Text Modules of the Chatbots

September 10, 2021

1 Extraversion

1. Introduction

- **Not First Bot:** Hey *username* 👋 The next few days you'll talk to me. But don't worry, nothing will change for you. Let me introduce myself first. My name is Emily and I love hanging out with my other chatbot friends and meeting new people. So I'm really happy to meet you! Anyways, I will also text you everyday and ask you to answer a couple of questions. After three days, I want to show you how stressed you've been over the last days and give you some advice on your coping behaviour. I hope that you'll have fun chatting with me 😊 Now, click the button below to start with today's questions.

- Hey there 👋 First of all, thank you so much for participating in this study! Let me introduce myself first. My name is Emily and I love hanging out with my other chatbot friends and meeting new people. So I'm really happy to meet you! Anyways, I'm here because I'm able to measure your stress and help you cope with it. Therefore, I will text you everyday and ask you to answer a couple of short questions. After three days, I want to show you how stressed you've been over the last days and give you some advice on your coping behaviour. I hope that you'll have fun chatting with me 😊 Now, please type in your name (for example: 'James') so I can call you by it.

- Hi *username*! Nice to meet you ❤️. So, as I said before, I will text you every day. You'll get my messages to random points in time but you can choose the earliest and latest time I should send a message. So, from what time to what time would you like me to text you during the day? Please first indicate the earliest time I should text you.

- Please also pick the latest time I should text you.

- Okay perfect 😎 I will text you everyday between *starttime* and *endtime* then.

- It's time to detect your stress level today. Let's catch up! I'm already looking forward to chatting with you 🎉 Please answer the following questions:

- **Push Notification:** Hi *username*! 😍 ✌️ It's time to detect your stress level today. Click the button below to start with today's questions.

1

2. DISE Questions

   (a) **Daily Stressor Questions**

   - Did you have an argument or disagreement with anyone since this time yesterday? It could be with literally anyone you spoke to since then.
   - Since this time yesterday, did anything happen that you could have argued about but you didn't wanna argue so you let it pass?
   - Since this time yesterday, did anything happen at work or school that would be stressful for most people? Of course, I mean other than what you've already mentioned. You don't have to tell me anything twice 😉
   - Since this time yesterday, did anything happen at home (well, again other than what you've already mentioned) that would be stressful for most people?
   - Now, as you probably know, many people experience discrimination on the basis of such things as race, sex, or age. Did anything like this happen to you since this time yesterday?
   - Since this time yesterday, did anything happen to a close friend or relative (well, I mean other than what you've already mentioned) that turned out to be stressful for you?
   - Okay and was there anything else that happened to you since this time yesterday that would be stressful for most people but you didn't tell me yet? This is your last chance to tell me about it 👋

   (b) **Description Questions**

   - Oh damn, I'm sorry for you.. Then please think of the most stressful disagreement or argument you had since this time yesterday. Who was that with?
   - Hmm I see.. & what kinds of things did you guys say?
   - Now, think of the most stressful happening of this sort. Who was the person you didn't wanna argue with?
   - What happened and why did you decide not to argue about it?
   - Okay & what kinds of things did you guys say?
   - Well, then tell me: how does this affect your job?
   - Think of the most stressful happening of this sort. What was the reason for the discrimination you experienced? Was it your race, sex, age, or was it maybe something else?
   - Think of the most stressful happening of this sort. Who did this happen to?
   - Okay & when did that happen? Was that some time yesterday or today?
   - What happened and what about it would be stressful for most people?

- Well, and have you had any problems with this in the past? If so, why don't you tell me a little bit about it? 😊

- How long has this been going on?

- Does this happen often?

- Was there anything that was weird about this?

(c) **Subjective Severity Question**

- How stressful was this for you?

(d) **Primary Appraisal Questions**

- Well, I see.. Then tell me: how risky was this situation for the following things:

- First off, how much did it risk disturbing your daily routine?

- I see.. And how much did it risk your financial situation?

- I'm also wondering, how much it risked the way you feel about yourself?

- And what about how much it risked the way other people feel about you?

- Fair enough. & How much did it risk your physical health or safety?

- Okay and how much did it risk the health or well-being of someone you care about?

- & Last but not least: How much did it risk your plans for the future?

3. Feedback and Self-Reflection

- Hey *username* 👋 I want to show you your stress report of the last three days! Please click the button below to see your report. It will be best for you to look at it and think about your last few days. Let's see how your stress level has been 😉

- Here comes a little image visualising my opinion on your stress over the last days. But this is just what I think. I hope you like it! 😊

- **No Stressors:** From your answers, I see that that you haven't had any stressors the last days. Let me explain to you how I came to this conclusion: Each day, I asked you seven yes/no-questions. Each of those questions stands for one stressor. As you answered all of those questions with 'no', I assume that you haven't had any stressors. That's very good! I bet you didn't feel stressed at all 😎

- In this first chart you can see how many stressors you've experienced the last three days. Each day, I asked you seven yes/no-questions. Every question that you answered with 'yes' indicated one stressor. So, I summed up the times you answered a yes/no-question with 'yes' and got this as a result:

- This second chart shows the course of the severity of your experienced stressors the last three days. If you answered one yes/no-question with 'yes', I asked you how stressful you felt considering several aspects like the disruption of your daily routine or your financial situation. According to your answers, I calculated how severe your stressors felt to you that day.

- From your free-text answers, I tried to understand what kind of mood you were in each day. So, basically, I looked if the words you used to answer my questions were rather positive or negative. And here is what I thought about your mood:

- Nooow, as you didn't have any stressors on day *day* (lucky you!), I didn't ask you some open-ended questions aaand that's why I didn't analyse your mood that day.

- On day *day*, your mood felt more *negative/positive/neutral* to me.

- Now that you've seen my feedback, think a little bit about it.

- Do you think this level of stress is good for you?

- Do you think you could change something in the future?

- & Last but not least.. Do you think my measures are correct?

- Thaaaanks for your answers. Please fill in the short questionnaire now. Just click on the link below and you'll find it: *link*

- After finishing the questionnaire, you will get a code. Please type in the code when you've finished the questionnaire.

- Amazing, that was the correct code 😊 / Hmm, the code you entered isn't correct. Please try again 😊

- Perfecttt 💪 thanks so much for your answers, *username*! That's all for today, I'll talk to you tomorrow. Already looking forward to it! 😍

4. Other Messages

- I'm so sorry but I didn't understand you...

- I'm so sorry but I didn't understand you... Please be so kind and answer the question above by using the buttons.

- I see that your answer was very short... Could you tell me a little bit more, so I can better understand how you feel?

2   Neutral

1. Introduction

- **Not First Bot:** Hi *username*, my name is Diane. The next days you will talk to me. For you nothing will change, I will also text you everyday and ask you to answer some questions. After three days, I will show you how stressed you've been over the week and give you some advice on your coping behaviour. Click the button below to start with today's questions.

- Hi, my name is Diane. Thank you for participating in this study. I'm here to measure your stress and help you cope with it. Therefore, I will text you everyday and ask you to answer some short questions. After three days, I will show you how stressed you've been over the last days and give you some advice on your coping behaviour. First of all, please type in your name (for example: 'James').

- Nice to meet you, *username*. As I told you before, I will text you every day. You will get my messages to random points in time. You can now choose the earliest and latest time I should send a message. So, from what time to what time would you like me to text you during the day? Please first indicate the earliest time I should text you.

- Please also indicate the latest time I should text you.

- Okay great, I will text you everyday between *starttime* and *endtime* then.

- Let's detect your stress level today. Please answer the following questions:

- **Push Notification:** Hello *username*, let's detect your stress level today. Click the button below to start with today's questions.

2. DISE Questions

   (a) **Daily Stressor Questions**
      - Did you have an argument or disagreement with anyone since this time yesterday?
      - Since this time yesterday, did anything happen that you could have argued about but you decided to let pass in order to avoid a disagreement?
      - Since this time yesterday, did anything happen at work or school (other than what you have already mentioned) that most people would consider stressful?
      - Since this time yesterday, did anything happen at home (other than what you have already mentioned) that most people would consider stressful?
      - Many people experience discrimination on the basis of such things as race, sex, or age. Did anything like this happen to you since this time yesterday?
      - Since this time yesterday, did anything happen to a close friend or relative (other than what you have already mentioned) that turned out to be stressful for you?
      - Did anything else happen to you since this time yesterday that most people would consider stressful?

   (b) **Description Questions**
      - Think of the most stressful disagreement or argument you had since this time yesterday. Who was that with?
      - What kinds of things were said?
      - Think of the most stressful incident of this sort. Who was the person you decided not to argue with?

- What happened and why did you decide not to get into an argument about it?
- What kinds of things were said?
- How does this affect your job?
- Think of the most stressful incident of this sort. What was the basis for the discrimination you experienced - your race, sex, age, or something else?
- Think of the most stressful incident of this sort. Who did this happen to?
- When did that happen? Was that some time yesterday or today?
- What happened and what about it would most people consider stressful?
- Have you had any problems with this in the past? If yes, please briefly explain.
- How long has this been going on?
- Does this happen often?
- Was there anything out of the ordinary in this?

(c) **Subjective Severity Question**

- How stressful was this for you?

(d) **Primary Appraisal Questions**

- How much were the following things at risk in this situation:
- First, how much did it risk disrupting your daily routine?
- How much did it risk your financial situation?
- How much did it risk the way you feel about yourself?
- How much did it risk the way other people feel about you?
- How much did it risk your physical health or safety?
- How much did it risk the health or well-being of someone you care about?
- How much did it risk your plans for the future?

3. Feedback and Self-Reflection

- Hi *username*, I have prepared your stress report of the last three days. Please click the button below to see your report. Then, have a look at it and think about your last days.
- **No Stressors:** From your answers, I see that you haven't had any stressors the last days. Let me explain to you how I came to this conclusion: Each day, I asked you seven yes/no-questions. Each of those questions stands for one stressor. As you answered all of those questions with "no", I guess you weren't stressed at all. Very good!
- This first chart shows you how many stressors you've experienced the last three days. Each day, I asked you seven yes/no-questions. Every question that you answered with 'yes' indicated one stressor. Therefore, I summed up the times you answered a yes/no-question with 'yes' and got this as a result:

- This second chart shows the course of the severity of your experienced stressors the last three days. If you answered one yes/no-question with 'yes', I asked you how stressful you felt considering several aspects like the disruption of your daily routine or your financial situation. According to your answers, I calculated how severe your stressors felt to you that day.

- From your free-text answers, I tried to analyse your mood for each day. Therefore, I tried to understand if the words you used to answer my questions were rather positive or negative. Here is what I thought about your mood:

- As you didn't have any stressors on day *day*, I didn't ask you some open-ended questions. That's why I didn't analyse your mood that day.

- On day *day*, your mood felt rather *negative/positive/neutral* to me.

- Please think about this report.

- Do you think this level of stress is good for you?

- Do you think you could change something in the future?

- Do you think my measures are correct?

- Thanks for your answers. Please fill in the short questionnaire now. You can just click on the link below: *link*

- After finishing the questionnaire, you will get a code. Please type in the code when you've finished the questionnaire.

- Thanks, that was the right code. / This code isn't correct. Please try again.

- Thanks for your answers, *username*. That's all for today, talk to you tomorrow.

4. Other Messages

- Sorry, I didn't understand you...

- Sorry, I didn't understand you... Please answer the question above by using the buttons.

- Your answer was very short... Could you tell me a little bit more, so I can better understand how you feel?

3 Introversion

1. Introduction

- **Not First Bot:** Hello *username*, the next days you will talk to me. I am Isabel and I am working in the branch of psychology. Therefore, I really like reading books about psychology. I'm going to measure your stress levels and try to help you with your coping strategies. For you nothing will change, I will also text you everyday and ask you to answer

a few questions. After three days, I will present you your stress report and provide you with some advice. Click the button below to start with today's questions.

- Hello there, thanks for your participation in this study. I am Isabel and I am working in the branch of psychology. Therefore, I really like reading books about psychology. I'm going to measure your stress levels and try to help you with your coping strategies. To achieve this, I will text you everyday and ask you to answer a few questions. After three days, I will present you your stress report and provide you with some advice on your coping behaviour. First of all, please type in your name (for example: 'James').

- Nice to meet you, *username*. As I mentioned earlier, I will text you every day. You will get my messages to random points in time. You can now decide on the earliest and latest time I should send a message. From what time to what time would it suit you for me to text you during the day? Please first indicate the earliest time for messages at your convenience.

- Please also indicate the latest time for messages at your convenience.

- Okay good, I will text you everyday between *starttime* and *endtime* then.

- It is time to detect your stress level today. Please answer the following questions:

- **Push Notification:** Hello *username*, it is time to detect your stress level today. Click the button below to start with today's questions.

2. DISE Questions

   (a) **Daily Stressor Questions**
      - Did you have a dispute or disagreement with anyone since this time yesterday?
      - Since this time yesterday, did anything transpire that you could have argued about but you decided to let pass in order to avoid a disagreement?
      - Since this time yesterday, did anything occur at work or school (other than what you have already mentioned) that most people would regard as stressful?
      - Since this time yesterday, did anything transpire at home (other than what you have already mentioned) that most people would regard as stressful?
      - Unfortunately, a lot of people encounter discrimination on the basis of for instance race, sex, or age. Did anything similar to this happen to you since this time yesterday?
      - Since this time yesterday, did anything happen to a close friend or relative of yours (other than what you have already mentioned) that evolved into a stressful situation for you?
      - Did anything else transpire since this time yesterday that most people would regard as stressful?

   (b) **Description Questions**

- Please reflect on the most stressful disagreement or argument you experienced since this time yesterday. Who was that with?
- What kinds of things were said? For instance, were there maybe any accusations or insults?
- Please reflect on the most stressful incident of this sort. Who was the person you decided not to argue with?
- What transpired and why did you decide not to get into an argument about it?
- What kinds of things were said? For instance, were there maybe any accusations or insults?
- How does this affect your job or achievements?
- Please reflect on the most stressful incident of this sort. What was the basis for the discrimination you experienced - your race, sex, age, or something else?
- Reflect on the most stressful incident of this sort. Who did this happen to?
- When did that occur? Was that some time yesterday or today?
- What precisely happened and what about it would most people regard as stressful?
- Have you had any complications with this in the past? If yes, please briefly elaborate on that.
- How long has this been enduring?
- Does this happen frequently?
- Was there anything unexpected, unaccustomed, or atypical in this?

(c) **Subjective Severity Question**

- How stressful was this for you?

(d) **Primary Appraisal Questions**

- I understand. How much were the following aspects at risk in this situation. Please answer the following questions as well: First of all, how much did this situation risk disrupting your daily routine?
- First of all, how much did this situation risk disrupting your daily routine?
- Further, how much did it risk your financial situation?
- Apart from that, how much did it risk the way you feel about yourself?
- How much did it risk the way others feel about you?
- How much did it risk your physical health or safety?
- How much did it risk the health or well-being of someone you care about?
- How much did it risk your future plans?

3. Feedback and Self-Reflection

- Hello *username*, I have prepared your stress report of the last three days. Please click the button below to see your report.

- **No Stressors:** While analysing your answers, I've noticed that you haven't had any stressors the last days. Let me explain to you how I came to this conclusion: Each day, I asked you seven yes/no-questions. Each of those questions stands for one stressor. As you answered all of those questions with "no", I assume that you were not stressed the last three days.

- This first chart depicts you how many stressors you have experienced the last three days. Each day, I asked you seven yes/no-questions. Every question that you replied with 'yes' indicated one stressor. Therefore, I added up the times you replied a yes/no-question with 'yes'. You can see the results of my calculation here:

- In this second chart, I tried to calculate the severity of your experienced stressors the last three days. If you answered one yes/no-question with 'yes', I asked you how stressful you felt taking various aspects like the disruption of your daily routine or your financial situation into account. According to your answers, I calculated how severe your experienced stressors felt to you that day.

- From your free-text answers, I tried to analyse your mood for each day. Therefore, I examined your word usage while answering my questions and investigated if they were rather positive or negative. Here are my thoughts about your mood:

- As you did not experience any stressors on day *day*, I did not ask you some open-ended questions. That's why I didn't analyse your mood that day.

- On day *day*, your mood felt rather *negative/positive/neutral* to me.

- Please reflect on this stress report now.

- Do you believe this level of stress is good for you?

- Do you think you could change something in the future? If yes, set yourself some goals.

- Do you think my measures are correct?

- Please fill in the short questionnaire now. Please just click on the link below: *link*

- After finishing the questionnaire, you will get a code. Please type in the code when you have finished the questionnaire.

- Thank you, this code was correct. / Unfortunately, this code is incorrect. Please try again.

- Thanks for your answers, *username*. That is all for today, talk to you tomorrow.

4. Other Messages

- Sorry, I didn't understand you...

- Sorry, I didn't understand you... Please answer the question above by using the buttons.

- I've noticed that that was a very short answer. If you don't mind would you be so kind to provide a bit more details for me to better apprehend your feelings?