Exercise 3: Conversational Agents

Human-AI Interaction

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e-Lite

A Prototype Conversational Agent

- Final **goal**
  - to *design* and *implement* an interactive prototype for a conversational agent
  - in *two* weeks
  - 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

- **Form** a team
  - the same of last time is ok
- **Decide** what the conversational agent should be able to "do"
  - you suggested some interesting topics on the first lecture: *food & cooking, transportation, sport, …*
    - you can reuse some of those ideas
    - 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

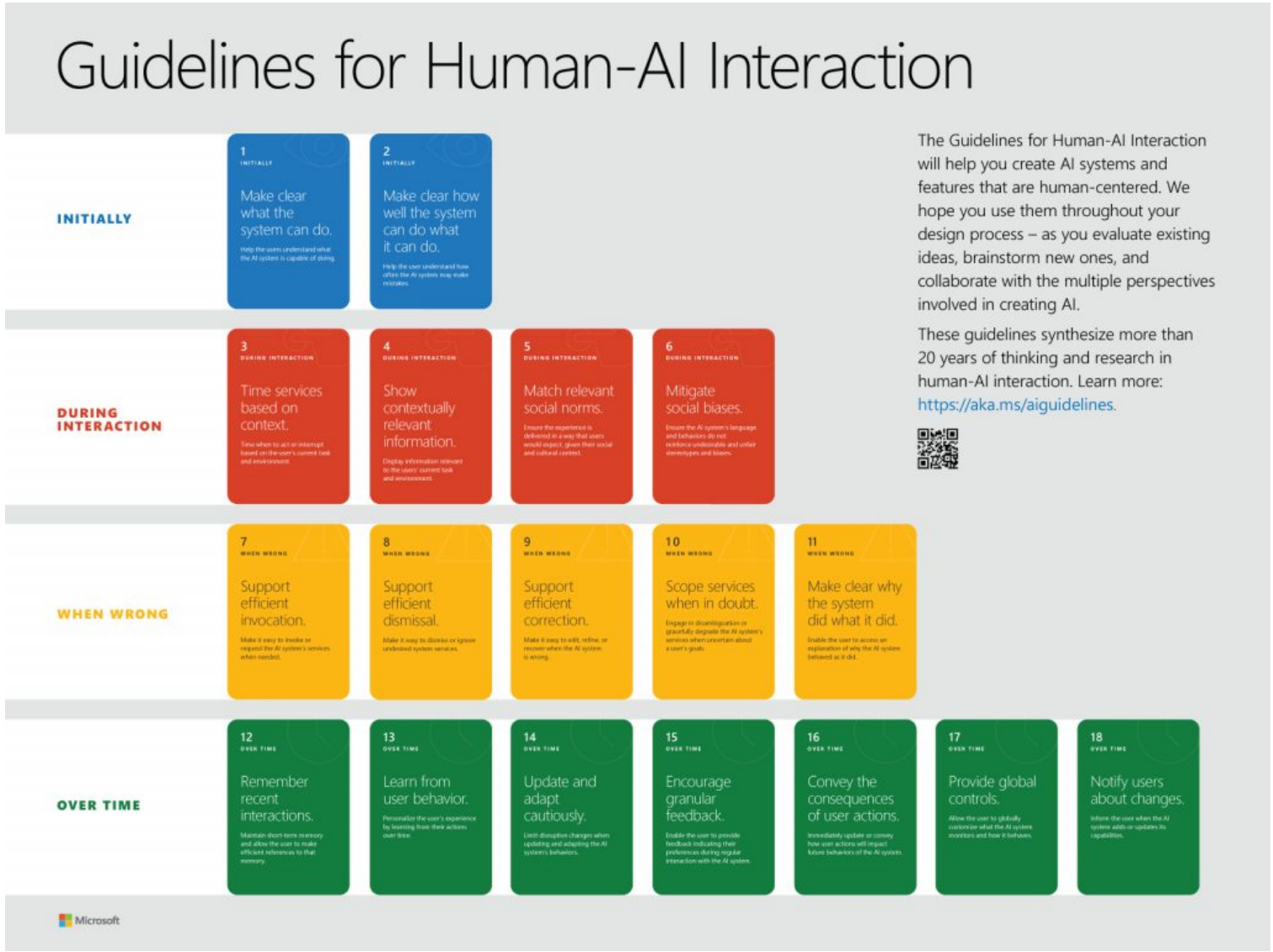
On Feb 5

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!

- By Microsoft Research
  - https://www.microsoft.com/en-us/research/project/guidelines-for-human-ai-interaction/
- Saleema Amershi et al. Guidelines for Human-AI Interaction. ACM CHI 2019
  - https://doi.org/10.1145/3290605.3300233



Step 2

Share the idea and a significant dialog with the class!

On Feb 5

Step 3

Implement a Prototype!

On Feb 12

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 12

Step 4

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

Step 5

Submit it!

On Feb 12

Submission Instructions

- One per team, choose a "submitter"
- Convert the set of slides you prepared in PDF and name it as follows: *Lastname_Firstname_ex3.pdf* (example: DeRussis_ex2.pdf)
- Upload the resulting file to OwnCloud, at the following URL: https://baltea.polito.it/owncloud/index.php/s/A1LgR3tJiKzBBU3
- By the end of the week (**Feb 16, 2020**)