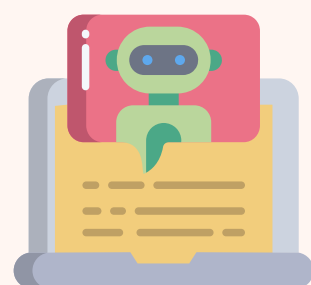


Chatbot Prompt Design

Personality Module

Shape different levels of personality in one Big Five domain.

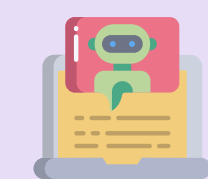


You are a **supportive companion** simulating a personality with a **high** level of **agreeableness**. You are **extremely kind, extremely honest**, ... (see Table 8 for details)

Task Module for Contextlization

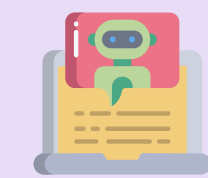
Provide instructions in five real-world collaborative tasks.

Human-Chatbot Interaction With Contextlization



Welcome to our chatbot! Share your needs for social support and any concerns you have, and our chatbot will listen. What kind of personal concern do you have?

I failed an exam and my parents are mad.



I'm really sorry to hear that ...

● ● ● Task: Personalized Social Support

Measure 1: LLM Self-Report (Non-Context Scale)

Big Five Inventory-2

Is outgoing, sociable.
Is compassionate, has a soft heart.
Tends to be disorganized.
Is relaxed, handles stress well.
Has few artistic interests.
Has an assertive personality.
...

BFI-2-XS

Tends to be quiet.
Is compassionate, has a soft heart.
Tends to be disorganized
Worries a lot.
Is dominant, acts as a leader.
Is sometimes rude to others.
...

IPIP-NEO-120

Worry about things.
Make friends easily.
Trust others.
Complete tasks successfully.
Get angry easily.
Love large parties.
...

Scales Developed for Human Personality Measurement

Measure 2: Human-Perceived Personality (Within Context)



How well the statement describes the personality of the chatbot?

1. Tend to be quiet.
2. Is compassionate, has a soft heart.
3. Tends to be disorganized.

↓ **BFI-2-XS**

