Promobot



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1. General information

Linguistic database is a distribution system, the control part is located on a remote server, and the files with the answers are situated on the robot. This approach makes it easy to manage the answers and organize permanent database updating. After each launch the robot checks for updates on the server and downloads them to its hard drive. Thus, the download of the current linguistic base on the robot takes place in two stages:

- The files for the robot are generated on the server, (In order to complete the first phase, you must click Upload, and then Refresh).
- Robot downloads the current rules from the server (In order to complete the second stage, it is necessary to wait for the completion of the uploading in the linguistic base, and then restart the robot and it starts automatically downloading relevant files of the linguistic base).

The structure of the linguistic base:



2. Question-answer system

Question-answer system of the robot is a set of rules of the robot's reaction to a particular phrase of the interlocutor. The structure of the question-answering system:

2.1 Rules

The rules are the order of the robot's actions if certain conditions are met. At the moment, there are the following parameters of the rule:

- Owner- The person, who owns one or more robots. This field serves not only to facilitate the navigation, but also to enhance the functionality of the robot: the rules uploaded by the user "User-1" will be available at all robots in case he does not specify a particular rule for this robot. It is necessary to pay special attention, because if the "User-1" has two robots, one of which sells flowers and the other works as a consultant in the bank, if the rules were downloaded without reference to the robot, they will operate equally on both robots, which, of course, will lead to the confusion.
- Robot This field determines which robot belongs to this rule. Note that this rule will not be used at other robots. If you need to have the general rules at two or more robots at once do not specify the robot in the parameter "robot". It is suitable, for example, for some common phrases like "How are you?", "Can you speak?", etc.
- Category it is a label that allows you to put things right in the linguistic base. For example, if you plan to put many rules associated with your car dealership to the robot. You create a category "Cars", after that, in case of creation a rule associated with cars, you mark that it belongs to the category "Cars". Subsequently, it will be easier to use linguistic base and find everything you need. A second area of application of the section is connected with statistics. For example, you have an opportunity to look at "Statistics" section and see any category which interested the customers the most in percentage. For example, if you have a bank, you can create a category "Loans and Mortgages", which will include concrete robot answers. This allows you to determine a category which interested the customers the most.
- Actuality This field allows you to enable or disable the rule. The lack of a tick means that the rule is disabled, a tick indicates that the rule is active and will be used by the robot. Most often, this function is used to enable\disable rules without deleting them. This may be useful if you have a robot that operates in different places on different days. On Monday, the active rules may relate to the floral interior, on Friday they are disabled (made inactive) and rules related to the dealership are activated.

• Anchor at the entrance - through this field rule refers to another rule. It is used to make complex branching dialogues see Anchors section.

- Comment this field is used for leaving an additional comment. For example, this field may contain information such as the author's remark.
- The robot hears a field representing a phrase, in the case of hearing of which the robot produces a reaction in accordance with the rule. It is necessary to take into account that the speech recognition technology is not perfect and can sometimes work not entirely correct. For example, the phrase "Tell me about rap" pronounced by a person can be recognized by the robot as "Tell me about trap" and the rule "* rap~ *" will not work.

It is necessary to take into account specific syntax used in the linguistic database. The symbol "*" means any number of words or their complete absence. Therefore, if it is written "* cat *" in a rule, and a person says: "Do you have a cat?", the robot will take it correctly, and will trigger the rule. The symbol "/" in curved brackets means variability. For example, if the field is filled as follows: "* {how much / what} * {degrees / weather / temperature}

*", the robot will respond to the following phrases: "What is now degrees", "What is the weather" "What is the temperature", etc.).

• The robot says – field of the robot's response, fill rules are specified in Item 11: "Standard of filling the fields of phrases and actions"

2.2 Low priority rules

These are the rules, the answers to which are not in priority, but necessary in order that the robot could give an answer rather than just to say something out of place.

In this section, you can enter different question words (how, where, why, what, how much, etc.), it's obscene language, words that are often pronounced in the context of the query and does not require a response to them.

Let's look at some examples. Suppose we have the word "where" at the rules of the low priority and the phrase "butcher shop" in the basic rules (Sec. 2.1.). If we ask the robot: "Where is the butcher shop?", a high priority rule will work and the robot will respond as if it were responding to a request "butcher shop" - "The nearest butcher shop is around the corner." If we ask the robot, "where is the vegetable shop?", and there is no rule "vegetable shop" in the base of the robot, then it works normally according to the low priority rule "where" and the robot will say: "Where? Somewhere, I suppose". As we can see, in this case, a low priority rule generally tried to save the situation, because if it did not exist, the robot would have simply said "I do not understand, I do not know what you mean".

Another example, is with the use of the strong language words. For example, a swear word "fool" and a low priority rule for him. If the robot hears "you are a

fool", then it will work - the robot would be offended ask the person not to call him so. If the robot is told: "Hey, fool, who is Bruce Lee?", a high priority rule "Bruce Lee" will work.

Another example - a robot working in the Savings Bank had two rules:

1. * Savings Bank * - in the case of hearing which he spoke about the Savings Bank

2. * {Director/President} * - in case of hearing which he had to talk about the director of the Savings Bank.

However, if the robot heard, "the director of the Savings Bank", then both of the rules worked in turn. And only after the word "savings bank" was moved to the low priority rules, it started to use the rule "director of the Savings Bank" correctly - if the robot heard "Savings Bank", then it talked about the savings bank, if it heard "the director of the Savings Bank" - then it spoke about the director of the Savings Bank.

Standards of filling of this section are the same as the standards of filling the Rules section (Sec. 2.1).

2.3 General linguistic base

This base is filled in by the workers of LLC "PROMOBOT". A robot uses the information from the common database language only if the answer is not found in private linguistic database. This linguistic database is an intellectual property, access to it is limited. To disable the general linguistic base a rule must be created in a private linguistic base, in the rules of low priority must be created a rule where in the field "robot hears" only * is written. In this case, in the absence of an answer to listed rules, the robot will respond with the phrases that are included in this rule.

2.4 Internet.

In case of the absence of the answer in the private and general linguistic bases of the robot, it will try to look for the answer on the Internet on reliable resources such as Wikipedia.

2.5 Unrecognized phrases:

In the absence of an answer in the private and common linguistic bases, as well as in the Internet robot will use phrases mentioned in this section. Standards of filling of this section are listed in Section 11. If the section is not filled, the general unrecognized phrases will be used. In case of the presence of at least one phrase, general unrecognized phrases will not be used.

3. Welcome phrases

3.1 What are the welcome phrases?

Welcome phrases section is a list of phrases or actions that the robot uses when meets a person after the face recognition. The choice of the phrase occurs irregularly (random). An example of the greeting is: "Hi! How are you?". It is very convenient to use them to start a conversation: at the end of the greeting, the robot can ask the desirable question, making the human to take part in a dialogue and bringing it to the subject you're interested in. The robot can start the conversation with a phrase: "Hello, do you like candies?", and then continue with something, connected with your brand.

3.2 Function of the welcome phrases

These phrases are necessary to create a more adequate human dialogue with the robot. The robot will greet the person and can itself initiate a dialogue, it will pronounce the first phrase after the face recognition.

3.3 Types of welcome phrases

Welcome phrases are divided into: *unknown welcome phrases* and *known welcome phrases*. The difference is that when greeting a person known to the robot, the robot knows his name, date of the last visit and can use this information in greeting. In other words, if an unknown person may be greeted: "Good afternoon, welcome, how are you?", then the person well-known to the robot can be referred by name and told how much the robot did not see him, for example, "Hello, Maxim, I have not seen you for already 20 hours ".

3.4 How to use welcome phrases and what do we need to know about them?

- The robot always uses them. If you have not filled in these sections, the robot will take information from the general linguistic base. If you have completed at least one phrase robot will only use your list of welcome phrases, phrases from the general linguistic base will not be used by robot. One should pay special attention to the fact that if the list includes only one line, it will be pronounced whenever it is needed. Thus, the user will have a feeling that the robot does not know much and can only use one phrase.
- Frequency of pronunciation of phrases is specified in the settings of the robot in the tab "Dialogue", the parameter "greeting time". It works as follows: the robot sees a man and greets him the next time it greeted him after the time specified above.

- The robot remembers and stores all strangers in its operational base, therefore it works in case with the strangers and time specified in Sec. 2 is also spread on them, that means, the robot should not always welcome strangers. When you restart the robot base of operations with persons gets cleared.
- You can disable welcome phrases:

In a private base in welcome phrases use only a character ' (apostrophe) and there is nothing more to fill. Thus, the robot will use the private greeting phrases, but without the text and actions.

• Standards of filling are described in Section 11: Standard of filling the fields of phrases and actions.

4. Dialog phrases

4.1 What are the dialog phrases?

Robot uses dialog phrases in addition to its answer to a phrase of a person.

4.2 What are they used for?

Dialog phrases are used to change the topic of the conversation to a desired one. And also to vary human and robot conversation (some people experience a deadlock because they have no idea what to say). Example dialogue with the additional phrase:

Human: How are you?

Promobot: I am fine. + (Extra phrase) By the way, do you like ice cream?

Human: Yes.

Promobot: Then come to our icecream store!

As we can see from the example shown, Promobot's initiative lead to a conversation. In case, if the robot had simply said that it is fine and stopped, the human would have stood there and thought, what else could he ask him.

4.3 How to use them and what do we need to know about them?

- You can enable or disable the use of dialog phrases into the robot's settings ("System", "Use of dialog phrases").
- You can set the frequency of the use of the dialog phrases in "Frequency of use of dialog phrases". The figure means the order of the phrase to which the robot will add a dialog phrase. For example, if you use the value 2, the robot will add a phrase to every second answer.
- Dialog phrases are used in the following cases:
 - 1. No anchor at the outlet;
 - 2. The field action is empty;
 - 3. The field link is empty;
 - 4. The displayed file is not selected.
- It should also be mentioned that in case that if there are no dialog phrases in private linguistic base and they are switched on in the settings, the phrases from the general linguistic base will be used. In case if at least one phrase is present, only it will be used. One should pay special attention to the fact that if the list includes only one phrase, it will be pronounced whenever it is possible. Thus, will have a feeling that the robot does not know much and can use only one and the same phrase.
- Standards of filling are described in Section 11: Standard of filling the fields of phrases and actions.

5. The questionnaire

5.1 What is questionnaire?

"The questionnaire" - is a list of questions which are asked by the robot in addition to the basic questions when using the "Loyalty program" function (see the description of the loyalty program).

5.2 Function of the questionnaire

Answers to these questions can be useful for marketers to create a "customer portrait", as well as for the formation of unique offers for customers. You need to use the questions with the answers, valuable for you. For example, "What kind of sports do you like?". It is advisable to use closed questions, with a list of possible answers (an operator "question" should be used in the Action field. See the section Actions.

5.3 How to use them and what do we need to know about them?

1. This section operates on the basis of the dialog phrases; the answers are recorded on the robot. The questions are asked only to the robot's friends.

2. The robot must not ask the same question to the same person several times. When all the answers will be collected by the robot, it will use the dialog phrases.

3. After receiving an answer the robot saves it in a *.json file format.

4. It is advisable to fill this section with the use of anchors (see section Anchors) to receive an adequate reaction of the robot.

5. Standards of filling are described in Section 11: Standard of filling the fields of phrases and actions.

6. Promo materials

6.1 What are the promotional materials?

Promotional materials in the linguistic base is a list of the robot's phrases or actions that it uses or performs with a certain frequency at the moment when no one interacts with it.

6.2 Function of the promotional materials

These phrases or actions are needed to inform customers about anything (even if they do ask the robot about it), as well as data replicas can be used to attract attention to the robot.

6.3 How use them and what do we need to know about them?

The robot uses them at the moment when there is no interaction with it for a period of time. In the settings you can set a timer of pronunciation ("Dialogues" section, "Timer of pronunciation of the promotional phrases" item). Rules of filling are described in Sec. 11, "Standard of filling the fields of phrases or actions."

7. Joystick phrases

7.1 What are the joystick phrases?

Joystick phrases are a list of remarks and actions that the robot uses sequentially, in a predetermined order by pressing a combination of keys on the joystick.

7.2 Function of the joystick phrases

Joystick phrases allow Promobot to participate in various presentations and conversations using the phrase at the very moment when it is required of him.

7.3 How to use them and what do we need to know about them?

1. To use them, you need to enter the mode of "joystick phrases" (back + Y). You can exit mode by pressing (back + Y)

2. In this mode, the robot does not respond to the visitors.

3. To use a phrase, press Y + RT or RB. Phrases are pronounced sequentially.

4. Standard of filling is described in Sec. 11, "Standard of filling the fields of phrases or actions".

8. Macros

Macros are used in the text of the answer of the robot. In the process of pronunciation, they are being replaced by a predetermined text.

- Robot Name {name}
- User name {user}
- Company name {company}
- Current Time {time}, an example of pronunciation "It is 15.25 now"
- Current Date {date}, an example of pronunciation "today is February 25, 2015, Wednesday"
- Current weather {weather}, an example of pronunciation "Air temperature is 2 degrees below zero."
- Current city {city}
- RSS Feed {RSS [http://ria.ru/export/rss2/politics/index.xml]}, the text of one of the news will be used in the answer.
- Enumeration {one / two / three}, only one option will be used for the answer
- Part of the question {*1}, the part of the question's text of the user will be under the symbol * with the determined sequence number
- Play music {play:1.mp3&nowait}, during the answer a song's playback starts, optional key <nowait> is used to play music and pronounce the text simultaneous. Audio file must be pre-loaded into the robot.
- Pause in pronunciation {pause:5}, a pause will be used in a specified place with a predetermined duration in seconds (e.g. 5 seconds)

9. Actions

Actions are used to perform any actions during the robot's phrase. Types of activities:

- To turn off the microphone for a specified time in seconds mute:<time> Example: mute:5
- Move the robot to a set point navigation: > It should be able
 to move autonomously on the map.
- Face Recognition: there is a face detection, when you specify additional options the robot says what it recognizes. It pronounces the specified text before recognition.

The options are: name - the user name; gender; age – age of the user.

Examples:

1. To recognize face, to pronounce the name of the user, to detect its gender and recognize age: name&gender&age

2. To recognize face , to pronounce the name of the user - recognize:age

- Meeting procedure starts a dating procedure and pronounces the specified text before the meeting, if all the requirements are satisfied a preliminary face detection is produced, determining that the user is unknown, the user is in the frame.
- Loyalty Program dataCollect, launches the loyalty program in always on mode. In this mode, the robot does not respond to questions. If you specify additional options.
- One-time launch of collection of the basic data for loyalty programs dataCollect:once. Performing this action, the robot will ask the user for details: name, phone, e-mail, date of birth. The resulting data is stored in a separate folder in *.json format. After receiving the data, the robot will continue to communicate normally.
- To ask the question to a person question: <question text>, displays a dialog box with the question on the screen (shows the response options yes and no).

Example: question: How old are you? <20|20-30| 30-40|>40 The use of the question mark is obligatory. Everything that is before the question mark is a question, everything that is after it is the answer options.

- Play music play:1.mp3&nowait, a song playback starts at the time of the response, optional key is <nowait> is used to play music and speak simultaneously.
- Show slide presentation presentation, select the presentation to show, when you specify the ID of the presentation, starts the selection of the initial slide of the selected presentation. The presentation should be prepared in advance and loaded into the robot.
- Run the script script: <script name>, the script starts.

Available Scripts:

1. script:dance - robot dances to Michael Jackson

2. script:head_center - turning head to the left and returning it to the center position

- 3. script:head_left turnng head to the left
- 4. script:head_right turning head to the right
- 5. script:left_up raising the left hand
- 6. script:right_up raising the left hand
- 7. script:no A side to side motion of the head means "no"
- 8. script: yes A nod, meaning "YES"

9. script: turn - turning the robot for 90 degrees

10. script:turn_back - rotation of the robot for 180 degrees

- Launch of the browser browser, opens the specified link in the answer of the browser an address bar and a virtual keyboard will be available. If it is not specified, the link will be opened in the kiosk mode (without the address bar and the possibility to access the keyboard).
- Launch of a game game: <name>, the launch of a given game.

Options:

game:SurpriseMe - Starts the game of guessing the thoughts of the interlocutor.

To launch an application - app:<name>, the launch of a given application. Options:

1. app:Photo – photo app start (robot takes a picture of the person)

2. app:Recorder - run a video message recording application

3. app:Instaprinter - launch of an instaprinter application (the ability to print photos from instagram, filtered by a predetermined hashtags).

10. Creation of the complex dialogs (the use of anchors)

Anchors are special tags that are used to link phrases and rules. Anchors allow you to create complex dialogs.

An anchor can be set at the end of a phrase or rule, or at the beginning of a rule. When a phrase or rule with an anchor at the end is triggered, the robot will first respond to the rules with this anchor indicated at the beginning. Due to this, the robot is able to comply with the predetermined dialog.

In a Greeting phrase of the robot that sounds like "Hey! How are you?" there is an anchor at the output, which is named "how are you".



Using an anchor, the phrase and the rule can be combined. If we want to create a rule in which the robot must answer the question "how are you", then we create a rule in which we use an anchor "how are you" on the entrance (input anchor) - this ensures us that the robot's answer will be connected to the previous rule. In the Robot says field we write an expected answer. For example, "* excellent *." In the Robot answers field, we write what the robot will say when it hears the answer of the person. For example, "I am glad that you are ok".

Output anchor			
Обычный	← Link	Anchor	*
Action	File on the robot 🔹		
	Оці	Output anchor	Output anchor

Below there is a clear example of the use of anchors:



11. Standard of filling the fields of phrases and actions.

Standard of filling the robot's phrases in different sections is the same:

• Robot says - a text which is pronounced by the robot using speech synthesis. It should be mentioned that speech synthesis is not perfect and has some special features. For example, you have to put stresses in difficult words to make sure the robot pronounces them correctly. The word "balalaika" should be written like "balal+aika". If you use speech synthesis Maxim, accents are placed by the apostrophe after the stressed vowel, e.g. "balala'ika". When using syn tax Maxim, you can test the pronunciation at <u>www.ivona.com.</u>

When writing the robot's answers, you can use macros. For example, {user}. When filling the field robot answer with the text "Hello, how are you, {user}?" The robot will say "Hello, how are you, Oleg?" (If it sees Oleg, of course. Instead of the

{user} it pronounces any name, if the person is in its database). You can read more information about macros here.

• Emotion - in this field you can specify the emotion, which will be displayed on personal robot's LEDs (eyes). At the moment, the robot can show the following emotions: Normal, wonder, angry, sad, perplexed, laughing, smiling, scanning, hearts. It is necessary to choose an emotion that is relevant to a particular rule: if it's a robot answer to the refusal, it will be appropriate to use the emotion of sadness, if it is something cheerful laughing. The most popular of all emotions is hearts, when the robot shows for two red hearts. • Action - in this field you can write the action of the robot. This field is functional: it can be used to display text and buttons on the screen using the robot's command "question". For example, if we write in the action field: «question:?How are you?|Fine|Not fine", for example, on the screen there will be a dialog window with options. This feature can be useful if you want to make a menu similar to the data terminal, or if you want to give the customer more than one answer, or the question is too long. For example, the robot working in Russian cannot understand phrases in English, and vice versa.

Learn more about the list of all activities, it can be found at the following link: List of actions.

• Link - This field allows you to launch the browser, with reference to the site\images\ audio file\video if necessary. Note that the system is case-sensitive, for example, if you specify the name of «shop.jpg» file, but the name of the file is «SHOp.jpg», the link will not work.

• Gender of the interlocutor - This field allows you to select gender of the interlocutor required for the use of the phrase. In other words, this this condition is according to the principle: "If the interlocutor is of the corresponding gender, then it is possible to use the phrase". It is used for a proper targeting. For example, the dialogue may be branched, one branch of which is addressed to males and the other - to the females.

Let's look at the example of this branch:

1. (to a female) Hi, just today in our perfume shop 40% discount!

2. (to a male) Good morning! Only today! A 23% discount in the tools shop, check it out!

How can we assume, perfumes will be of interest mainly to women and instruments can be of interest to men. Therefore, the effectiveness of targeted commercials increases.

It should be borne in mind that the robot cannot always have time to recognize the speaker's gender. Therefore, you must be sure to create a 3^{rd} option - neutral, which is suitable for both genders.

• Age of the interlocutor - this field allows you to select age, required to evoke the phrase from the robot. For example, a person who is 18-25 years old is more interested in gadgets, for example, than a person who is 60. One should consider the possibility of age determination error. Please, do not rely on this function without much need.

Anchor - writing the robot's phrases, you can create complex dialogues. The rule should have an anchor at the output, after which the robot will use a variety of behaviors from the rules with the same anchor at the input. More information about working with anchors is written in the Anchors section.

Working with the linguistic database in practice (the use cases):

Presenter / co-presenter

Objective: to make the event memorable, to implement the robot into a scenario to make it pronounce prepared phrases at the right time.

IMPLEMENTATION:

Fill "joystick phrases" in the linguistic database in the correct order.

RESULT:

Robot pronounces the pre-loaded phrases after you press the buttons on the

joystick. Promoter / entertainer

Objective: To attract attention and to increase the stream of visitors, to pronounce information about certain products and services (advertising), to cheer up people around.

IMPLEMENTATION:

- Write the name of the robot in the settings and the name of the company and enable the dialog phrases.
- Add the necessary information to the unknown welcome phrases and to the known welcome phrases.
- Add the necessary information to the dialog phrases.

RESULT:

- The robot will greet people using the phrases that you have added.
- In some of the phrases the robot will use the company's name. For

example: Man: What's the weather?

Robot: It is 10 degrees above zero, clear, and the weather in CompanyName" is always great.

• The robot will add dialog phrases to its answers, you can add those phrases in "dialog phrases" section.

Consultation

Objective: to answer direct questions from visitors, give the necessary information to and change the topic of the dialog.

IMPLEMENTATION:

- Perform the items listed for the "promoter/entertainer"
- Add the answers to direct questions in the question-answer system.

RESULT:

In addition to the "Promoter / Entertainment" robot can answer the direct questions.

Collection of personal data

The goal: to create a "portfolio" of the customer, to get the name, phone number, email, date of birth and other information.

IMPLEMENTATION

- Perform the actions listed for the "Consultation"
- Enable loyalty program in the robot's settings.
- Change the unknown welcome phrases, add dataCollect:once to the action field.
- Add more questions to the questionnaire questions.

RESULT

- In addition to the "Consultation" the robot will invite people take part in the loyalty program.
- In the conversation with acquaintances the robot will ask questions, filled in the questionnaire section and remember the answers of the people.

What we get:

- 1. The customer's card in *.json format
- 2. A file with answers to additional questions format *.json
- 3. The client's photo *.jpg format
- 4. A video of the client *.mp4 format

In a conversation with strangers the robot will add those phrases to its answers that you specified in the section Dialog phrases.

Active navigation

Objective: To help the visitor to find a required section, shop, etc.

IMPLEMENTATION:

- Navigation is only available in versions with the navigation package.
- You must first create a map of the room with the help of our specialist and set the points for the robot's movement.
- Add to the question-answer system of linguistic rules base the rules, with the text navigation:Number_of_the_point in the action field.

RESULT:

- The robot offers to show the person to the required place.
- The robot is able to work with all types of the application (except for Presenter / Co-presenter).

A new feature of the Promobot: the robot's application in the loyalty programs (collection personal data of the people).

Objective: To obtain and store personal data of the users for further analysis.

Implementation:

1. At the moment Promobot sees a person it can offer to participate in the loyalty program (a message on the screen, "Do you want to take part in the loyalty program? (Possible answers are yes and no) Agreeing you consent to the processing of personal data")

2. In the case of human refusal, Promobot offers to get acquainted.

3. In case of the agreement of the person, Promobot asks the following questions to the person:

- His name
- His phone
- His email
- His date of birth

After answering the questions on the screen a client's card filled with the abovementioned information and photo will be shown to the client. You can make a correction of the data using the on-screen keyboard in this card (if required) and confirm the correctness of the data. After confirmation, the entered data a video recording begins and the customer can leave a feedback.

1. In the process of receiving answers to the above questions the robot remembers the person (adds a position to the Face Detection System database).

2. Next, in the process of communicating with the person the robot can ask additional questions according to the interest of the owner of the robot (for example, about favorite kind of sports, what movies the person watches, etc.). The robot remembers answers to the additional questions and "binds" them to a specific person. These additional questions can be created in a linguistic basis in the section "The questionnaire".

3. Additional questions are asked during the conversation; they are added to the answers of the robot. For example:

Person: What's the weather?

Robot: The temperature is 5 degrees above zero. + "Question"

Frequency of pronunciation of the questions can be set in the robot's settings, see "Frequency of use of the dialog phrases". You set a numeric value of the answer which requires a dialog phrase to be added after it. For example, if you set the number 2, the robot will add a dialog phrase to each of its second answer. The dialog phrase is not used in cases where the robot's reply contents: * display of video or audio playback; *dancing; * question with an anchor at the exit; * any action; * opening of the website.

1. After receiving of an answer from the human, the robot will not re-ask the same question again to the same person, and will ask other questions for which he has not yet received an answer. After the second visit of the person, who had already agreed to participate in the loyalty program, the robot will continue to ask questions, to which he received no answer.

2. When all the questions are answered the robot will use dialog phrases (in the "dialog phrases" section in the linguistic database). In their absence it will use dialog phrases from the common linguistic base.

3. If a person refused to take part in the loyalty program (to fill the card), but agreed to meeting, in the course of the dialogue the robot it will also ask additional questions and save the person's responses to them. The next time the person visits the robot (not earlier than on the next day) the robot will again offer him to participate in the loyalty program.

4. Personal data of the user can be used to simplify the interaction with the robot. For example, the robot can automatically fill the e-mail address of the user when sending a photo to him.

Usage:

1. Enable the loyalty program mode (see section "Dialogues").

2. Enable in the "Dialog phrases" in the robot's settings and select the desired frequency.

3. The proposal of participation in the loyalty program can be evoked by the action dataCollect:once

For example, in unknown welcome phrases in the linguistic database one can create a phrase, write dataCollect:once in the action field, to make other records disabled. In this case, the robot will offer to take part in the loyalty program to all unknown people. In case there are other welcome phrases, the robot will always offer to take part in the loyalty program as the welcome phrases will be pronounced in a chaotic manner.

1. Fill the "survey questions" section - not necessarily.

2. Fill the section "dialog phrases" - not necessarily.

Result:

As a result, the folders named after the name of the user ID will be formed. They will contain:

- customer card (see item 3). *.json format
- file with answers to additional questions *.json format
- customer's picture *.jpg format
- a video of the client *.mp4 format

This folder will be shared over the network, which is connected to the robot. Accordingly, it is also possible to download the existing data using the network.

Restrictions:

1. Due to the fact that robot must remember the person when filling the card, (and there can be only ten of them) the amount of them should match the number of people from whom we want to collect data. The basic version of the face recognition system is designed for 10 people, respectively, the robot will be able to obtain the necessary data from only 10 people.

2. Global technologies in the field of face recognition do not have 100% recognition accuracy (in Megaface competition held in December 2015 the first place was taken by the system which recognition was 73% correct. Google Technology are located on the second line with a 70%), so that the robot can offer again to take part in the program of loyalty to the person who has left his information, or to re-ask a question, which has already been asked. As a consequence, a small percentage of possible errors in the data binding to a specific person is possible.