {  
        "values": [  
          {  
            "text": "Here you can login as patient "  
          }  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      },  
      {  
        "values": [  
          {  
            "text": "http://projectarmedicus.in/login/"  
          }  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      }  
    ]  
  }  
}
```

DOCTOR PORTAL NODE:

DIALOGUE 49:

```
{  
  "output": {  
    "generic": [  
      {  
        "values": [  
          {  
            "text": "Go through this link to log in as a doctor"  
          }  
        ],  
        "response_type": "text",  
        "selection_policy": "sequential"  
      },  
      {  
        "values": [  

```

```

    {
      "text": "http://projectarmedicus.in/login/"
    }
  ],
  "response_type": "text",
  "selection_policy": "sequential"
}
]
}
}

```

PATIENT RECORDS NODE:

DIALOGUE 50:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Please Enter your unique patient ID."
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

PAYMENT NODE:

DIALOGUE 51:

```

{
  "output": {
    "generic": [
      {
        "values": [
          {
            "text": "Please click this link for the payment portal."
          }
        ],
        "response_type": "text",
        "selection_policy": "sequential"
      }
    ]
  }
}

```

