TECHNOChatbot AI

Teacher Guide

Lessons for Middle & High School Students | Grades 8 - 12

Technology Course
using
Scratch and **Bot Libre**

Design chatbots to answer questions and automate tasks.

In this course, students become chatbot developers. They use both Scratch coding and a free bot-builder to design chatbots that improve the lives of others. To start they explore the practical applications of this AI technology and how it eliminates mundane, repetitive tasks. Once familiar with the possibilities of natural language processing, they design their own bots. First, they build a simple rule-based chatbot for an event that can answer attendees' questions using keyword matching. Next, they code a transactional chatbot that can do one job, which is take a customer order for a school fundraiser. Finally, they train a conversational chatbot to act as a virtual agent for an organization. It will answer questions, give directions, provide contact details, and more. Optional challenges explore the history of chatbots, large language models such as ChatGPT, and chatbot analytics.

TECHNOKids

Table of Contents

Introduction

This section provides valuable information about teaching TechnoChatbot AI. It includes a description of the Teacher Guide, as well as an overview of the course. In addition, there are ideas for implementation and technology integration.

For additional guidance, open the course in TechnoHub and select Get Started to access preparatory steps, resource list, and scheduling timetable.

How to Use This Guide

This Teacher Guide contains the following three sections:

Getting Started – This section contains a course description, as well as ideas for implementation.

Course Instructions – The course is comprised of six sessions, each focused on a problem-solving task that aligns with the project theme. Each session includes assignments that break down the task into manageable steps. The components of each session are as follows:

- Overview – An explanation of the session activities and their purpose.
- Materials – A list of assessment tools, samples, handouts, and other teacher resources required for each session.
- Teaching Strategies – Instructional methods recommended for teaching the activities.
- Lesson Plan – A detailed list of each step in the session.
- Learning Objectives – A summary of the content knowledge and technical skills taught throughout the session.
- Assignments – A session consists of assignments completed by students.
- Review – A session review contains a list of fill-in-the-blank, multiple choice, or short-answer questions intended to review terminology and tools (answers included).
- Skill Review – An additional assignment intended to review chatbot development (includes completed sample).
- Extension Activity – An additional activity that relates to the knowledge or skills presented in the session. Often tasks challenge students to enhance their chatbots with additional features.

Appendices – this section contains additional information or materials including the following resources.

- Assessment Tools – Skill summary and marking sheets for evaluation.
- Glossary – A definition of chatbot and artificial intelligence terminology.
- Contact Information – How to contact TechnoKids Inc. for curriculum support.

TechnoChatbot AI Overview

Introduction to TechnoChatbot AI

In this course, students become chatbot developers. They use both Scratch coding and a free bot-builder to design chatbots that improve the lives of others. To start they explore the practical applications of this AI technology and how it eliminates mundane, repetitive tasks. Once familiar with the possibilities of natural language processing, they design their own bots. First, they build a simple rule-based chatbot for an event that can answer attendees' questions using keyword matching. Next, they code a transactional chatbot that can do one job, which is take a customer order for a school fundraiser. Finally, they train a conversational chatbot to act as a virtual agent for an organization. It will answer questions, give directions, provide contact details, and more. Optional challenges explore the history of chatbots, large language models such as ChatGPT, and chatbot analytics.

Students complete the following tasks:

- In session 1, students explore the practical applications of chatbots. They chat with real business bots to critically examine strengths and limitations. Later, they prepare to create their own chatbots by registering for a Scratch account. This will be used in upcoming Sessions to build an event and order chatbot. To extend learning, an optional activity provides insight into key historical moments in chatbot development.

- In session 2, students build a chatbot for an upcoming school event using Scratch coding. It could be a prom, school dance, spirit day, talent show, or retirement party. The chatbot will answer attendees' questions. To make the bot appear intelligent, it uses if-then logic and keyword matching. Upon completion, students evaluate their chatbots' limitations. An optional activity about artificial intelligence expands students' knowledge of large language models.

- In session 3, students create an order chatbot using Scratch coding. It is a transactional chatbot, which can do one action. It will simplify the task of taking school fundraiser orders for items such as hats, cookies, or flowers. Just like a real salesperson, the bot will ask questions to help the customer make purchasing decisions. It will store their answers in a list. At the end of the conversation, the customer will be able to edit and then submit their order. This task expands students' knowledge of the practical applications of chatbots. In addition, it also introduces the use of lists, if-else logic, and broadcasting. An optional activity for using a chatbot to create a support ticket develops a deeper understanding of how this technology can be used to automate tasks.

- In session 4, students use the bot-builder app, Bot Libre, to design a virtual agent for a school or an organization. It will provide help to a new student or member. The chatbot will use natural language processing to answer common questions, provide directions, connect a user to information sources, and more. To start, they select a topic such as a local drama club, sports team, or art class. Next, they create a bot and then chat with it to discover what it does and does not know. Afterwards, they select a voice that will appeal to users. An extension activity emphasizes the need to be a responsible digital citizen by examining the Bot Libre terms of use and privacy policy.

- In session 5, students train their virtual agent to increase its intelligence. To start, they view pre-programmed responses to verify the chatbot's existing knowledge base. Next, they add a new greeting and modify default responses to make the bot friendly and helpful. The training continues by adding questions and answers for common requests such as directions and contact information. Students then share their chatbot with a friend to test the design. They analyze the conversation to improve responses.

- In session 6, students deploy their virtual agent. To prepare they use a checklist to verify that the chatbot can complete essential tasks. Once they are certain it is ready to use, they share their bot. This allows new members or students to get the information they need about an organization.

Implementation and Technology Integration Ideas

TechnoChatbot AI has 20 assignments divided into six Sessions. In TechnoChatbot AI, students become chatbot developers. They build chatbots using Scratch coding and the free bot-builder, Bot Libre. Each task requires students to apply computational thinking to design a bot that can mimic the flow of a real conversation. The activities are designed to provide an understanding of the practical applications of chatbots. Moreover, this course is a fun exploration of the power of artificial intelligence and natural language processing.

Ideas for Implementation

- *Artificial Intelligence Unit:* Natural language processing (NLP) is a type of artificial intelligence. It allows a computer to understand text and spoken language. Students explore the power of this technology throughout TechnoChatbot AI. However, it isn't until Sessions 4-6, when students use the bot-builder, Bot Libre, that they apply NLP to train a bot. If your time is limited, Assignments 1-2 and the Session 1 Extension Activity offer a simple introduction to how chatbots use artificial intelligence. You can explore large language models such as ChatGPT in the Session 2 Extension Activity.
- *Computer Science Class:* If you are interested in teaching coding skills, Sessions 2-3 uses Scratch blocks to build scripts. Students combine logic, variables, lists, and operators to design bots that can interact with a user. Please note, in the real world, Scratch is not used to design chatbots. However, the program can help students to think like chatbot developers using a program that is familiar.
- *Digital Citizenship Outcomes:* Developing chatbots requires students to join the Scratch community and create a Bot Libre account. Both platforms have guidelines that must be followed to remain a member. Behaving as a responsible digital citizen is essential. This is especially true when using Bot Libre, as it is available for a mature audience as well as teens. If you are teaching digital citizenship the Session 3 Extension Activity focuses on intellectual property and copyright. The Session 4 Extension Activity places a focus on terms of use and privacy.
- *Workshop Series*: If you are running a workshop series as part of an after-school program or community event, then you will need to select assignments from TechnoChatbot AI that fit the number of classes offered. Also, consider the age range and abilities of students. For younger students complete Sessions 1 to 3 to build two unique bots using Scratch. Alternatively for older students complete Assignments 1,2, and Session 4-6 to create an animated avatar using Bot Libre.

Technology Integration Suggestions

The TechnoChatbot AI course is primarily a STEM project about chatbot development and artificial intelligence. However, the activities also integrate into other areas of curriculum including computer science, information technology, data analysis, business studies, and graphic design.

- *Computer Science*: TechnoChatbot AI introduces programming concepts in Sessions 2-3. This course is not an introduction to Scratch. Instead, students use conditional logic to trigger output, operators for keyword matching, variables to store input, lists to manage user data, and broadcasting to control the flow of scripts.
- *Information Technology/App Development:* Building a chatbot is an introductory activity to building AI apps. Throughout the course students must apply logical thinking and problem-solving skills to predict what a user might ask. They then fine-tune the chatbot to improve its responses. Also, to create a positive user experience, they empathize with the user and adjust the design based on this perspective. These are transferrable skills to other app development tasks.
- *Business Studies Course*: TechnoChatbot AI focuses on the practical applications of artificial intelligence to reduce mundane tasks. It is a hands-on way to explore how chatbots can help businesses become more efficient while improving customer relationships. A strong emphasis is placed on recognizing the needs of the end-user.
- *Graphic Design*: Session 3 has students design an order screen for a chatbot using the Scratch paint editor. This task simulates the content a website landing page or an ecommerce app would require for a fundraising campaign. The focus is on developing a viable design solution that considers restrictions such as the placement of the input box and order list.

This is a preview of the teacher guide.
Pages have been omitted.

Session 4
Design a Virtual Agent

In this session, students use the bot-builder app, Bot Libre, to design a virtual agent for a school or an organization. It will provide help to a new student or member. The chatbot will use natural language processing to answer common questions, provide directions, connect a user to information sources, and more. To start, they select a topic such as a local drama club, sports team, or art class. Next, they create a bot and then chat with it to discover what it does and does not know. Afterwards, they select a voice that will appeal to users. An extension activity emphasizes the need to be a responsible digital citizen by examining the Bot Libre terms of use and privacy policy.

Assignment 13: Plan a Virtual Agent

Assignment 14: Register for a Bot Libre Account

Assignment 15: Build a Virtual Agent

Session 4 Review: About Conversational Bots

Session 4 Skill Review: Make a Game Bot

Session 4 Extension Activity: Be a Responsible Digital Citizen

Session 4 Getting Started

Overview

In this session, students use the bot-builder app, Bot Libre, to design a virtual agent for a school or an organization. It will provide help to a new student or member. The chatbot will use natural language processing to answer common questions, provide directions, connect a user to information sources, and more. To start, they select a topic such as a local drama club, sports team, or art class. Next, they create a bot and then chat with it to discover what it does and does not know. Afterwards, they select a voice that will appeal to users. An extension activity emphasizes the need to be a responsible digital citizen by examining the Bot Libre terms of use and privacy policy.

Materials

- Bot Libre: https://chatbot.technohub.technokids.com
- Assignments 13 – 15
- Plan a Virtual Agent planning sheet (optional)
- Virtual Agent Checklist (optional)
- Virtual Agent Rubric (optional)
- Session 4 Review: About Conversational Chatbots (optional)
- Session 4 Skill Review: Create a Game Bot (optional)
- Session 4 Extension Activity: Be a Good Digital Citizen (optional)

Teacher Preparation

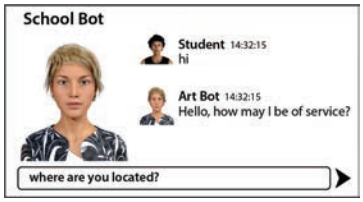
(Refer to the Prepare to Teach section of this course for instructions)

- Teachers **must create a BotLibre account**. You will use it to view students' bots. Refer to Assignment 14 for registration instructions. Create a User ID that will be easy for students to type such as **ClassSchool** (e.g., computersjkcs). Optional instructions in Assignment 15 have students add the teacher as an administrator to their bot. This will not only give you full control, but it will allow you to easily view students' chatbots from the My Bots area.
- Examine the *Virtual Agent* checklist and rubric to understand the evaluation criteria.
- Make the files in the Chatbot folder available to students. It contains the planning sheet.

Teaching Strategy

In this session, students create a chatbot using Bot Libre. Explain session scenario:

> *In this session, you begin to design a virtual agent for your school or an organization. It could be a drama club, sports team, art studio, or theatre group. New members or students will be able to converse with the chatbot to ask questions, get directions, or connect to important information. To reply, the bot will use natural language processing, which is a type of artificial intelligence.*
>
> *To start, you will select an organization and then make a list of frequently asked questions. Afterwards, you will follow instructions to build an animated avatar that speaks to users using Bot Libre. You will then chat with the bot to discover what it does and does not know. In the following session, you will train your virtual agent to improve its responses.*



IMPORTANT:	Bot Libre is available online as an open source chatbot platform. It is designed for a mature audience. However, **TechnoKids has created a limited version of Bot Libre at https://chatbot.technohub.technokids.com.** It restricts sharing options and content, such as avatars. We encourage you to use the TechnoKids platform. It offers age-appropriate online tools with an emphasis on digital safety. Instructions in this course refer to the Bot Libre platform hosted by TechnoKids – not to BotLibre.com.

Assignment 13 Plan a Virtual Agent

In this assignment, students form a plan for a chatbot that will act as a virtual agent. It will be an animated avatar that can speak. The chatbot will answer questions about a local club, team, or group. To start students read about conversational chatbots. Afterwards, they complete a planning sheet to list the types of knowledge their virtual agent will require.

To spark inspiration, you may wish to generate a list of extracurricular activities both at school and in the community that appeals to teens. Encourage your students to select a place where they are a current member or would like to join. This will help them to pose frequently asked questions.

This task creates an authentic learning experience that mimics the job of a real chatbot developer. Advise students that the place they select must have:

- a website, blog, or social media page, as the bot will provide links in its responses.
- a physical building, as the bot will post a map to the location.
- a phone number, email, or staff directory, as the bot will connect the user to a real person.

Introduce the terms:

- *conversational chatbot*: bot that can mimic the flow of a real conversation
- *natural language processing*: artificial intelligence technology that enables a computer to understand text and spoken words
- *virtual agent:* chatbot that can complete menial and recuring tasks that are often done by customer service

Assignment 14 Register for a Bot Libre Account

In this assignment, students register for a Bot Libre account using the TechnoKids platform. Registration requires a working email address. Please note, students must be 13 to sign up.

Introduce the terms:

- *bot-builder*: application that allows users to create a chatbot without programming
- *user id*: nickname or alias used in place of a person's real name

It is important that students behave as responsible digital citizens. Students should never use their bot to bully, post hateful comments, spew profanity, or respond rudely.

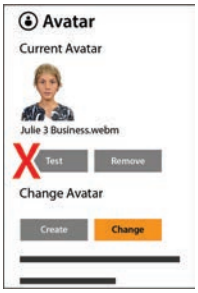
Session 4 Extension Activity: Be a Responsible Digital Citizen

When students register for a Bot Libre account, they must agree to terms of service. The Session 4 Extension Activity has students read Bot Libre's terms and privacy policy to answer questions. This is an excellent way to promote digital citizenship.

Assignment 15 Build a Virtual Agent

In this session, students create their virtual agent. They give it a name and select a template that comes pre-loaded with scripts that help it to understand human language. Students ask their chatbot questions to discover what it knows. Encourage them to notice when the replies make sense and when the bot is confused. This information will be used in the next assignment to train and improve the virtual agent.

Bot Libre Tips for Voice Selections:



- **Use the *Test Chat* option in the menu – not the button.** When selecting an avatar, the Test button directly below the avatar can remove a user from the Admin Console. Do not use it.
- **Bot Libre times outs if a user is inactive for a short time**. The error message "No bot has been selected" will display. Students must:
  - Click their profile at the top of the screen. Click *My Bots.*
  - Select your bot. Click *Admin Console.*
  - Select either *Avatar* or *Voice*.
- **Bot Libre signs out if a user is inactive for a long time.** Should this happen, sign back in.

Lesson Plan

Assignment 13: Plan a Virtual Agent

- What is a conversational chatbot?
- Why use a conversational chatbot?
- Answer questions to plan a virtual agent.

Assignment 14: Register for a Bot Libre Account

Assignment 15: Build a Chatbot

- Sign into Bot Libre. Create a new bot.
- Chat with the bot to discover what it does and does not know.
- Test the chatbot to decide if the voice suits the chatbot.
- Select a voice for the chatbot. Test it again.
- Disconnect the chatbot and sign out.

Learning Objectives

Applied Technology

- assume the role of a chatbot developer
- develop a conversational chatbot that is a virtual agent which helps new members
- test a chatbot to discover its knowledge
- build a virtual friend that can play a game (optional)

Content Knowledge | Chatbots in the Real World | Computational Thinking

- define conversational chatbot and natural language processing
- recognize the ways that a conversational chatbot can help people
- plan a virtual agent that answers questions, give directions, and offers contact details
- recognize the knowledge a chatbot must possess
- evaluate the limitations of a chatbot's knowledge

Digital Citizenship

- sign up for the Bot Libre account
- customize profile and chatbot settings to maintain privacy
- sign in and out of a web-based app appropriately
- add a user to a chatbot and set their usage rights (optional)
- examine a service's terms of use and privacy policy (optional)

Chatbot Development | Bot-builder

- create a new bot
- apply a suitable template with pre-loaded scripts
- converse with a chatbot to test its responses
- apply a voice that will appeal to users

Session 4 Skill Review: Create a Game Bot

Have students practice their skills by building a bot that can play games. This task has students discover the strengths and limitations of a virtual friend.

Assignment 13 Plan a Virtual Agent

You are going to design a virtual agent for your school or an organization. It will provide help to a new student or member.

You will use Bot Libre, a free bot-builder, to create your virtual agent. It will answer common questions, give directions, provide contact details, and connect a user to helpful information.

The chatbot will use an animated avatar to create a presence on a website, blog, or social media page. It will speak to visitors.

Before you begin, read about conversational chatbots and artificial intelligence. Afterwards, answer the questions to organize your ideas for your own bot.

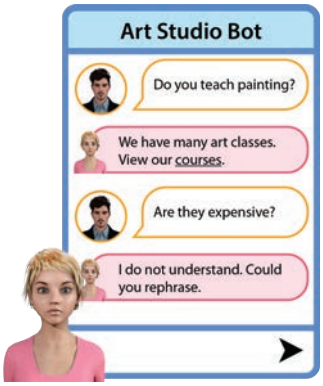
What Is a Conversational Chatbot?

A conversational chatbot can mimic the flow of a real conversation. It uses **natural language processing**, which is a type of artificial intelligence to speak or write in a way that seems human. The chatbot has scripts that allow it to recognize the pattern of the words, decode their meaning, understand the context, and then provide an appropriate response.

How Does a Conversational Chatbot Work?

A conversational chatbot:

1. waits for a user to ask a question or make a request.
2. decodes the meaning of the input.
3. checks its knowledge base to find a correct response.
4. provides an appropriate reply that sounds like a real person.
5. informs the user it does not understand when it lacks confidence in its reply and is unsure.



Conversations are stored in a log. This allows the chatbot developer to notice when the bot is confused and cannot provide help. When this happens, the chatbot receives training to improve its responses. Over time, the chatbot can become quite intelligent.

Why Use a Conversational Chatbot?

Conversation chatbots are used to help people in real time. With a chatbot:

- customers can instantly get answers to their questions.
- customers do not need to waste time searching a website trying to find answers.
- employees no longer answer the same requests over and over again.
- businesses can send customers directly to a web page that has relevant information.
- businesses can provide customers with helpful resources such as a map or price list.
- businesses can connect with customers any time of day.

Plan a Virtual Agent

You are going to design a virtual agent for your school or an organization. It will provide help to a new student or member. It will be able to answer questions, provide directions, and more!

> **TIP:** Think like a chatbot developer. Visit the group's website or social media page. Read their frequently asked questions or posts. What do people want to know?

1. What organization will your chatbot help?

Where are you a member or student?
Is there a place you want to join?
What are your hobbies or interests?

2. What is the URL of their website, blog, or social media page?

3. List **three more questions** a user might ask. Underline the keyword.
   - **What is your address?**
   - **Who should I contact?**
   -
   -
   -

Ideas:
sports team
band
robotics contest
art classes
chess club
dance committee
school council
math league
yearbook
theatre group
guitar lessons
spelling bee
summer camp
code challenge
science fair
poetry corner

4. a. Where is the school or organization located?

   Address:

   b. Use Google Maps to find the location:
   https://www.google.com/maps/
   ☐ Save a screenshot of the **map**.

5. a. Who or how should a person contact the school or organization?
   (For example: name, phone number, or email)

   b. *If available*, find a link to an online contact form or staff directory.

Assignment 14 Register for a Bot Libre Account

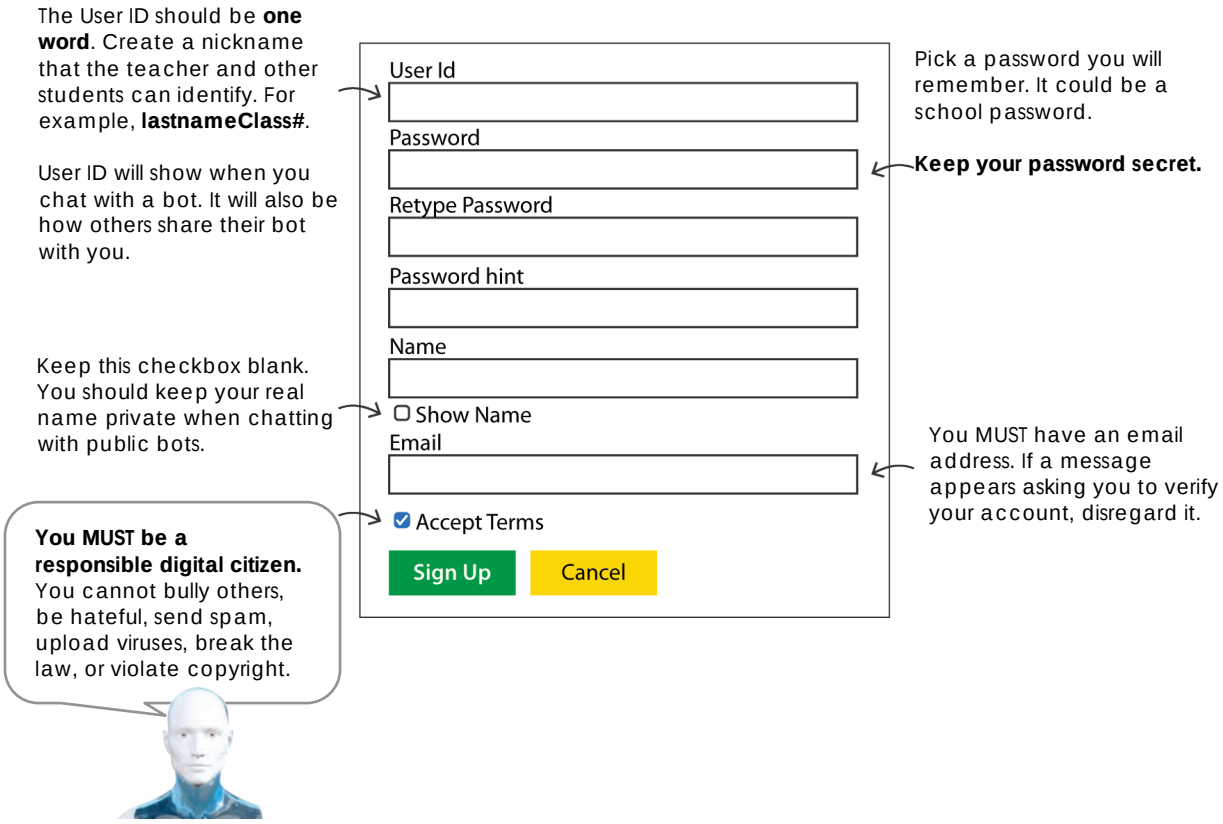
You will create a virtual agent that will be an animated avatar that can chat with new students or members. To design it, you will use Bot Libre, which is a free bot-builder. A **bot-builder** is an application that allows user to create chatbots without knowing programming.

Many companies use bot-builders because they have features that make them simple to use. Plus, they easily embed the bot onto a website, blog, or social media page.

In this assignment, you will register for a Bot Libre account.

Sign Up for a Bot Libre Account

1. a. Visit https://chatbot.technohub.technokids.com
   b. Click *Sign Up*. Sign Up
   c. Complete the fields and then click *Sign Up*.



Sign Out

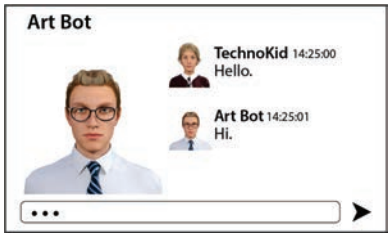
3. Click your profile. Select *Sign Out*.

DIGITAL CITIZENSHIP: Complete the Session 4 Extension Activity about terms of use and privacy.

Assignment 15 Build a Virtual Agent

In this assignment, you begin to create your chatbot. You will:

- create a new bot
- chat with the bot
- change the voice



Sign Into Bot Libre

1. a. Visit **https://chatbot.technohub.technokids.com**

   b. Click *Sign In*. **Sign In**

   c. Enter in your User ID (or email) and password. Click *Sign In*.

Create a New Bot

2. a. From the Welcome screen, click *Create New Bot*.

   b. Complete the fields and then click *Create*.

The Bot Name should relate to the school, organization, or activity. Pick a suitable name.

Create new bot

Bot Name: Type a creative, friendly name for the bot.

Template: service_template

The **service_template** has AI. It uses scripts to reply with greetings, farewells, thanks, and more!

Alias

Description: Chatbot that answers questions about...

What will your chatbot do?

Details ☐
Disclaimer ☐
License
Website
Website Subdomain (or domain)
Categories: Education,

Select ***Education***.

Tags: botclass#,

A tag can help your teacher identify bots. Add a tag with your **class**, **initials**, or **firstname**.

Check ***Private***. This will prevent your bot from being searchable by other Bot Libre members.

☑ Private
☐ Hidden
Access Mode: Everyone
Fork Access Mode: Administrators
Content Rating: Everyone

Select ***Everyone***. This controls the profanity filter, which monitors hateful or rude comments during a chat session.

Create | Cancel

DIGITAL SAFETY: Check to make sure that you have selected *Private*. This will prevent your bot from being viewed by other users.

Chat With the Bot

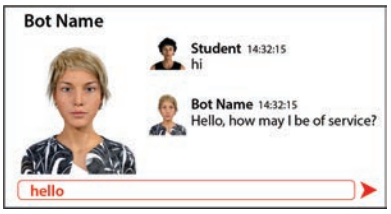
The service bot uses a female avatar by default. First, you need to chat with your bot to discover what it knows and what it does not know.

3. Click *Chat*.

4. a. Your chatbot knows how to greet people. Type **hi**. Press *Send*.

Test more greetings:

hello
hey
good morning
afternoon



b. Your chatbot knows how to reply to thank you. Try it.

thanks
thank you
ty

c. Your chatbot knows how to respond to names in conversations. Try it.

what is your name
my name is *Student*

d. Your chatbot has knowledge of the date and time. Try it.

what day is it
what time is it

e. Your chatbot knows how to do basic math. Try it.

2 + 2
5 * 5

f. Your chatbot can reply to goodbyes. Try it.

bye
good bye
farewell

5. Ask questions about your school or organization. For example:

who should I contact
how much does it cost to join
where are you located

When the bot does not know the answer it will reply, *I do not understand*. However, sometimes it gives a response that does not make sense. You need to train it.

6. Disconnect.

ERROR: If you see the error, "*No bot has been selected*", click your profile at the top of the screen. Select *My Bots.* Click your bot. Click Admin Console.

Select a Voice for Your Chatbot

7. Pick a voice that suits the chatbot.
   a. Click *Admin Console.*
   b. Click *Voice*.
   c. Select a voice and then click *Test*. When you find one you like click *Save*.

TIPS:

- pick a voice that is easy to understand
- change the *test speech* to words your bot might speak

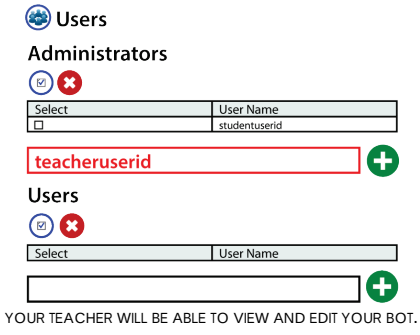
   c. From the menu, click *Test Chat*.

   Note: This method is best for testing the avatar as it keeps you in the *Admin Console.*

   d. Type **hi**. *Does the voice suit the chatbot?*
   e. Close the chat window. **X**

Add Your Teacher as an Administrator

8. a. Click *Users*.
   b. Type your teacher's **userid** into the *Administrators* box. Click .



YOUR TEACHER WILL BE ABLE TO VIEW AND EDIT YOUR BOT.

Sign Out

9. From your profile, click *Sign Out*.

In the next assignment, you will train your bot to be more helpful.

Session 4 Review: About Conversational Chatbots

Chatbot Terms

Match the term to its definition.

C	1. conversational chatbot	A.	icon or character used to represent a chatbot to give it personality
D	2. natural language processing	B.	nickname or alias used in place of a person's real name
A	3. avatar	C.	chatbot that can mimic the flow of real conversation
B	4. user id	D.	AI technology that translates human text and spoken word into a form a computer can understand

/4

How Does a Conversational Chatbot Work?

5. Number the steps in the correct order.

____ decode the meaning of the user's input

____ provide a reply that sounds like a real person

____ wait for the user to ask a question or make a request

____ check knowledge base to find a correct response

/4

Why Use a Conversational Chatbot?

6. Pick **two ways** customers can benefit from using a conversational chatbot:

   a. chatbot knows more than a real person who works in customer service

   b. customer always gets the correct answer from the chatbot

   c. customer can get directions or links to helpful resources from the chatbot

   d. customer does not need to waste time searching a website for answers

/2

TOTAL: /10

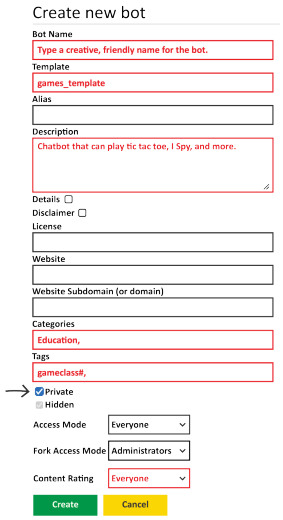
Session 4 Skill Review: Make a Game Bot

You will apply your knowledge to invent a virtual friend using Bot Libre.
Play **Tic Tac Toe** and **I Spy!**

1. Sign into Bot Libre: https://chatbot.technohub.technokids.com/
2. From the Welcome screen, click *Create New Bot*.

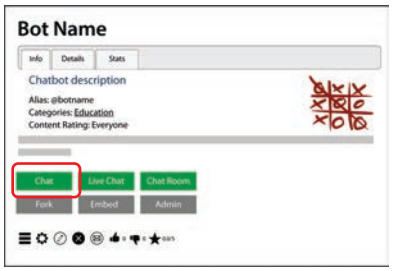
3. Type a Bot Name. Select the **games_template**. Complete the fields. Click *Create*.

Check *Private* to make sure you are the only user to view and edit the game.



A tag will help your teacher identify bots. Use **game*class#*** and your **initials**, or **first name.**

4. Click *Chat*.



5. Play **Tic Tac Toe** and **I Spy** with the chatbot. When done, disconnect.

6. Pick a voice that kids will like.
   a. Click *Admin Console*.
   b. Click *Voice*.
   c. Pick a voice.
   d. Test your chatbot.

7. Share bot with your teacher.
   They MUST have a Bot Libre account:
   a. From the *Admin Console*, click *Users*.
   b. Type your teacher's **userid** into the *Adminstrators* box. Click .

Answer Questions About the Game Bot

1. What name did you give your chatbot?

2. Describe the voice you picked for the chatbot. Why did you pick it?

3. Your chatbot expresses emotions. This happens with words or sometimes the tone of their voice. Does it make the chatbot seem like a real person? Why or why not?

4. Play TicTacToe with the chatbot. Was it easy to play? Why or why not?

5. Play I Spy with the chatbot. Pick *guess*. How could this game be improved?

6. Why might a person want to play a game with a chatbot, instead of a real person?

Session 4 Extension Activity: Be a Responsible Digital Citizen

To use Bot Libre, you must agree to their terms and conditions. Read the Terms of Service and Privacy Policy, then answer the questions. TIP: Scan the text using the **bold** words in a question.

Terms of Service

1. Visit https://www.botlibre.com/terms.jsp
   a. List 4 things that you may **not** do according to Bot Libre's *Rules and policies*.

   - violate copyright
   - bully; collect personal information
   - use content that is hateful
   - upload viruses; act unlawful; send spam

   b. What will happen if user carries out a **violation** of any of the rules or policies?

   terminate account, delete bot instances

   c. Do you think this is a fair agreement? Why or why not?

2. a. If you **delete** your bot, could it still appear for a period of time?

   yes, it exists in backup copies

   b. How do you think this might this affect a person's decision to play an inappropriate joke or other questionable activity with a bot?

   There is proof of the inappropriate behavior.

3. Bot Libre tries to keep the website **safe**. What can you do to help?

   flag bot instances, responses, users, and posts that violate rules and policies

Privacy Policy

4. Visit https://www.botlibre.com/privacy.jsp
   a. Write the email of a **contact** at Bot Libre to get information or support.

   support@botlibre.com privacy@botlibre.com

   b. How much of any bot **conversation** does Bot Libre store in memory?

   every interaction is recorded into the bot's memory

   c. What is the benefit of making your bot **private**?

   not public, only available to the bot creator and users they share the bot with

This is a preview of the teacher guide.
Pages have been omitted.

Appendices

Refer to the appendices for additional resources:

Appendix A: Assessment Tools

Appendix B: Glossary

Appendix C: Contact Information

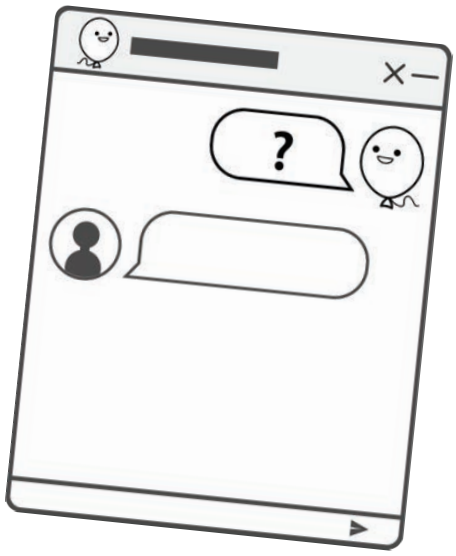
This is a preview of the teacher guide.
Pages have been omitted.

Event Chatbot Marking Sheet

TASK:

Design a chatbot for an upcoming school event. It could be a prom, dance, spirit day, play, game, talent show, or retirement party. Attendees will use the chatbot to ask questions about the date, time, and place. It will use keyword matching and if-then logic to reply.

Personality	
The avatar uses an image that relates to the event or school.	/1
The chatbot has a suitable name.	/1
The chatbot is friendly.	/2
Quality	
The chatbot can answer questions about the event such as date, time, and place.	/3
The chatbot provides information about a contact person or other event details.	/2
The chatbot can respond to the same type of question even if it is phrased differently.	/3
Ease of Use	
The chatbot opens when the avatar is clicked.	/1
The chatbot closes when an "End Chat" button is clicked.	/1
Instructions explain how to use the chatbot.	/1
Total:	/15



Order Chatbot Marking Sheet

TASK:

Develop a transactional chatbot for a school fundraiser. It automates completing a paper form. The chatbot will take customer orders by asking questions and storing the answers as a list. Customers will be able to edit their order before they submit.

School Fundraiser	
The purpose of the school fundraiser is clearly explained.	/1
The items selected for a school fundraiser are practical and priced fairly.	/1
The idea for a school fundraiser is creative.	/2
Chatbot Design	
The Order Screen outlines details such as items, price, choices, and other information.	/4
The layout of the Order Screen is balanced, and all elements are easy to read.	/3
Order Screen is attractive.	/1
The chatbot avatar uses an image that relates to the school fundraiser.	/1
The chatbot is simple to use and friendly. (e.g., greets the user, thanks them for order)	/2
Additional sprites are used to decorate the page or show fundraiser items.	/1
Chatbot Function	
Instructions explain how to use the chatbot.	/1
The chatbot begins when the avatar is clicked.	/1
The order list is empty when the chat session begins.	/1
The chatbot asks questions in a logical order.	/1
The chatbot asks at least five relevant questions.	/5
The chatbot stores customer input in a list.	/1
The customer can edit their order by replacing a list item with a new value.	/1
The chat session ends when the order is correct.	/1
The chatbot is enhanced with options such as list labels, sound, or a print feature.	/2
Total:	/30

Virtual Agent Rubric

TASK:

Design a conversational chatbot that acts as a virtual agent for an organization. This might be a sports team, school club, or community group. The bot should answer common questions a new student or member will ask. It should be able to give directions, provide contact details, and connect a user to helpful information. It must be friendly and respond in a professional manner.

	1 Needs Improvement	2 Fair	3 Good	4 Excellent
Design	animated avatar does not suit the school, organization, or activity	animated avatar is the default bot	animated avatar is a custom selection that is appropriate for a school environment	animated avatar is a custom selection that suits the organization and appeals to the user
	does not respond in a friendly, professional manner	sometimes responds in a friendly manner	consistently responds in a friendly, professional manner	consistently responds in a friendly, professional manner with replies that are easy to understand
Intent	does not detect the meaning of the user's questions about the organization	sometimes detects the meaning of the user's questions about the organization	consistently detects the meaning of the user's questions about the organization	always detects the meaning of the user's questions about the organization
	does not offer accurate responses when the same question is phrased differently	sometimes offers accurate responses when the same question is phrased differently	consistently offers accurate responses when the same question is phrased differently	always offers accurate responses when the same question is phrased differently
Conversation	greeting is missing	greeting is missing some key elements (name, description, keywords)	greeting includes key elements (name, description, keywords)	greeting includes key elements (name, description, keywords) and is phrased to make the bot seem likable
	default responses are not helpful	default responses are sometimes helpful	default responses are helpful and include a link to organization	default responses are helpful, include a link to organization, and is phrased to avoid annoying a user.
	chatbot cannot answer questions about location or contact details	chatbot can sometimes answer questions about location or contact details	chatbot can answer questions about location and contact details; responses often include resources (e.g., map, link to site)	chatbot can answer questions about location and contact details; responses often include helpful resources (e.g., high-quality map, link to directory or contact form)
	chatbot cannot answer FAQs a new student or member would ask	chatbot can sometimes answer FAQs a new student or member would ask	chatbot can answer most FAQs a new student or member would ask	chatbot can answer almost all FAQs a new student or member would ask
Practical Application	chatbot would not help the organization	chatbot would be somewhat helpful to an organization	chatbot would be very helpful to organization	chatbot would be an exceptional help to an organization