



Reedy Creek Magnet Middle School
Girls Who Code Club Presents

Social Distance Activity Recommendation Chatbot: Quarantina

Kicking off the Virtual Club Week 1

- Club Facilitator Intros

- ☆ Jordan D'Addeo, Software Developer
- ☆ Olivia Davis, Software Designer

- Learned what Computer Science is:

Computer science is the study of all of the different ways computers can be used to make things easier, faster, or more fun.

- Learned what a Girls Who Code Club is:

GWC is a place for us to practice the skills of a computer scientist as we build a project we care about with our friends.

- Discussed the agenda for each session:

Mix of learning and applying learning through activities

- Spotlight Video: [Ada Lovelace](#) - Ada is considered the first computer programmer.

- Design Thinking Exercise: **Hopes and Fears**

The image shows a Zoom meeting interface. At the top, the title bar reads "Christine Sachs _ Staff - ReedyCreekMS is presenting". The main video area displays a slide with two illustrations of women in historical dresses, one in blue and one in yellow and red. Below the video is a gallery view of participants. On the right, a "Meeting details" sidebar shows a chat log with messages from "Summer Buck _ Student - ReedyCreekMS" at 11:23 AM, 11:25 AM, and 11:29 AM.

Below the Zoom interface is a design thinking exercise titled "Hopes and Fears". It is divided into two sections: "Hopes" and "Fears".

Hopes:

- Coding!**
 - I hope to learn more about computer programming
 - I hope we do some coding that is beyond block coding! Diya
 - I hope to learn something new about the technology we're using for the project.
- Having fun**
 - we can have a great year together and code
 - I hope we have a lot of fun in the club
- Activities**
 - I hope we can do some hands-on things too! Diya
- Cool projects**
 - I hope we create a useful tool for middle school students!
 - I hope our project gets shared with everyone at the school!!
 - Making something that works. -Summer Buck

Fears:

- Time to create something**
 - Able to finish something we're proud of
 - Running out of time before completing something Diya
 - Me forgetting about a important meeting (Like today) -Summer Buck
 - I fear forgetting the meeting dates
- Learning**
 - Problems getting virtual platform to work in time to have a good meeting!
 - Not being able to understand writing code
 - Learning how to code virtually
- Bugs**
 - messing up the code
 - messing up on a long string of code

Design Thinking, Empathy Maps, and Chatbot Intro

Week 2

- Spotlight Video: [Alyssia Jovellanos](#) - Co-founded and directed DeltaHacks, Canada's first and largest student-run hackathon for change.

- Presentation: IBM Design Thinking
 We use Design Thinking as a way to solve some complex problems here at IBM and create innovative solutions for our users.

- Design Thinking Activity:
 ☆ Empathy Map

- Project Reveal: Create a chatbot that shares socially distance approved activities you can do with your friends.

- Presentation: Examples of Chatbots

Principles

- A focus on user outcomes
- Diverse empowered teams
- Restless reinvention

The Loop

Observe Reflect Make

The Keys align us.

- Hills
- Playbacks
- Sponsor Users

IBM Design Thinking is a framework helping us get things done in a way that enables speed, constantly delivers new value, and ensures minimal risk.

Design an alarm clock.
 Design a better way for people to wake up in the morning.

Says

- when can i go back
- Writing to my friend on discord "Hello Wanna play roblox"
- "Can I see my friends?"
- "Where is my computer charger?"
- Wishes there were more fun things to do at home
- Where is the assignment Ms. I don't know your name?
- "I don't remember my schedule this week"
- "What's for dinner?"
- "I don't understand!"
- How will I ask my teacher a question after class?
- When will I go back to school?
- What is going to happen in my Math Test, Will my grade be good
- When will I buy the halloween stuff in Royale High

Thinks

- Wants to get fresh air

Does

- Goes to school online using a laptop computer
- Playing video games
- Joins lots of Google Meets
- Plays roblox all the time
- Sits on my bed to do homework

Feels

- Sad they can't see their friends
- Can't play games with my friends in person
- Can't make friends online
- Doesn't know who they are working with
- people are all looking at me

Themes:

- Hard to meet people online
- Hard managing a schedule online
- A lot of extra screen time
- A lot of things up in the air

Project Brainstorm and Learning about Chatbots

Week 3

- Spotlight Video: [Amali de Alwis](#) - CEO of Code First: Girls

- Activity:

Chatbot Project Brainstorming:

- Inside Activities
- Outside Activities
- Digital Activities
- Other Activities

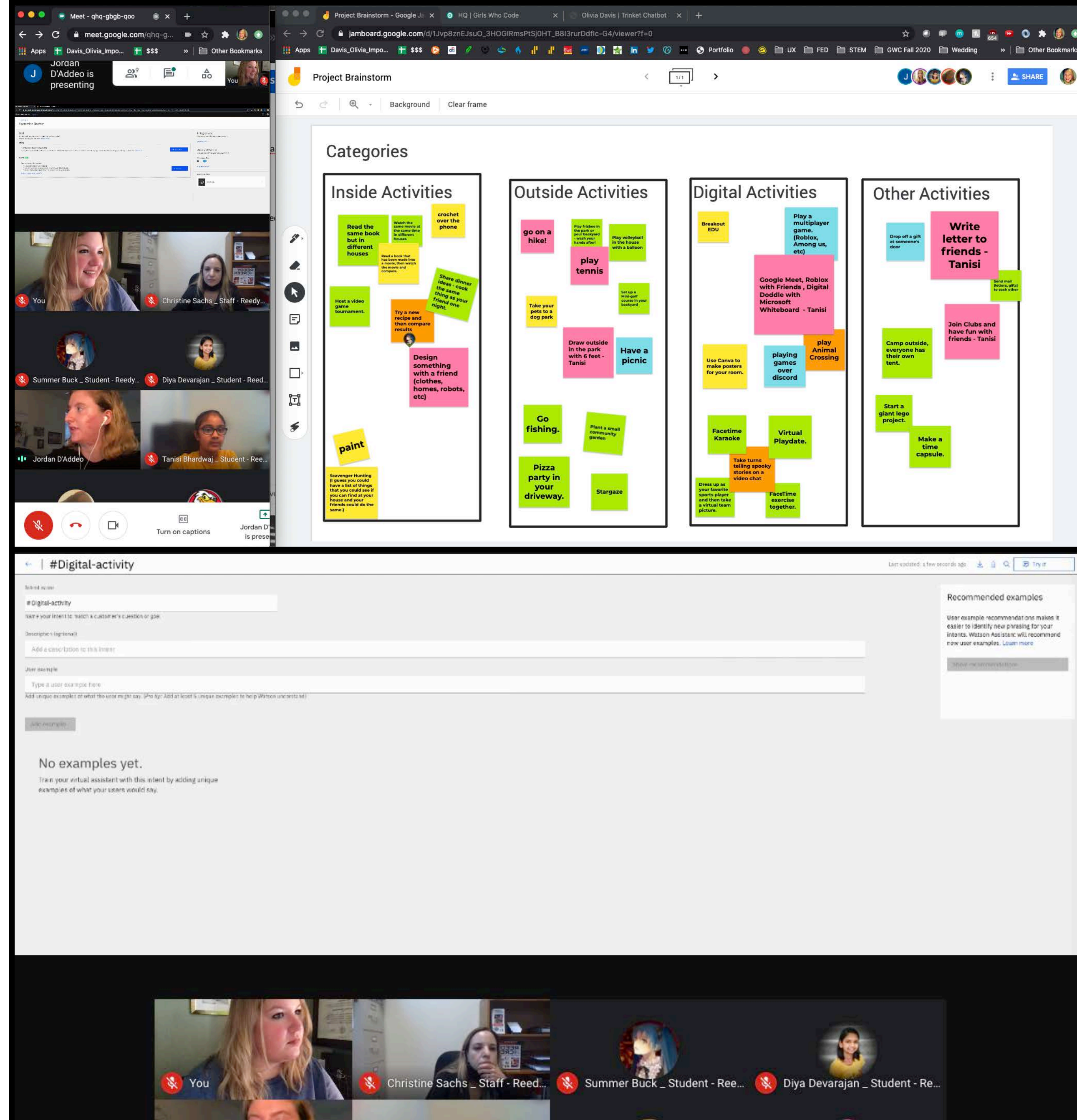
- Learned about Watson Assistant and Chatbots

☆ Intents

☆ Entities

- Activity:

Create an intent and entity with one of the activities from the brainstorm



Writing Intents and Entities

Week 4

- Spotlight Video: [Katherine Johnson](#) - an American mathematician whose calculations of orbital mechanics as a NASA employee were critical to the success of the first U.S. crewed spaceflights.

- Activity:

Turned the activities we brainstormed into intents and entities to prepare the input for the chatbot.



←

- Inside Activities
- Outside Activities
- Digital Activities
- Other Activities

Inside Activities

Intent	Entity
I'm hungry	Food: hungry

Outside Activities

Intent	Entity

Digital Activities

Intent	Entity

Categories

Inside Activities

- Read the same book but in different houses
- Watch the same movie at the same time in different houses
- crochet over the phone
- Share dinner ideas - cook the same thing as your friend one night.
- Host a video game tournament.
- Try a new recipe and then compare results
- Design something with a friend (clothes, homes, robots, etc)
- paint
- Scavenger Hunting (I guess you could have a list of things that you could see if you can find at your house and your friends could do the same.)

Outside Activities

- go on a hike!
- Play Frisbee in the park or your backyard - wash your hands after!
- Play volleyball in the house with a balloon
- play tennis
- Set up a Mini-golf course in your backyard
- Take your pets to a dog park
- Draw outside in the park with 6 feet - Tanisi
- Have a picnic
- Go fishing.
- Plant a small community garden.
- Pizza party in your driveway.
- Stargaze

Digital Activities

- Breakout EDU
- Play a multiplayer game. (Roblox, Among us, etc)
- Google Meet, Roblox with Friends, Digital Doodle with Microsoft Whiteboard - Tanisi
- Use Canva to make posters for your room.
- playing games over discord
- play Animal Crossing
- Facetime Karaoke
- Virtual Playdate.
- Take turns telling spooky stories on a video chat
- FaceTime exercise together.
- Dress up as your favorite sports player and then take a virtual team picture.

Other Activities

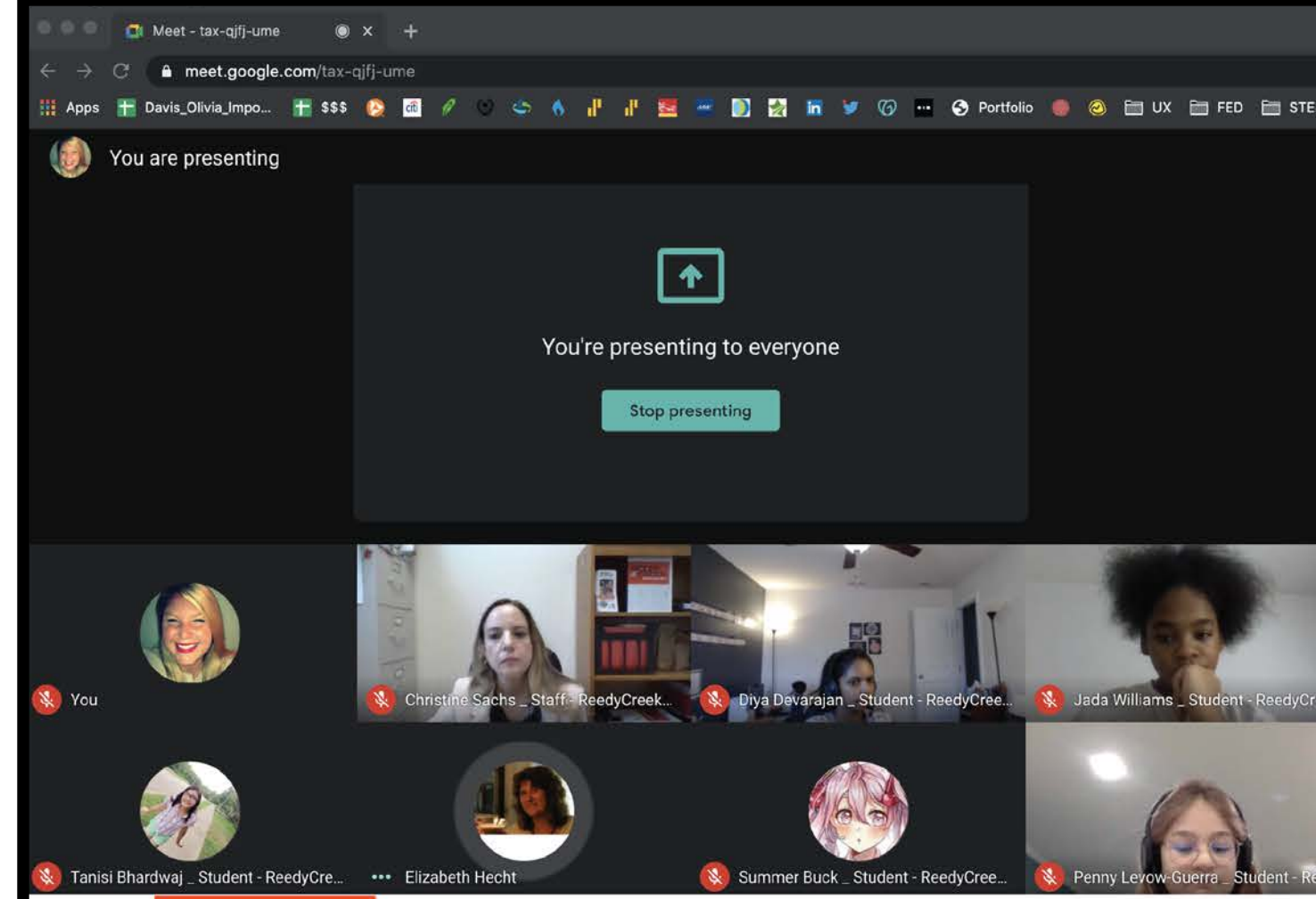
- Drop off a gift at someone's door
- Write letter to friends - Tanisi
- Send mail (letters, gifts) to each other
- Join Clubs and have fun with friends - Tanisi
- Camp outside, everyone has their own tent.
- Start a giant lego project.
- Make a time capsule.

Intro to HTML and CSS

Week 5

- Presentation:
HTML/CSS 101 with Liz Hecht, Software Support Engineer

- Activity:
Get an HTML page running locally



Formatting

Spaces and new lines are ignored by the browser unless you provide formatting tags:

- `<p>` = paragraph
- `
` = new line
- `` = ordered list, numbered
- `` = unordered list, bulleted
- `` = list items

```
<table border="1">
  <tr> table row </tr>
  <td> table cell </td>
  <th colspan="2"> Cells that span more than one column </th>
  <th rowspan="2"> cells that span more than one row </th>
</table>
```

Let's see how its done

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>HTML basics</title>
  </head>
  <body>
    <p>
      <h1>
        <center>
          HTML and CSS
        </center>
      </h1>
      <br>
      <b>Writing HTML is as simple as storing everything in a text file and giving it a .html extension.</b>
      <i>
        Everything on the page is displayed as plain text unless you add formatting.
      </i>
      <br>
      <hr>
      <pre>
        Preformatted text leaves the all of the formatting including spaces and paragraphs
        that you type within the paragraph or section.
      </pre>
      <ol>
        <li>This is one example of a list</li>
        <li>You can also use unordered lists</li>
        <li>Or you can use dt for description lists</li>
      </ol>
    </p>
  </body>
</html>
```

HTML and CSS

Writing HTML is as simple as storing everything in a text file and giving it the extension .html

Everything on the page is displayed as plain text unless you add formatting.

Preformatted text leaves the all of the formatting including spaces and paragraphs that you type within the paragraph or section.

1. This is one example of a list
2. You can also use unordered lists
3. Or you can use dt for description lists

Writing Dialogues in the Chatbot

Week 6

- Spotlight Video: [Fran Kalal](#) - a Cloth and Simulation Technical Director at Pixar Animation Studios and has tailored outfits and simulated shots on “Up,” “Brave” and “Inside Out.”

- Presentation:

How dialogues bring the intents and entities to life and make them conversational.

- Activity:

Create dialogues

The screenshot displays the IBM Watson Assistant Lite interface for a dialog named "Covid activities". The interface is divided into several sections:

- Left Sidebar:** Contains navigation options: Intents, Entities, Dialog (selected), Options, Analytics, Versions, and Content Catalog.
- Dialog Editor:** Shows a list of dialog nodes with their details:
 - Welcome:** welcome, 1 Responses / 0 Context Set / Does not return
 - Outside Activities:** #Outside-activity && @good-weather, 1 Responses / 0 Context Set / Does not return
 - Movies:** #Indoor-Activity || #Digital-activity && @Movies-and-TV, 1 Responses / 0 Context Set / Does not return
 - Play a video game:** #Digital-activity && @Video-game, 1 Responses / 0 Context Set / Does not return
 - Talk to my friends:** #Social, 1 Responses / 0 Context Set / Does not return
 - Anything else:** (partially visible)
- Right Panel:** Shows configuration options for the selected node, including "If assistant recognizes" (set to anything_else) and "Assistant responds" (set to Text).
- Try it out Panel:** A chat window on the far right showing a simulated conversation:
 - Assistant: "Hi there friend! My name is Quarantina. I can help you find socially distance approved activities to do with your friends. How's the weather today?"
 - User: "It's sunny"
 - Assistant: "#Outside-activity @good-weather:Sunny"
 - User: "If you like sports, maybe you can play Tennis"
 - Assistant: "🎾! Volleyball 🏐 is a nice choice too!"

Writing Dialogues in the Chatbot

Week 7

- Spotlight Video: [Danielle Feinburg](#) - Director of Photography at Pixar.
- Set up Trinket accounts to work on HTML page that will hold the chatbot
- Activity:
Practice HTML/CSS in Trinket

The image is a collage of three screenshots related to a coding project. The top-left screenshot shows a Google Meet session in progress, with a 'You're presenting to everyone' overlay and a 'Stop presenting' button. The top-right screenshot shows a Trinket account interface for a chatbot named 'Socially Distance Activities', displaying a chat window with a 'Watson Assistant' chatbot. The bottom screenshot shows a code editor (Brackets) with HTML code for the chatbot page, including a title, a paragraph of text, a footer, and a Glitch button. The code is as follows:

```
54  
55  
56 <!-- This starts the body section -->  
57 <body>  
58  
59  
60 <h1>Socially Distance Activities</h1>  
61  
62 <p>  
63 I created a chatbot using Watson Assistant to help give  
64 me friends ideas of socially distanced activities they  
65 can do!  
66 </p>  
67 <!-- Footer -->  
68 <div class="footer">  
69 <p>Reedy Creek Magnet Middle School Fall 2020 Virtual  
70 Girls Who Code</p>  
71 </div>  
72 <!-- End footer -->  
73  
74 <!-- include the Glitch button to show what the webpage is  
75 about and  
76 to make it easier for folks to view source and remix  
77 -->  
78 <div class="glitchButton"  
79 style="position:fixed;top:20px;right:20px;"></div>  
80 <script src="https://button.glitch.me/button.js" defer>  
</script>  
</body>  
<!-- This ends the body section -->  
</html>
```

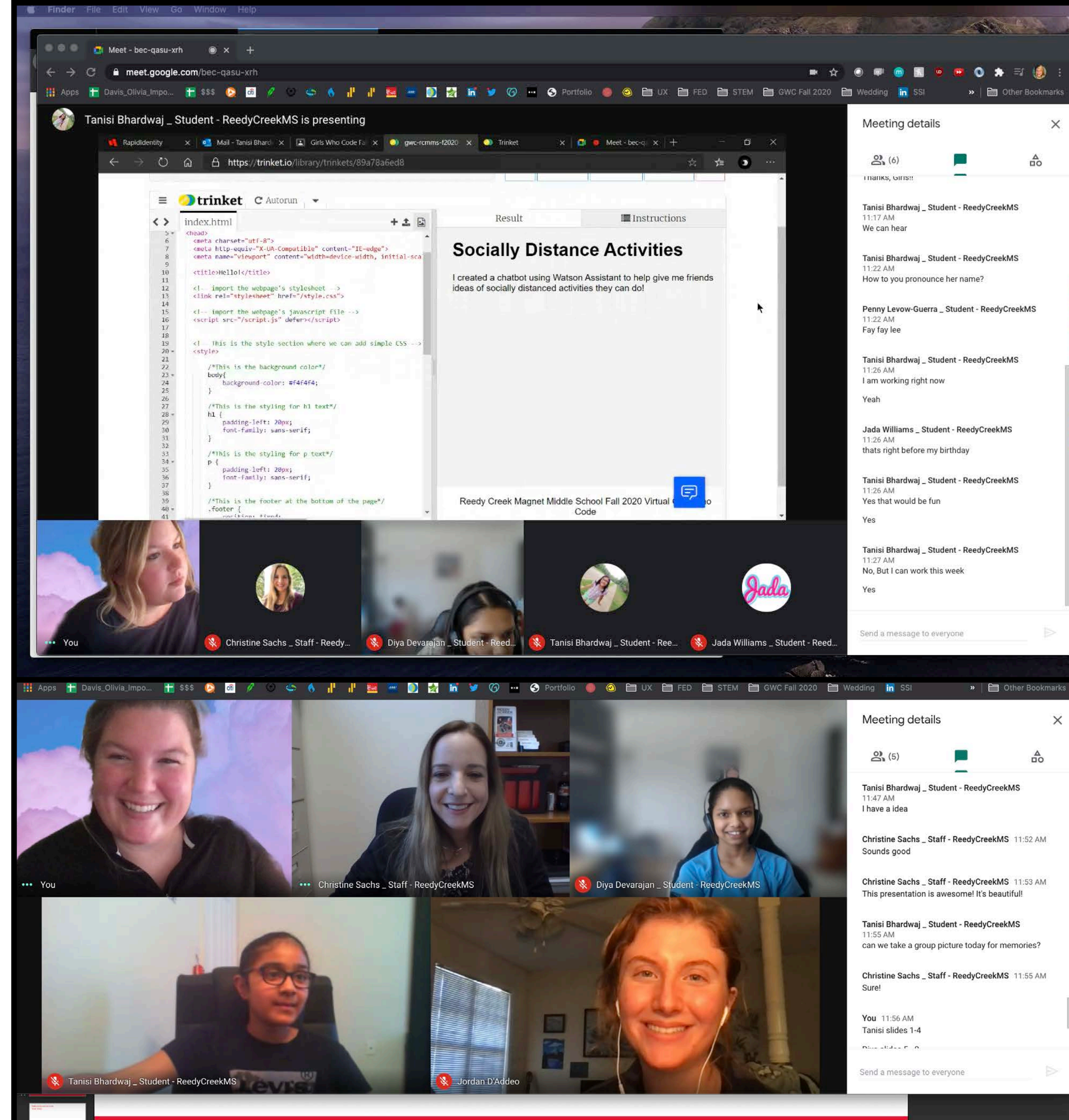

Working Sessions

Week 8

- Everyone created their own trinket to create their own web page to hold the chatbot
- Test the chatbot and add more intents, entities, and dialogues

Week 9

- Spotlight Video: [Ayanna Howard](#) - Dr. Howard has developed robots that are learning to inhabit Mars with NASA.
- Spotlight Video: [Mathangi Sri](#) - Head of Data Science at PhonePe, a financial technology company whose goal is to make digital payments so safe and universally accepted that people never feel the need to carry cash or cards again.
- Spotlight Video: [Fernanda Viégas](#) - Founded Flowing Media, a startup that specializes in using data visualization to express ideas and tell stories.
- Peer reviewed and tested HTML pages on trinket
- Final changes to the chatbot



Our Webpages

Sharing the Chatbot and Webpages

Diya's Webpage:

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <!-- This starts the header section -->
5 <head>
6 <meta charset="utf-8">
7 <meta http-equiv="X-UA-Compatible" content="IE=edge">
8 <meta name="viewport" content="width=device-width, initial-scale=1">
9
10 <title>Hello!</title>
11
12 <!-- import the webpage's stylesheet -->
13 <link rel="stylesheet" href="/style.css">
14
15 <!-- import the webpage's javascript file -->
16 <script src="/script.js" defer></script>
17
18
19 <!-- This is the style section where we can add simple CSS -->
20 <style>
21
```

Fullpage URL: <https://dsdevarajan-students-wcpss-net.trinket.io/sites/gwc-rcmms-f2020-socially-distance-activities-remix>

Code view: <https://trinket.io/html/ad3685467e>

Tanisi's Webpage:

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <!-- This starts the header section -->
5 <head>
6 <meta charset="utf-8">
7 <meta http-equiv="X-UA-Compatible" content="IE=edge">
8 <meta name="viewport" content="width=device-width, initial-scale=1">
9
10 <title>Hello!</title>
11
12 <!-- import the webpage's stylesheet -->
13 <link rel="stylesheet" href="/style.css">
14
15 <!-- import the webpage's javascript file -->
16 <script src="/script.js" defer></script>
17
18
19 <!-- This is the style section where we can add simple CSS -->
20 <style>
21
```

Fullpage URL: <https://tbhardwaj-students-wcpss-net.trinket.io/sites/gwc-rcmms-f2020-socially-distance-activities-remix>

Code view: <https://trinket.io/html/89a78a6ed8>

View the chatbot:

Use your phone camera to pull up the chatbot:



Chatbot URL: <https://web-chat.global.assistant.watson.cloud.ibm.com/preview.html?region=us-south&integrationID=1702efc8-e047-444f-9961-08cb0629aff5&serviceInstanceID=256f0154-9752-4ca8-9a32-42688c93dd19>

THE END