

Dialogflow (13 Points)

In this assignment, you will experience prototype a conversational shopping assistant and implement it using Dialogflow. It will cover both programming and design aspects of building conversational user interfaces.

Start this assignment early. You will spend the same amount of time you normally would spend in both α and β assignments combined and leaving it until the last minute is guaranteed to fail. We recommend that you steadily work on this assignment throughout three weeks. Here's a recommended timeline:

- Complete Part 1 within *four working days* of this assignment being released (e.g., by Apr 25). You will need to recruit at least *one* person to do experience prototyping with.
- Complete Part 2 within *seven working days* upon completion of Part 1 (e.g., by May 4).

As always, get in touch with us as soon as you feel stuck; we're always happy to help out! Here's the [timetable](#) for office hours and discussion sessions.

Part 1—Experience Prototyping and Agent Specification (5 Points). You will engage in experience prototyping for a *conversational shopping assistant*, which will serve as the basis for developing the intents and entities for the first prototype of your Dialogflow implementation.

Part 2—Implementation (8 Points). Based on the insights and specifications you came up with in Part 1, you will start implementing the conversational shopping assistant using Dialogflow.

Submission Details

To complete the assignment, you will need to submit the following on Canvas:

- (1) the completed version of this document in PDF, submitted to Canvas
- (2) .zip file of your exported Dialogflow agent. You can download this file from [the settings pane](#).
- (3) Your **webhook.js** as file attachment, a starter of which is provided in your GitHub Classroom repository.
- (4) A screen recording of you demonstrating your Dialogflow implementation. Make sure to cover each feature specified in the rubric for Part 2.

Part 1. Experience Prototyping and Agent Specification (5 Points)

In this part, you will engage in experience prototyping for a *conversational shopping assistant*, which will serve as the basis for developing the intents and entities for the first prototype of your Dialogflow implementation. Specifically, the Dialogflow tasks provided below should inform the development of the scenarios in Step 1, and the bodystorming of these tasks in Step 1 should be the basis for the specification of the intents, entities, and responses in Step 2.

Step 1. Experience Prototyping (2.5 Points). In this step, you will follow a process very similar to the process we followed for the in-class activity on experience prototyping, paying particular attention to bodystorming for idea generation. In the context of designing a shopping assistant robot, follow the steps below:

1. *Define context* — This is given to you: users interacting with a conversational shopping assistant embedded within a clothing retail website. There is no deliverable for this step.
2. *Develop scenarios* — Think about how the shopping assistant will help users. What are some tasks the shopping assistant can help users with? Develop 3 scenarios. The tasks from Part 2 (provided below) should be the basis of these scenarios. Reviewing the [WiscShop API Docs](#) will also be helpful in developing your scenarios.
3. *Identify design goals* — Determine what the shopping assistants can do to assist in these tasks. Consider aspects of the task where the assistant can bring added value. Our goal is not designing a fully autonomous assistant that could take care of everything with minimal input from the user, but what is called a *mixed-initiative design* where the assistant does what it's good at and the user does what the user is good at.
4. *Setup environment* — You can use the retail store interface provided in the starter code and/or real clothing retail store (e.g., [Everlane](#)) as your environment or prop during your acting.
5. *Act out interaction* — Ask a friend, family member, or another student in class to help you bodystorm user interactions with the shopping assistant to develop ideas and to more concretely define user and system behavior and interactions with the environment. Act out and record a transcript on at least one interaction for each scenario.
6. *Develop insight* — Capture the conversations from your bodystorming session and any other insight you have gained from the previous step in notes and translate them into a flowchart representation of the interaction. You will need to make one flowchart for each scenario. Refer to p. 23 of VUI Design slides for an example.

Tasks that your Dialogflow agent should support are listed below:

- **Login**
 - User is able to login with username and password. You do not need to handle account creation.
 - **NOTE:** It is sufficient if the user enters this information as a text query (typing), in case the username and/or password is hard to parse. It should still be in English, e.g., "Log in with username `<username>` and password `<password>`."
- **Queries**
 - *Categories:* User should be able to query about the types of products offered.
 - *Cart:* User should be able to request information about what is in their cart (e.g., total number and type of items, total cost, etc.).
 - *Product Info:* User should be able to request information about a product. If the product has reviews, they should be able to inquire about reviews and average ratings.
- **Actions**
 - *Cart:* User should be able to add/remove items to/from your cart. They should also be able to clear their cart.

- *Cart Confirm*: User should be able to review, then confirm their cart.
- **Navigation**
 - User should be able to navigate through the application with the voice assistant using natural language, e.g., "Take me to the home page" or "Show me the hats".
 - For a full breakdown of the various routes in the application, see the WiscShop readme.

Your deliverables will be the scenarios and design goals you have focused on, the transcripts of the bodystorming sessions, and a flowchart representation of the conversational capabilities suggested by your experience prototyping through your 3 scenarios. Your flowcharts can be in the form of a graph where the nodes are system behaviors and arrows are user behaviors. To generate flowcharts, you can use [SmartDraw](#) (using your NetID login) or free versions of other tools, such as [LucidChart](#) or [Creatly](#).

Scenarios and Design Goals

- Using voice interface to login with spoken username and password
- Navigating wiscShop pages to user
- provide voice interaction with user including add or remove items in cart

Develop scenarios

- Using voice interface to login with spoken username and password
- Navigating WiscShop pages to user
- provide voice interaction with user including add or remove items in cart

Identify design goals

- The virtual assistant will talk to user with action of login, and the user can directly response the username and password to login.
- for each page shown in the WiscShop, user can ask virtual assistant to direct the user the intended pages.
- the virtual assistant is able to identify the language of ambiguity and provide specific adding and removing functions in cart to change the products of items, number of quantities, etc.

Bodystorming Transcripts

I worked with my UX design major friend, Chen. We simulated the conversation that when a person is asking question to get more information, such as simulate a place like library's help desk. We decided to have a front desk and Chen is standing in front of a desk, asking for service in a public area. People tend to not understand conversation until encountering system or dialog after few conversational sentences to realize the situations.

Scenario 1 - Using voice interface to login with spoken username and password

Chen: Hi there.

Me (Virtual Agent): Hello, nice to meet you.

Chen: I would like to login to the web site so that I can purchase products.

Me (Virtual Agent): Sure. It is my pleasure to help you out. Do you mind provide your username to me?

Chen: Yes. My username is chen123.

Me (Virtual Agent): Got it. Would you mind also give me your password?

Chen: Yes. My password is 12345678.

Me (Virtual Agent): ... Great! Now you are signed in.

Chen: Thanks.

Me (Virtual Agent): Hope you have a wonderful shopping experience at WiscShop!

Scenario 2 - Navigating WiscShop pages to user

Chen: Hi. Are you able to help me out to navigate the WiscShop?

Me (Virtual Agent): Of course. That is one of my jobs. What do you think you are going to on the WiscShop? If you do not have any thought, I will redirect you to your account home page.

Chen: ... Okay. Sure, please navigate me to the home page.

Me (Virtual Agent): Any categories that you want to take a look?

Chen: Yeah. I want to see what you have under the category of the Bottoms.

Me (Virtual Agent): Got it. Now the system is redirecting you to the Bottoms page. We have Women's Wisconsin Cuddle Joggers, Wisconsin Sweatpants, Wisconsin Qualifier Woven Short, Wisconsin Running Shorts in our bottoms.

Chen: Wow. These are more products than I expected. Can you also show me what I have in my shopping cart?

Me (Virtual Agent): Sure... Now you are in your personal cart. Nothing found in your cart.

Chen: Thank you very much.

Scenario 3 - Provide voice interaction with user including add or remove items in cart

Me (Virtual Agent): Hello, I am your Virtual Assistant. How am I help you today?

Chen: Hello. I want to add 4 Football Hats to my Cart.

Me (Virtual Agent): Of course. You have added 4 items to the cart which are 120 dollars. The detail product list is: 4 Wisconsin Football Hats.

Chen: Thanks. Oh! I found that I want to delete 1 hat. I think 4 is too many.

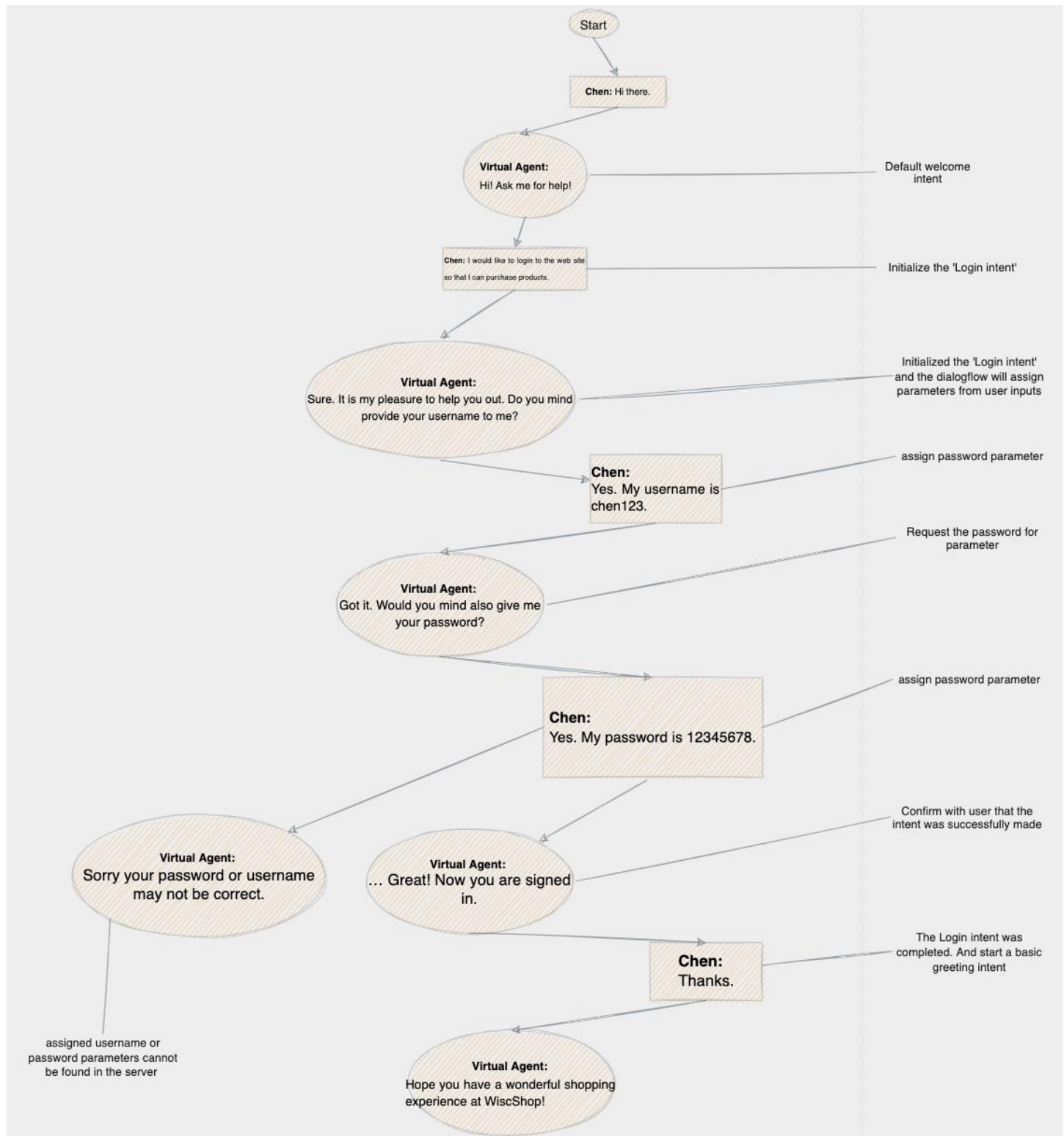
Me (Virtual Agent): Okay. I will help you delete 1 Wisconsin Football Hat for you. Now You have 3 items to the cart which are 120 dollars. The detail product list is: 3 Wisconsin Football Hats.

Chen: Thanks a lot!

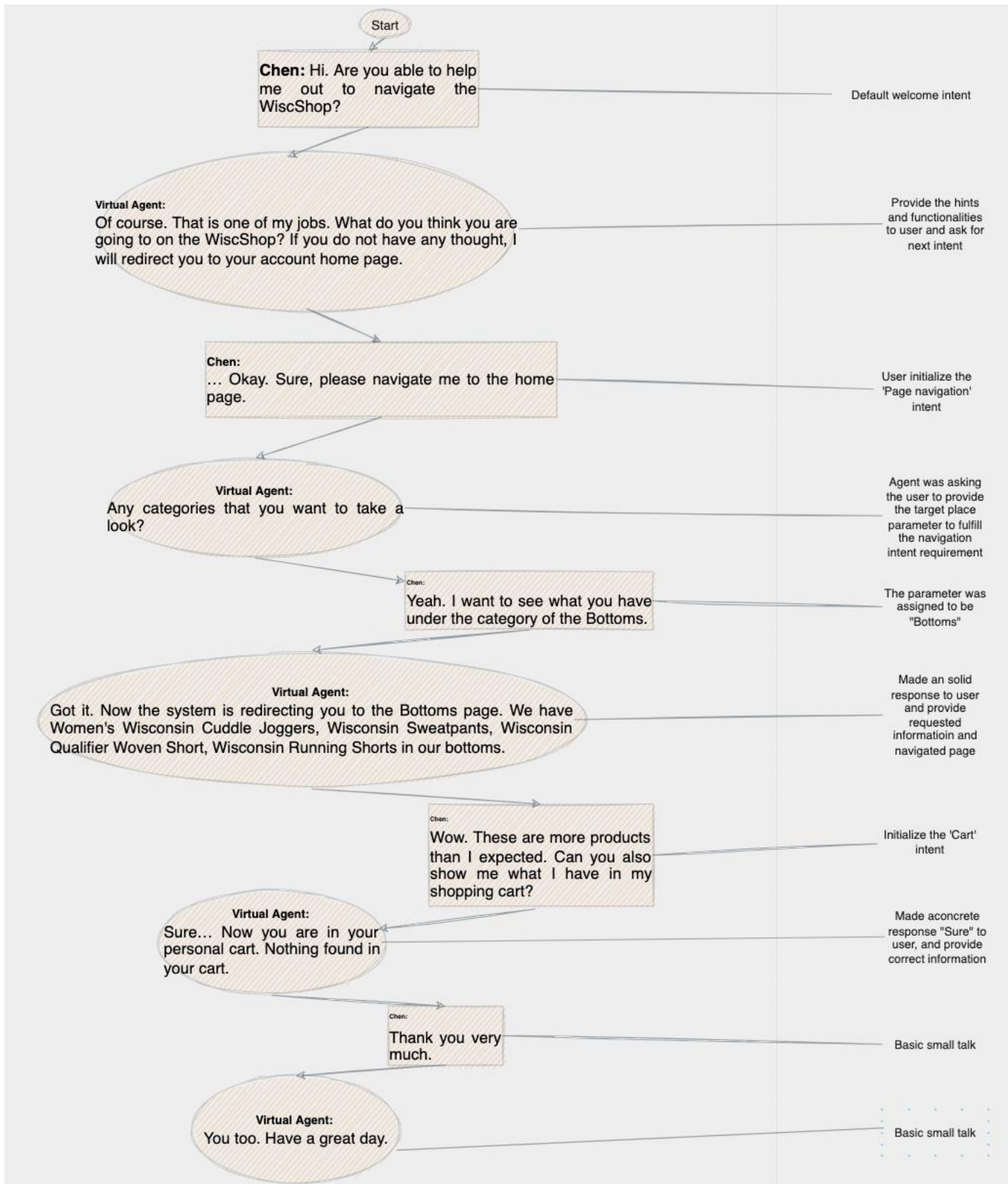
Me (Virtual Agent): You have a great day!

Flowcharts for Each Scenario

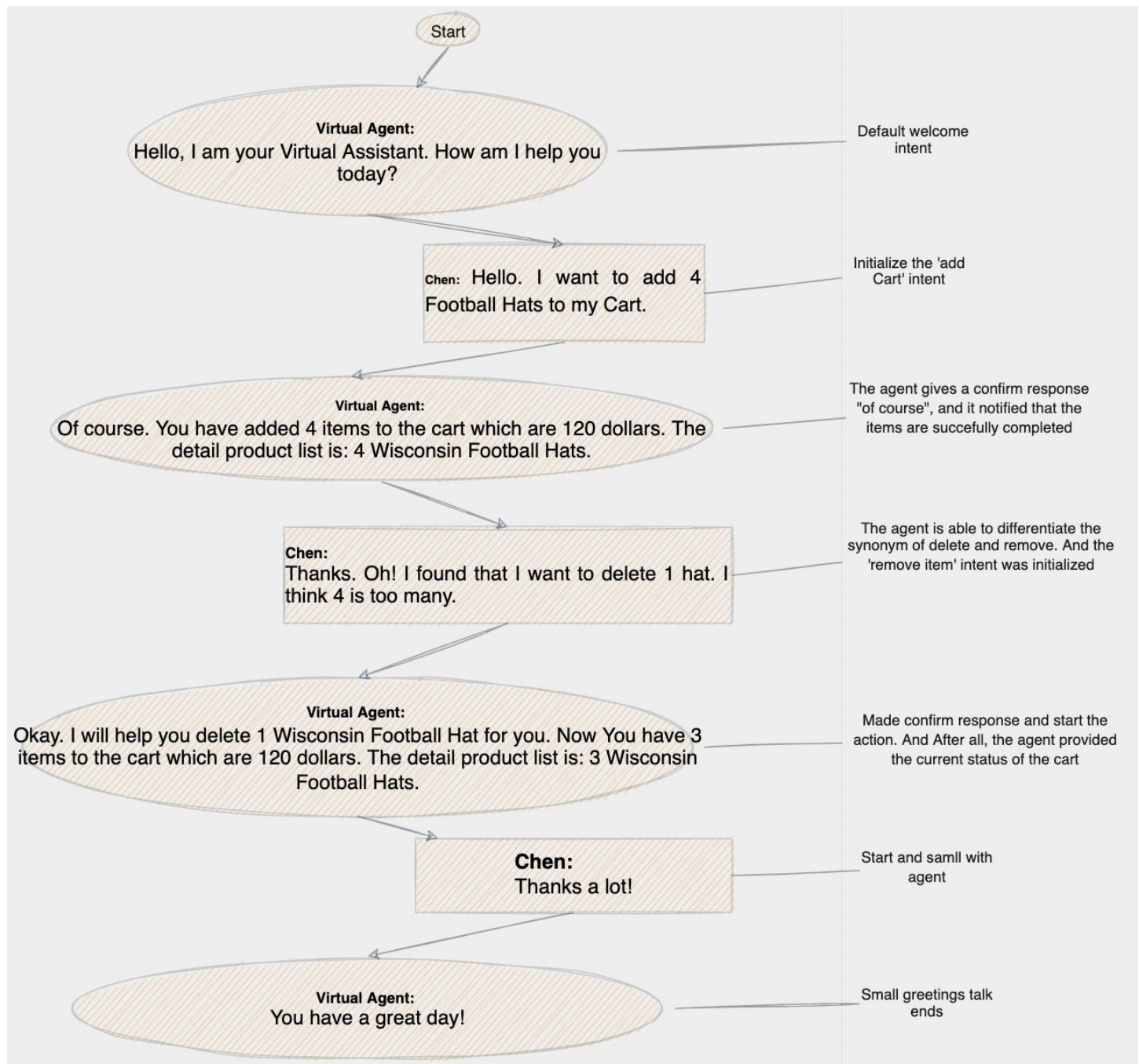
Scenario 1 - Using voice interface to login with spoken username and password



Scenario 2 - Navigating WiscShop pages to user



Scenario 3 - Provide voice interaction with user including add or remove items in cart



Step 2. Agent Specification (2.5 points). In this step, you will apply what you learned in your experience prototyping activity to the design of the agent you will be creating. More specifically, you will draw on the outcome of your bodystorming session to determine the intents and entities that your agent will utilize in its conversation and consider how you will use them and server data to provide responses.

If a particular intent or response is infeasible to implement the way you imagined in your bodystorming session, explain why, and propose an intent or family of intents which can be realistically implemented using the Dialogflow framework that will support the same functionality.

In this step, you will provide three main deliverables:

1. A list of all *intents* you will use (provide 10 training examples for each intent).
2. A list of all *entities* (provide at least five examples for each entity) you will be using with your agent.
3. For each *intent*, develop agent responses, specifically what it will *say in reply* (at least three responses to avoid repetition) and what it will *do* to change the GUI.

For a full description of what the GUI can do, and the requirements of the agent, see Part 2 for details.

Intents and Training –

Request all products

- Please list all products that WiscShop have
- What do you have in this store?
- Can you provide all items that you offer?
- I want to know what products you have
- Anything that this store provides?
- I need to know all products
- Is there any way to show all products you have?
- What can I find in this store?
- Show me all products
- Demonstrate all products you have

Show up categories of products

- What do you know about the category of your product?
- Can you provide me what type of products do you have?
- Show me what kinds of products in this store
- Please give me a hint about groups of items
- What kinds of products are your offering?
- What are the different groups of products do you have?
- I want to know different types of items in WiscShop
- Please tell me what categories you have
- Let me know the category that you are offering
- Show me types of products

Request products of each category

- Give the category of bottoms
- Can you show me all products of leggings
- I would like to take a look the type of plush
- I want to see what group of hat products
- I need to know all type of tees in stock
- Please tell me what you have in terms of sweatshirt
- Show me the products of tees
- Please provide me how many items of tees you have
- Let me know about the categorization
- How do you categorize products?

Query specific information of each item

- I want to know the information of Bucky Crew Neck Sweatshirt
- Can you give me the description of Bucky Crew Neck Sweatshirt
- Bucky Crew Neck Sweatshirt
- Please give me more details of Bucky Crew Neck Sweatshirt
- Let me know the product information about Women's Wisconsin Cuddle Joggers.
- Do you know anything about Cuddle Joggers?
- What is Jump Around Shirt?
- Tell me about the product descriptions of Women's Wisconsin Cuddle Joggers.
- How do you describe Bucky Crew Neck Sweatshirt?
- Give me more info of Bucky Crew Neck Sweatshirt

Get all reviews of a product

- I want to know the reviews of Bucky Crew Neck Sweatshirt
- Would you mind provide some review information of Bucky Crew Neck Sweatshirt?
- Please give me the feedback of Jump Around Shirt
- Tell me what other people think about the Jump Around Shirt
- Show me some comments on the product of Jump Around Shirt
- Give me some perspectives of other people to the Jump Around Shirt
- How about the reviews of the Bucky Crew Neck Sweatshirt from others?
- Reviews of Bucky Crew Neck Sweatshirt
- Show me some note on Bucky Crew Neck Sweatshirt
- Give me feedbacks of Bucky Crew Neck Sweatshirt

Get the number of review and average rating of a product

- What is the average rating on the Jump Around Shirt
- Show me the rating of Neck Sweatshirt
- Show me the rating score of Neck Sweatshirt
- How did the Jump Around Shirt be rated?
- Give me the average rating and reviews of Jump Around Shirt be rated

- Please provide the customer rating of Jump Around Shirt to me
- Tell me the average rating review of Bucky Crew Neck Sweatshirt from others
- What do other people think about Bucky Crew Neck Sweatshirt's rating score?
- I want to get information of rating average of Bucky Crew Neck Sweatshirt

Request cart items and information

- I want to know about the cart summary
- Show me what I have in the cart
- What are the items in my cart?
- What did I get in my cart?
- Give me the summary of my cart
- Let me know the items in my cart
- Do I have many items in my cart?
- How much do I plan to buy?
- Show my summary
- Can you provide the recent Cart info

Clear all items in the cart

- Help me to clean up the cart
- I want to clear all items in the cart
- Clear all items in the cart
- Can you help me to remove all items in the cart?
- Take off everything in the cart
- Please help me to clear all products in the cart
- I would like to clear everything in the cart
- I want to remove all item in the cart
- Empty all products in the cart
- Clear the cart

Go back to previous page

- I want to go back to the previous page
- Can you show me last page I visited?
- What page did I visited?
- Please redirect me to the last page
- Can I go back to see the page that I last visited?
- Let me go back to last web page
- I would like to see the last view
- Send me back to last view
- Change the page view to last visited
- Take me back to last view

Go to the intended page

- I want to redirect to the home page

- Please send me to the cart view page
- I want to go to the Bucky Crew Neck Sweatshirt page
- I would like to confirm the order
- Let me navigate to the plushes page
- Going back to home page
- Could you please lead me to the Bucky Crew Neck Sweatshirt page?
- Direct me to the home page
- Send me to my main account page
- I want to go to the summary view

Add a number of Item to cart

- Please help me to add 3 Wisconsin Sweatpants to the cart
- Add 2 Bucky Crew Neck Sweatshirt to the cart
- Can you help me to increase the number of Bucky Crew Neck Sweatshirt to the cart?
- I would like to add a Bucky Crew Neck Sweatshirt to the cart
- Please help me bring Bucky Crew Neck Sweatshirt to my cart.
- I need Wisconsin Sweatpants to be added to my cart
- I want to put Wisconsin Sweatpants to my cart
- Is there a way to add 4 more Bucky Crew Neck Sweatshirt?
- Try to help me carry Bucky Crew Neck Sweatshirt to my cart
- Increase the 3 items of this to cart

Delete a number of Item to cart

- Please help me to remove 3 Wisconsin Sweatpants from the cart
- remove 2 Bucky Crew Neck Sweatshirt from the cart
- Can you help me to decrease the number of Bucky Crew Neck Sweatshirt from the cart?
- I would like to remove a Bucky Crew Neck Sweatshirt from the cart
- Please help me take off Bucky Crew Neck Sweatshirt from my cart.
- I need Wisconsin Sweatpants to be removed from my cart
- I want to take off Wisconsin Sweatpants from my cart
- Is there a way to remove 4 Bucky Crew Neck Sweatshirts?
- Try to help me take off Bucky Crew Neck Sweatshirt from my cart
- Decrease 3 items of this from cart

Confirm the order

- I want to check out
- I want to start the payment
- Can you redirect me to confirm?
- I decide to purse to the next step after reviewing my cart
- I would like to continue the check-out process
- Start processing of purchasing all items in the cart
- Try to help me confirm the order of all items
- Proceed the order

- I have done shopping and want to check-out
- Confirm all items in the cart

Entities and Synonyms –

Category

"bottoms", "bottoms", "bottom", "pants"
 "hats", "hats", "hat", "Cap", "visor"
 "leggings", "leggings", "leg", "yoga pants"
 "plushes", "plushes", "plush"
 "sweatshirts", "sweatshirts", "sweatshirt"
 "tees", "tees", "tshirt", "t-shirt", "tee", "shorts"

Category names

"category", "category", "categories", "groups of products", "categorization", "type", "group"

Directing page names

"account", "home", "home page", "main", "main page", "category page", "categories page"
 "cart", "cart", "cart page"
 "cart-review", "cart-review", "review page", "cart review", "check out", "purchase"
 "cart-confirmed", "cart-confirmed", "cart confirmed page", "confirm", "confirmed", "confirmed page", "confirm the purchase", "confirm orders"
 "signUp", "signUp", "sign up", "account create page", "create account"
 "signIn", "signIn", "sign in", "sign in page"
 "hats", "hats", "hat page", "hats page"
 "bottoms", "bottoms", "bottoms page"
 "leggings", "leggings", "leggings page", "legging"
 "plushes", "plushes", "plushes page"
 "sweatshirts", "sweatshirts", "sweatshirts page"
 "tees", "tees", "t-shirt page", "tees page", "tee page", "t-shirt", "t-shirts"
 "Wisconsin Sweatpants", "wisconsin sweatpants"
 "Bucky Badger Pillow", "Bucky Badger Pillow", "pillow"
 "Bucky Crew Neck Sweatshirt", "Bucky Crew Neck Sweatshirt", "Sweatshirt"
 "Bucky Badger Plush", "Bucky Badger Plush"
 "Wisconsin Leggings", "Wisconsin Leggings"
 "Game Day Bucky Plush", "Game Day Bucky Plush"
 "Bucky Badger Leggings", "Bucky Badger Leggings"
 "W Cloud Pillow", "W Cloud Pillow"
 "Bucky Badger Keychain", "Bucky Badger Keychain", "Keychain"
 "Wisconsin Football Hat", "Wisconsin Football Hat"
 "White Wisconsin Visor", "White Wisconsin Visor"
 "Jump Around Shirt", "Jump Around Shirt"

"150 Year Commemorative Hoodie", "150 Year Commemorative Hoodie", "Hoodie"

"Women's Wisconsin Cuddle Joggers", "Women's Wisconsin Cuddle Joggers"

"Wisconsin Sweatpants", "Wisconsin Sweatpants"

"Wisconsin Qualifier Woven Short", "Wisconsin Qualifier Woven Short"

"Wisconsin Running Shorts", "Wisconsin Running Shorts"

Product names

"Bucky Badger Pillow", "Bucky Badger Pillow", "pillow", "badger pillow", "bucky pillow"

"Bucky Crew Neck Sweatshirt", "Bucky Crew Neck Sweatshirt", "Sweatshirt", "neck sweatshirt"

"Bucky Badger Plush", "Bucky Badger Plush", "bucky plush", "badger plush"

"Wisconsin Leggings", "Wisconsin Leggings", "wisc leggings"

"Game Day Bucky Plush", "Game Day Bucky Plush", "bucky plush"

"Bucky Badger Leggings", "Bucky Badger Leggings", "bucky leggings", "badger leggings"

"W Cloud Pillow", "W Cloud Pillow", "w cloud", "cloud pillow", "w pillow"

"Bucky Badger Keychain", "Bucky Badger Keychain", "Keychain"

"Wisconsin Football Hat", "Wisconsin Football Hat", "wisc hat", "wisc football hat", "football hat"

"White Wisconsin Visor", "White Wisconsin Visor", "wisc visor", "white visor"

"Jump Around Shirt", "Jump Around Shirt", "jump shirt"

"150 Year Commemorative Hoodie", "150 Year Commemorative Hoodie", "Hoodie", "150 Year hoodie", "commemorative hoodie", "comm hoodie"

"Women's Wisconsin Cuddle Joggers", "Women's Wisconsin Cuddle Joggers", "women wisconsin joggers", "Women Wisconsin Cuddle Joggers", "Cuddle Joggers"

"Wisconsin Sweatpants", "Wisconsin Sweatpants", "Sweatpants", "wisc Sweatpants"

"Wisconsin Qualifier Woven Short", "Wisconsin Qualifier Woven Short", "wisc short", "woven short"

"Wisconsin Running Shorts", "Wisconsin Running Shorts", "running shorts", "wisc running short", "run shorts"

Intent Responses and Procedures –

Request all products

Response – We offer Bucky Crew Neck Sweatshirt, Bucky Badger Plush, Wisconsin Leggings, Game Day Bucky Plush, Bucky Badger Leggings, W Cloud Pillow, Bucky Badger Pillow, Bucky Badger Keychain, Wisconsin Football Hat, White Wisconsin Visor, Jump Around Shirt, 150 Year Commemorative Hoodie, Women's Wisconsin Cuddle Joggers, Wisconsin Sweatpants, Wisconsin Qualifier Woven Short, Wisconsin Running Shorts. Do you want to specify what category of all products that you want to me to list? Wish You can find what you want in our WiscShop.

- After the customer asks for all products, the virtual agent will ask and narrow down the query category of all products. And the customer can make a follow-up request to agent specially to the products. To the next intent, "Request products of each category"

Show up categories of products

Response – We have the following categories: bottoms, hats, leggings, plushes, sweatshirts, tees.

- After the customer asks for a list of all categories, the virtual agent will catch the key word “categories” and seek a list of all category name on API server.

Request products of each category

Response – In the tees category of products, we offer We offer Jump Around Shirt.

- After the customer asks for the category of products, the system will retrieve the Jump Around Shirt as a parameter name and utilize this name to fetch data from API to receive all same type product, sending back to Dialogflow.

Query specific information of each item

Response – The description of Women's Wisconsin Cuddle Joggers is [You can show off your Wisconsin Badger pride with these super soft joggers. The cozy material feels soft and luxurious making them comfy and stylish. The joggers feature a drawstring waist, side pockets, and closed bottom.] The price is 50 dollars for each.

- After the customer asks for the specific information of certain product, the virtual agent will ask request the data in API server and get the response of its product description to show to user.

Get all reviews of a product

Response – I found 1 review(s) for White Wisconsin Visor. Review Title: [ok]. Review Content: [color isn't exactly the same but still decent].

- After the customer asks for the reviews from other customers of the specific product, the virtual agent will return the review of the title and the content of the review from other customer.

Get the number of review and average rating of a product

Response –

Can you provide the product of rating that you want?

There is 1 review for White Wisconsin Visor. The average rating is 3.00.

- After the customer asks for the average ratings from other customers of the specific product, the virtual agent will return the number of reviews and the average ratings from other customer. If the customer did not specify which item he or she is referring to, it will request the customer to fulfil the parameter of the name of product, so the system can find the data from server API.

Request cart items and information

Response – You have added 3 items to the cart which are 90 dollars. The detail product list is: 3 Wisconsin Football Hat.

- After the customer asks for items and information of the current cart, the virtual agent will provide the current number of products in the cart and the total. In addition, listing down all the products.

Clear all items in the cart

Response – Cart cleared!

- After the customer asks for removing all products in the current user cart, the virtual agent is able to clean up and take off everything in the cart.

Go back to previous page

Response – You are now viewing the previous page.

- After the customer asks for returning back to the last page, the virtual agent will redirect the user to the previous web link synced in the server API.

Go to the intended page

Response – You are now viewing the Wisconsin Football Hat product page of WiscShop!

- After the customer asks for navigating to the intended web page, the virtual agent will redirect the user to the product, categories, cart, cart-review, cart-confirm, sign-up, sign-in web links which are all synced in the server API.

Add a number of Item to cart

Response – I have helped you adding 1 Wisconsin Football Hat to your cart.

- Customer can add the specific item by asking virtual agent to do so. If the user did not say the number of the products, it will just add 1 to the cart.

Delete a number of Item to cart

Response – I have removed 1 Bucky Crew Neck Sweatshirt from cart for you.

- Customer can remove the specific item by asking virtual agent to do so. If the user did not say the number of the products, it will request the user and assign to it to a parameter to make sure the deletion number.

Confirm the order

Response – You are now viewing the cart-confirmed page of WiscShop!

- After the customer asks for check out, the virtual agent will redirect the custom to the order placed page.

Part 2. Implementation (8 Points)

In this part, you will work with Dialogflow to create a voice agent that you prototyped in Part 1. Refer to the following setup tutorial to get started with implementing your Dialogflow agent for WiscShop. It will walk you through how to connect the webhook with Dialogflow. Before watching the video, create a new Dialogflow agent by following the ["Create an agent" section in the official Dialogflow docs](#).

Before you begin

- Accept the [Github Classroom invitation](#) to get the starter code.
- Watch this [setup guide video](#). Also, read this [setup guide document](#).
- Review Dialogflow 1 / 2 lectures. You will also find the [official Dialogflow documentation](#) helpful.
- Read the [WiscShop API docs](#) and test each endpoint with Postman.
- Feel free to peruse the source code of the WiscShop Web UI ([/src](#)). It has a number of fetch examples.

Commands

- `npm run start`: Launch the WiscShop GUI
- `npm run tunnel`: Initiate a tunnel
- `npm run dev`: Run your webhook

IMPORTANT: You must enable webhook for intents that are used to implement the following features. No points will be given if webhook is not utilized (i.e., You should not hard code responses in the Response section of the Dialogflow console when they should come from interacting with the API).

Milestone 1. Login (1.0 pts)

- User is able to log in with username and password. You do not need to handle account creation.
- *Note:* User should manually log in to the WiscShop interface; the shopping agent does not need to navigate the user from the login page to the landing page.

Milestone 2. Queries (3.0 pts)

- *Categories:* User should be able to query about the types of products offered.
- *Cart:* User should be able to request information about what is in their cart (e.g., total number and type of items, total cost, etc.).
- *Product Info:* User should be able to request information about a product. If the product has reviews, they should be able to inquire about reviews and average ratings.

Milestone 3. Actions and Navigation (3.0 pts)

- *Cart:* User should be able to add/remove items to/from your cart. They should also be able to clear their cart.
- *Cart Confirm:* User should be able to review their cart and then confirm their order in the cart. (When user asks for a review, they should be navigated to either the cart page or **cart-review** page. When user would like to confirm the purchase, they should be navigated to the **cart-confirmed** page.)
- User should be able to navigate through the application with the voice assistant using natural language, e.g., "Take me to the home page" or "Show me the hats".
- For a full breakdown of the various routes in the application, see the WiscShop API Docs.

- In order to change the application state in the WiscShop Web UI, you will need to send appropriate requests to the API server in your webhook; you shouldn't need to modify anything in `/src`! Everything should be implemented in `webhook.js`. Refer to the API docs on the endpoints under the `/application` route.

Milestone 4. Messages (0.5 pts)

- In the WiscShop GUI, messages should be updated when the user or agent says something.
- Upon starting a new session, the messages should be cleared.
- Note: Because messages are saved for users who are logged in, you do not need to show messages before the user is logged in.

Final Criteria. Design and Personality (0.5 pts)

- Users should be able to converse with the agent in natural language to perform tasks. (e.g., Users shouldn't need to specify product id's to navigate.)
 - The agent should have a personality and should engage in expected turn-taking behavior.
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<https://youtu.be/SZ6gJJwQ9sw>