

# Conversational Agents Prototyping

Human-AI Interaction

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# A Prototype Conversational Agent

- Final goal
  - to *design* and *implement* an interactive prototype for a conversational agent
  - it should be vocal and/or textual (only or mainly, it is up to you)
  - the answers will be "fake"
    - it will always answer the same 2-3 things for each different question

# Step 0

Choose your specialty!

On Feb 5

# Step 0

- **Decide** what the conversational agent should be able to "do"
  - you can reuse some of the ideas from your journey map!
  - the "intelligence" should mainly be in the "conversational" part
  - write it down the topic/idea/problem to be solved
    - e.g., "*our app will support/help/... people to...*"
    - in a slide

# Step 1

Design the Conversational Interface

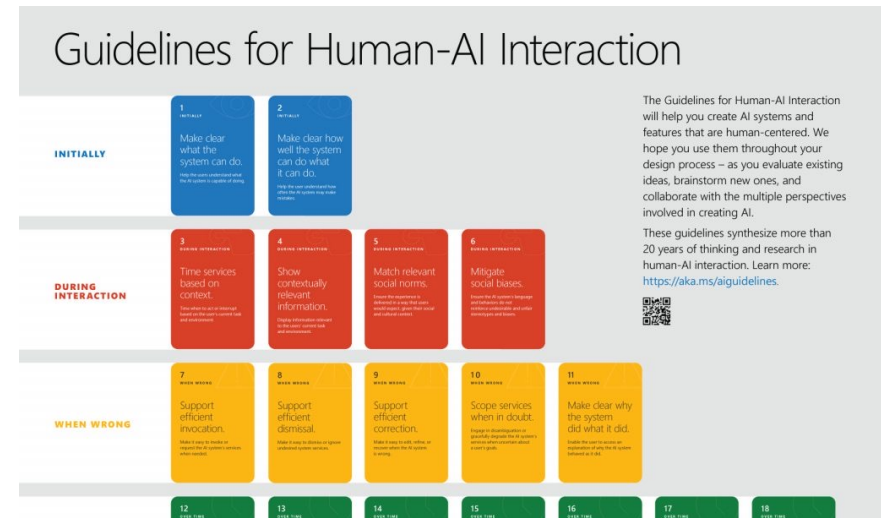
On Feb 5

# Step 1

- **Design** the conversational UI
  - in a slide
- Possible questions:
  - Which dialogues?
  - Will all the answers be textual/vocal, only?
  - How to recover from errors?
  - Which is the tone?
  - How many details?
  - ...
  - Which Human-AI Interaction guidelines follows and/or ignore? Why?

# Use this!

- <https://www.microsoft.com/en-us/haxtoolkit/library/>
- <https://www.microsoft.com/en-us/haxtoolkit/playbook/>



### HAX Playbook

Export

#### Describe your AI feature

Restart Undo

Which of these systems is closest to what you are designing?

- Search  
A search system locates items that correspond to user-specified keywords, phrases, or characters.
- Recommendation  
A recommendation system makes preferred-content suggestions, sometimes by predicting the user's rating of the content.
- Conversational AI  
Conversational agents interact with people through one or more exchanges of natural-language dialogue, similar to conversing with a person.
- Text prediction and assistance  
Text prediction and writing assistants help with the writing process, including research, grammar, tone, and localization.
- Classification  
Text or document classification categorizes text in groups organized by predefined labels.

#### Test these scenarios

Total scenarios: 0

# Step 2

Share the idea and a significant dialog with the class!

On Feb 3



# Step 3

Implement a Prototype!

On Feb 3-9

## Step 3

- Implement an interactive prototype for your conversational agent
  - Choose the **main** functionalities!
  - One to two, only
- By using Dialogflow and Python
  - you can tweak/replace the HTML/CSS/JS part, if needed
- By starting from the example shown in class last week

# Step 4

Share it!

On Feb 9

# Step 4

- Present your prototype and the underlying idea in 10 minute
  - Put together the slides you prepared
  - Add a couple of screenshots/screen-recordings
  - Prepare a short demo
  - Connect your laptop to the projector... and speak!

# Step 5

Submit it!

# Submission Instructions

- One per team, choose a "submitter"
- Convert the set of slides you prepared in PDF and name it as follows:  
*Lastname\_Firstname\_ex4.pdf* (example: Monge\_Alberto\_ex4.pdf)
- Upload the resulting file to OwnCloud, at the following URL:  
<https://baltea.polito.it/owncloud/index.php/s/IBhBfjeiW7pvSAa>
- By the end of the week (**Feb 13, 2022**)