



Prize Winner

Computer Programming, Apps & Robotics Year 3-4

**Siddharth Prabhu
Anas Qureshi**

Rose Park Primary School





SAN THE CHATBOT

A friendly robot indeed

Abstract

San the chatbot is a friend indeed for anyone in need of a friend when you feel lonely. San is funny and interactive in the best possible way like a friend.

Siddharth Prabhu & Anas Qureshi

SAN the Chatbot

The friend indeed

Aim: The aim of our project is to make a robot based on the idea a friend indeed. This robot is a chatbot friend that cheers you up and never lets you down. As you know a normal best friend forever (BFF) would always be there for you and will not let you down, but instead this is a robot that will always keep you company. San will keep you cheerful and happy all the time.

Software used: San the chatbot was created using Scratch.mit.edu.

Introduction: In the first phase we have been working on feelings, we've made the robot to ask "How are you feeling?" and it will start a conversation with you. The robot is programmed to ask questions and answer questions. The robot would basically interact just like a friend would do based on our feelings.

How we came up with the idea of SAN: It all started with Covid pandemic. We were lonely and sad in lockdown not being able to go to school or catching up with friends so we came up with this idea of making people happy and to make them feel like they are with their friends.

Instructions to operate SAN:

Here's the link on where you can find SAN the chatbot:

<https://scratch.mit.edu/projects/405258396/>

To start this robot you'll need to click on the green flag.

Click on the Green flag to start the program then then the San the chatbot it will introduce itself.

SAN begins the conversation by asking you to choose from a list of 4 feelings.

The 4 feelings are:

Happy, Sad, Angry, normal and then it interacts with you and you need to type your answers in the textbox.

Technically we have used:

1. **Controls** such as if else, if then else and timers to make the robot interact.
2. **Events** like when clicked and text to speech.
3. **Sounds.**
4. **Sensing** to ask questions and wait for a reply.
5. **Looks** to make the robot appear like it's talking.
6. **Operators** for yes and no functions.

We have included quizzes, jokes and riddles to make it more fun.

The Red octagon is used to stop the program.

Some screenshots of the program are

```

when clicked
  set voice to squeak
  switch costume to pico-b
  speak Hi i'm san the chatbot
  speak I would love to chat with you today
  switch costume to pico-a
  wait 1.5 seconds
  switch costume to pico-b
  speak I have got 4 feelings for you. Select the one that suits you best
  say I have got 4 feelings for you. Select the one that suits you best! for 2 seconds
  speak Press h if you're happy
  say Press h if you're happy for 2 seconds
  speak Press n if you're normal
  say Press n if you're normal for 2 seconds
  speak Press s if you're sad
  say Press s if you're sad for 2 seconds
  speak And press a if you're angry
  say And press a if you're angry for 2 seconds
  
```

```

when key pressed
  set voice to squeak
  switch costume to pico-a
  wait 1.5 seconds
  switch costume to pico-b
  speak hey
  say Hey for 2 seconds
  switch costume to pico-a
  wait 1.5 seconds
  switch costume to pico-b
  speak Are you in the mood for a quiz
  ask Are you in the mood for a quiz and wait
  if answer = yes then
    switch costume to pico-b
    speak Great
  ask Are you in the mood for a quiz and wait
  if answer = yes then
    speak excellent
  
```

```

when key pressed
  set voice to squeak
  speak Hello!
  say Hello! for 1 seconds
  speak Are you feeling okay?
  ask Are you feeling okay? and wait
  if answer = no then
    speak Can i make you feel better
    say Can i make you feel better for 1 seconds
    speak Would you like to listen to a joke or a riddle?
    ask Would you like to listen to a joke or a riddle? and wait
    if answer = joke then
      speak Okay
      say Okay for 1 seconds
      speak There are only 5 jokes to answer!
      say There are only 5 jokes to answer! for 2 seconds
      speak Joke number 1
      speak Why do bees have sticky hair?
      say Why do bees have sticky hair? for 2 seconds
    
```

```

play sound Win until done
speak Great
say Great for 2 seconds
speak You got it right
say You got it right for 2 seconds
else
  play sound Oops until done
  speak Great try
  say Great try for 2 seconds
  speak Maybe you could get a better chance next time
  say Maybe you could get a better chance next time for 2 seconds
  speak Whats the worlds poisonous snake
  ask Whats the worlds poisonous snake and wait
  if answer = saw scaled viper then
    play sound Win until done
    speak ding ding ding
    say ding ding ding for 2 seconds
    speak You have got it right
    say You have got it right for 2 seconds
  
```

```

when green flag clicked
  speak hello
  say Hello for 1 seconds
  speak What's your name?
  ask What's your name? and wait
  speak Nice to meet you
  say Nice to meet you for 2 seconds
  speak answer
  say answer for 2 seconds
  speak Are you feeling good?
  ask Are you feeling good? and wait
  if answer = yes then
    speak So are you in the mood for doing a quiz
    ask So are you in the mood for doing a quiz and wait
    if answer = Yes then
      speak That's great
      say That's great for 2 seconds
      speak So there will be 10 questions coming up!
  else
    speak So there will be 10 questions coming up!
  
```

```

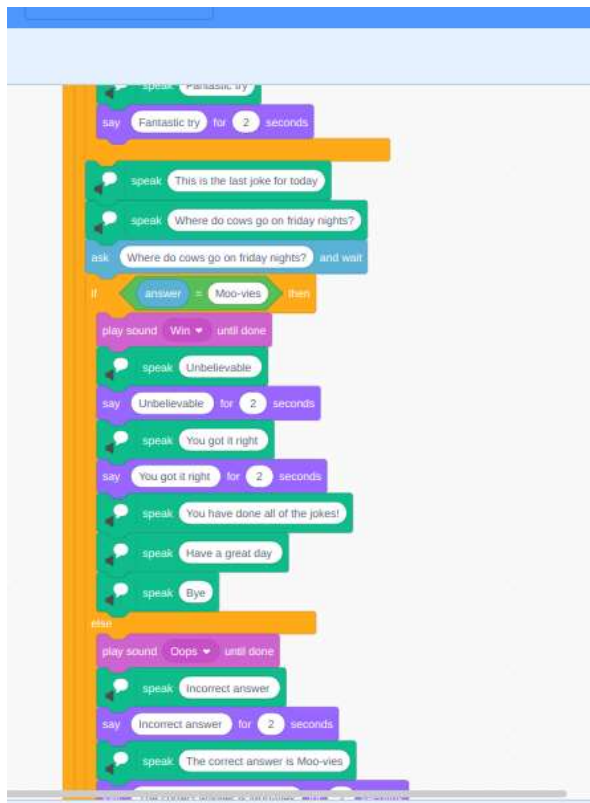
if answer = Because they use honeycombs then
  play sound Win until done
  speak Great Job
  say Great Job for 1 seconds
  speak You got it right!
  say You got it right! for 1 seconds
else
  play sound Oops until done
  speak Incorrect answer
  say Incorrect answer for 1 seconds
  speak The correct answer is because they use honeycombs
  say The correct answer is because they use honeycombs for 1 seconds
  speak Excellent try
  say Excellent try for 2 seconds
  speak Joke number 2
  speak Why did the kid throw his clock out of the window?
  say Why did the kid throw his clock out of the window? for 2 seconds
  ask Why did the kid throw his clock out of the window? and wait
  if answer = Because he wanted to see time fly then
  
```

```

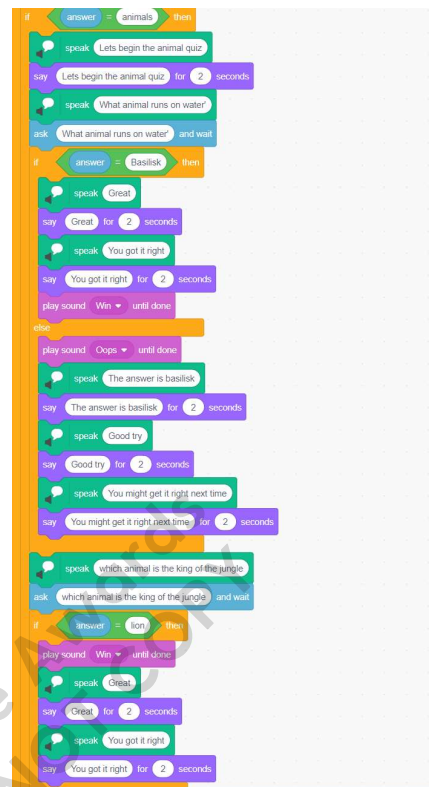
  speak Joke number 2
  speak Why did the kid throw his clock out of the window?
  say Why did the kid throw his clock out of the window? for 2 seconds
  ask Why did the kid throw his clock out of the window? and wait
  if answer = Because he wanted to see time fly then
    play sound Win until done
    speak Well done
    say Well done for 1 seconds
    speak You got it right
    say You got it right for 1 seconds
    speak Good job
    say Good job for 1 seconds
  else
    play sound Oops until done
    speak Incorrect answer
    say Incorrect answer for 1 seconds
    speak The correct answer is Because he wanted to see time fly
    say The correct answer is Because he wanted to see time fly for 1 seconds
    speak Excellent try
  
```

```

  ask What animal runs on water? and wait
  if answer = Basilisk then
    speak Great
    say Great for 2 seconds
    speak You got it right
    say You got it right for 2 seconds
    play sound Win until done
  else
    play sound Oops until done
    speak The answer is basilisk
    say The answer is basilisk for 2 seconds
    speak Good try
    say Good try for 2 seconds
    speak You might get it right next time
    say You might get it right next time for 2 seconds
    speak which animal is the king of the jungle
    ask which animal is the king of the jungle and wait
    if answer = lion then
      play sound Win until done
    
```

Backpack



These are some of the screenshots of the program we did in scratch.

Conclusion:

Our Chatbot San is a friend indeed with funny jokes and riddles to cheer us up when not in the mood. In Phase 2 of the project we plan to improvise the robot to interact with more information for example like solving problems.

Bibliography:

- Computer Coding for kids by Jon Woodcock
- Scratch tutorials from <https://scratch.mit.edu/>
- Quiz from Nature's Kingdom by Dean's International publishing

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Kind Regards

Magalakshmi

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