| # | Приклад з вимог (цитата) | Зауваження\питання | Додатково |
|----|--|--|--|
| 1 | User stories. Story 1 (admin story). 1. Admin opens "Maintain Questionnaires" page in admin area. On this page admin creates questionnaire with several questions having several choices each. | How many questions, how many choices? | I suggest to create up to 10 questions with up to 5 choices for the better user experience |
| 2 | User stories . 2. Admin opens "Conduct Questionnaires" page. On this page admin chooses created questionnaire and clicks button "Run". | Should the admin be redirected to the "Run questionnaire" page after clicking "Run" button? | |
| 3 | User stories. 3. In "Randomization" section he chooses "Number of users" and inputs value "100" | What is maximum amount of customers that admin could choose? | |
| 4 | User stories. 3. On "Run Questionnaire" page admin chooses invitation mode "Send one-time invitation" | Does "Send one-time invitation" mean that user will be able to go through link only once or fill the questionnaire once? What should be messaged to the user who wants to fill the questionnaire one more time? | I suggest to message user information: "Thank you very much for taking part in our survey. Your opinion is very important for us!" |
| 5 | Usage Information. Each question consists of question text and one or more choices. | How many choices the questionnaire should have? It should consist from at least 2 choices ("one or more choices" misunderstanding?) | I suggest to create up to 5 choices for the better user experience |
| 6 | Usage Information. Each questionnaire may contain one or more questions. | How many questions? | I suggest to create up to 10 questions for the better user experience |
| 7 | Usage Information . Choices are presented to Users as radio buttons. | Whether the radio button should be in the already pressed state, and if so, which of the choices number should be marked? | For more clear questionnaire I suggest not to have already pressed radio button |
| 8 | Usage information. Emails should contain special unique links (URLs) to questionnaire pages in Survey system (these links are automatically generated by the system). | How should these links look like? Should they be nested or have a simple link look | |
| 9 | Usage information. Questionnaires are created by Administrator. | There will be only one administrator, who will have access to this module? | |
| 10 | Usage Information . Administrator can specify the percentage or absolute number of Users that should be invited to fill a questionnaire | Input field should accept only integer numbers? | |
| 11 | Usage Information. Each URL contains encrypted and Base64-encoded user ID and questionnaire ID so that a user can be identified on the server and a correct questionnaire page can be loaded. | Explain Base64 encoding to non programmers: it is a way to transform binary data to printable, readable text | |
| 12 | Usage Information. Each URL contains encrypted and Base64-encoded user ID and questionnaire ID so that a user can be identified on the server and a correct questionnaire page can be loaded. | What is the order of IDs - user ID the questionnaire ID or vice versa? | |
| 13 | Usage Information. Administrator can stop run questionnaire by inactivating of run period. | There is no activate/inactivate button on the "Run Questionnaire page" images | I suggest adding "stop" button before "remove" button |
| 14 | Usage Information. Each User may fill each particular questionnaire only once for each run period. Users cannot participate in questionnaire after the end of current period (when invitation was sent) or in case if period was inactivated. | What message should user see, when he goes through the link again in three scenarios (1.end of the period, 2. inactivated (stopped) run, 3. already filled questionnaire) | |
| 15 | Usage Information. If questionnaire is made only for one or a selection of customers, then only the Users who belong to those customers are allowed to see it. | Users and customers? We have groups of customers with assigned users? Where we should create customers and assign users then? | |
| 16 | User Interface. Admin area should include an intermediary navigation page with 3 links: Maintain Questionnaires, Conduct Questionnaires and Email template. | Do you wish to see these links as text links or buttons? Should they be centered/ in horizontal or vertical line? | I suggest to have these 3 links as big horizontal, highlighted and clickable buttons |
| 17 | Maintain Questionnaires page. This page is used to create, edit, and delete questionnaires, and to modify their contents. | edit=modify? | |
| 18 | Maintain Questionnaires page. This page is used to create, edit, and delete questionnaires, and to modify their contents. | There should be all 3 points (questionnaires, questions and choices) with all available questions for each questionnaires and all choices for each question on the same page, according to the screenshot added? | |

| _ | | | |
|----|---|---|---|
| 19 | Maintain Questionnaires page. Button to add a new questionnaire (displays the Create/Edit questionnaire window) | After the admin presses the "new" button, the "create questionnaire" window opens and the title should contain the text "Create questionnaire"? After admin have pressed "ok" button the title should change to edit? | |
| 20 | Maintain Questionnaires page. Button to edit the selected questionnaire (displays the Create/Edit questionnaire window) | After the admin presses the "edit" button, the "edit questionnaire" window opens and the title should contain the text "Edit questionnaire"? | |
| 21 | Maintain Questionnaires page. Note that after the questionnaire has been run, it cannot be modified. | How you would like to see the behaviour of button "edit" if questionnaire is running? | I suggest to have the "edit" button grayed out (non clickable) with question mark on the right side with text that shows after hovering with mouse - "questionnaire is now running, you need to stop the questionnaire to be able to edit it" |
| 22 | Maintain Questionnaires page. Button to delete the selected questionnaire. Any questionnaire can be deleted, so, be careful. | Do you need caution message for the admin? | I suggest that admin will need to approve deletion in separate popup showed after button "delete" is pushed |
| 23 | User Interface. Admin Area. Maintain Questionnaires page. Button to create a new question (displays the Question text editor window) | According to the screenshot, title of the window is "edit question". Should the title look like: "create question" when new question is created? | |
| 24 | User Interface. Admin Area. Maintain Questionnaires page. Buttons to change the order of the selected question in the list. The list of questions should also support drag-and-drop to perform this operation. | According to the screenshot, there are 4 buttons in the following sequence: move top, move down, move up, move bottom. Is it the right order? | I suggest to place button "move down" after button "move up", cause it is more user friendly experience |
| 25 | User Interface. Admin Area. Maintain Questionnaires page. Buttons to change the order of the selected question in the list. The list of questions should also support drag-and-drop to perform this operation. | Do you need to show information for the admin about possibility of drag-n-drop functionality? | I suggest to create another type of cursor (hand cursor, for example) when hovering over questions |
| 26 | User Interface. Admin Area. Maintain Questionnaires page. Button to create a new choice for the selected question (displays the Choice text editor window) | How admin should select question(s) to assign choices? | |
| 27 | User Interface. Admin Area. Maintain Questionnaires page. Button to save the questionnaire. | What is expectations of behaviour after "save" button is pressed? | I suggest to redirect to the intermediary navigation page |
| 28 | User Interface. Admin Area. Questionnaire text editor window. Language of currently displayed title and description of Questionnaire (input title and description in all languages, when you are creating Questionnaire). | What languages should be present in the drop down list? | |
| 29 | Questionnaire text editor window | What characters can be entered in the fields and what max and min symbol limitations? | |
| 30 | User Interface. Admin Area. Questionnaire text editor window. Language of currently displayed title and description of Questionnaire (input title and description in all languages, when you are creating Questionnaire). | What should happen after language is chosen (Should previous entered value be visible?) | |
| 31 | User Interface. Admin Area. Questionnaire text editor window. | What is the expected behaviour of button "ok" | I suggest to receive message about successful update of the questionnaire from the right side of the button for 5 seconds |
| 32 | User Interface. Admin Area. Questionnaire text editor window. | According to the screenshot, should the admin see sample text in the input field? If yes, should this sample text disappear after admin clicks on the input field? | |
| 33 | User Interface. Admin Area. Questionnaire text editor window. | According to the screenshot, what is the purpose of the text above "text". Is it required in the program? | https://www.awesomescreenshot.com/image/36901224? key=59954bd1b50bc606137c1420755ea191 |
| 34 | Question text editor window. Dynamically generated list of languages and text boxes for specifying question text in each of those languages. | Do you mean that in this window, languages that are selected in the questionnaire earlier should be displayed? What do you mean under "dynamically generated list of text boxes"? | |
| 35 | Question text editor window. Dynamically generated list of languages and text boxes for specifying question text in each of those languages. | According to the screenshot - there is "text" in each field. Should it be visible as sample text and disappear after click? | |

| 36 | Question text editor window. Button to accept the changes | Button to accept is "ok", according to the screenshot? | |
|----|---|--|--|
| 37 | Choice text editor window. This window is used to specify the text of a choice in multiple languages. Looks and behaves identically to the Question text editor window. | This window should be titled "Editor choice"? | |
| 38 | Conduct Questionnaires page. This page is used to run questionnaires, view reports, and publish reports to Users. | In usage information there is a mention about "Administrator can stop run questionnaire by inactivating of run period." Also, there is mention that "One questionnaire can be run several times.", which indicates that it should be possible to stop and run questionnaire again | Maybe it will be good to have status button "Stop" with inactivate questionnaires function |
| 39 | Conduct Questionnaires page. This page is used to run questionnaires, view reports, and publish reports to Users. | According to the screenshot, what the status "Under creation" means? | I suggest to name this status "Created" |
| 40 | Run Questionnaire page. This page is used to manage questionnaire invitations and run periods. Questionnaire run period is time interval when users can participate in questionnaire. One questionnaire can be run several times. | Should we have additional column with runs quantity on the Conduct Questionnaires page ? | |
| 41 | Run Questionnaire page. Randomization settings for the questionnaire (used to specify whether all users, a percentage of all users, or an absolute number of Users should be invited to fill the questionnaire). Also showed approximated number of users who will be invited. | Why is the number of shown users that will be invited approximate? | |
| 42 | Run Questionnaire page. Randomization settings for the questionnaire (used to specify whether all users, a percentage of all users, or an absolute number of Users should be invited to fill the questionnaire). | What characters should the input field accept? What should happen after entering value into the field? Should the randomization start working immediately or with delay? | |
| 43 | Run Questionnaire page. List of customers whose users should be invited to fill the questionnaire (in parenthesis - number of users related to customer and who have not participated in the current questionnaire in the current period). Only these users can participate in questionnaire and view questionnaire reports | Users and customers? We have groups of customers with assigned users? Where we should create customers and assign users then? | |
| 44 | Run Questionnaire page. Run periods' list. New period can be added (both start and end dates must be in the future), existing period can be modified (start date can be modified only if it's the future date; the same true for the end date) or deleted (only if both start and end dates represents future dates). Also selected period can be inactivated\activated. Two periods cannot be intersected. | Should the format of date look like on screenshot (on the screenshot with "Run periods" - year.month.day or on screenshot with "Questionnaire run period editor window" - year-month-day in the same order)? What message should admin see, if the date of add/edit/remove period is in the past or two periods are intersected? | |
| 45 | Run Questionnaire page. Button to send invitations and run the questionnaire. | Should the admin choose the exact run period(s) before sending invitations? | https://www.awesomescreenshot.com/image/36913995? key=9dfae939767a9daa4950963f0b39027f |
| 46 | Questionnaire run period editor window. "No end date" means that period has no end date, in other words will never end. | How you would like to see text on the "Run periods" window if the checkbox "No end date" will be checked? | I suggest such option: 2010.06.01-UNLIMITED |
| 47 | Questionnaire run period editor window. "No end date" means that period has no end date, in other words will never end. | Should it be allowed to insert only integer numbers and a hyphen or points into the fields? | |
| 48 | Questionnaire run period editor window. "No end date" means that period has no end date, in other words will never end. | If there is "No end date" checked - should the agreed text be placed into the field "End date" automatically or the "End date" will be blanked out without possibility of change? | |
| 49 | View Questionnaire report page. This page allows administrator to view the questionnaire reports. The questionnaire is selected in the Manage questionnaires page. User can view report only for his customer's questionnaires. | Under Manage questionnaires page you mean Conduct Questionnaires page? Conduct Questionnaires page is intended for admin role only? | |
| 50 | View Questionnaire report page. Report style selector (options: Text, Graphs, Text and Graphs). | What is the order of report style should be shown if checked the "Text and Graphs selector"? | |

| 51 | View Questionnaire report page. Report style selector (options: Text, Graphs, Text and Graphs). | If checked "Text" option, how should option "Graph Style" field look? | I suggest to blank it and make grayed out |
|----|---|--|---|
| 52 | View Questionnaire report page. Numeric mode select (options: Absolute, Both). | Can you explain what do you mean under options: absolute and both? | |
| 53 | View Questionnaire report page. Period selector (user can input arbitrary period or select one of questionnaire run periods). | What limitations in characters that user can input for arbitrary period? Should the available "Run periods" be shown after clicking on the magnifier (according to the screenshot)? | |
| 54 | View Questionnaire report page. In "Two periods comparison" report mode, there are two period selectors. | Where should be placed input fields of two periods comparison selection and how they should look like | |
| 55 | View Questionnaire report page | According to the screenshot - there is "All time" checkbox. Does it mean that the report should be generated within all dates/runs? | |
| 56 | View Questionnaire report page. Also, on Questionnaire Report page you can view ratio of users, participated in questionnaire, to all invited user s (per period). | Where this information should be placed? | |
| 57 | Questionnaire report examples | According to the screenshot with graph report - name of Question is duplicated. Is it what expected? | I suggest to write name of the question once and add period indication above the graphs or write the description of color bars meaning behind |
| 58 | Questionnaire report examples | According to the screenshot with bar report - name of Question is duplicated. Is it what expected? Also the color of the first and fourth choice are identical, is it right? | I suggest to write name of the question once and add period indication above the bars and change fourth color to green |
| 59 | Questionnaire report examples | What should be placed instead of unchecked choices? | I suggest zero sign (0) |
| 60 | | | |
| 61 | Email templates | What are buttons User name and Questionnaire responsible for (Not fully understandable, cause we indicate questionnaires/users/URL on the "Run Questionnaire page")? | |
| 62 | Email templates | How should the selection process proceed (is it dropdown selector or checkbox behaviour)? | |
| 63 | User Area. Questionnaire pages are not accessible from Survey user interface. | This means, that admin pages are not accessible to common users? | |
| 64 | User Area. Text of questionnaire name, questions and choices is shown in language which is selected by in dropdown with list of predefined languages. | Where this dropdown should be placed? | I suggest to place this drop-down on a separate window before user starts the questionnaire |
| 65 | View Questionnaire reports. Questionnaire Reports menu contains the Questionnaire list that displays only the questionnaires that the user is authorized to see. | Should the user see all available periods or be able to choose them? | |
| 66 | Questionnaire vs Survey | A questionnaire is any written set of questions, while a survey is both the set of questions and the process of collecting, aggregating, and analyzing the responses from those questions. As there is the functionality of Survey, should the Questionnaire mentioned in the whole document should be replaced with Survey? | |

Read this specification and understand the purpose of the system and how it works.

1. Please list as much as possible inaccuracies, deficiencies or contradictions in specification, and questions you might have to the specification (do not write out grammatical, syntactic or other language mistakes).

FRS - Survey

Purpose of the Module

Survey is web application which is used to conduct questionnaires among users and to generate questionnaire reports (questionnaire results in text and graphical format). The application consists of Administration area used by admin to configure the system and User area intend for users.

User stories

Story 1 (admin story).

- 1. Admin opens "Maintain Questionnaires" page in admin area. On this page admin creates questionnaire with several questions having several choices each.
- 2. Admin opens "Conduct Questionnaires" page. On this page admin chooses created questionnaire and clicks button "Run".
- 3. On "Run Questionnaire" page admin chooses invitation mode "Send one-time invitation". In "Randomization" section he chooses "Number of users" and inputs value "100". Then he selects several customers and populates "Url parameters" section.
- 4. Admin clicks "Send" button. Invitations to participate in questionnaire are sent to users.

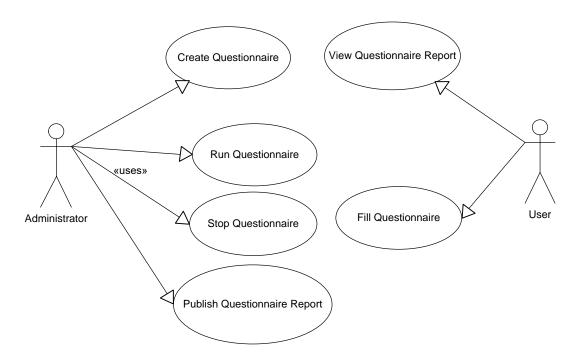
Story 2 (questionnaire participant user story).

- 1. User opens his mailbox and sees questionnaire invitation.
- 2. User opens link in it and goes to questionnaire page.
- 3. User answers questionnaire.

Story 3 (admin story).

- 1. Admin opens "Conduct Questionnaires" page. On this page he selects earlier created questionnaire and pushes button "View report".
- 2. On "View report" page admin selects report parameters and clicks "View report" button to look report in chart or text mode.
- 3. Admin returns to "Conduct Questionnaires" page. On this page admin chooses questionnaire and clicks button "Publish". Now all users related to questionnaire customers can view questionnaire report (in user area).

Use Cases



Usage Information

Questionnaires are created by Administrator. Each questionnaire may contain one or more questions. Each question consists of question text and one or more choices. Choices are presented to Users as radio buttons.

Administrator invites Users to fill questionnaire by sending emails. Emails are based on templates. Emails should contain special unique links (URLs) to questionnaire pages in Survey system (these links are automatically generated by the system).

Administrator chooses which customers (groups of users) to include in the questionnaire, so that the questionnaire can be run towards one customer, a selection of customers or all customers.

Administrator can specify the percentage or absolute number of Users that should be invited to fill a questionnaire. Users are selected on random basis.

Users fill questionnaires by following the URLs sent to them by Administrator. Each URL contains encrypted and Base64-encoded user ID and questionnaire ID so that a user can be identified on the server and a correct questionnaire page can be loaded.

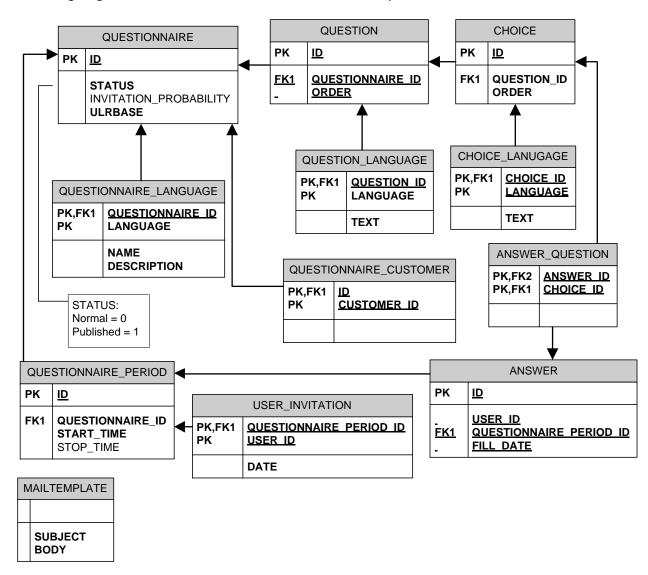
Administrator can stop run questionnaire by inactivating of run period. Each User may fill each particular questionnaire only once for each run period. Administrator can invite users only during run period. Users cannot participate in questionnaire after the end of current period (when invitation was sent) or in case if period was inactivated.

Administrator can view reports for each questionnaire. Reports display questionnaire results in text (numeric) and graphical format.

Administrator can publish questionnaire reports to users. If questionnaire is made only for one or a selection of customers, then only the Users who belong to those customers are allowed to see it.

Data Storage

The following diagram shows the database structure for the Survey module.



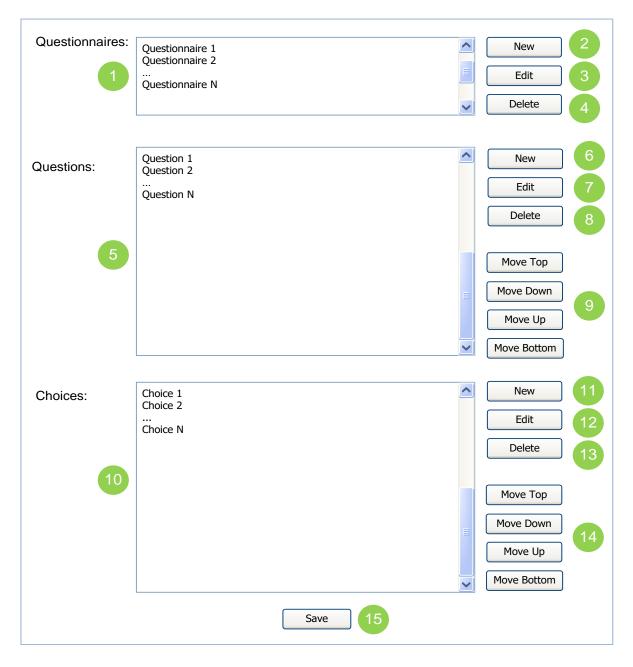
User Interface

Admin Area

Admin area should include an intermediary navigation page with 3 links: **Maintain Questionnaires**, **Conduct Questionnaires** and **Email template**.

Maintain Questionnaires page

This page is used to create, edit, and delete questionnaires, and to modify their contents.

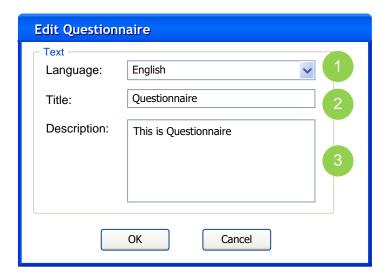


- 1. List of questionnaires
- 2. Button to add a new questionnaire (displays the Create/Edit questionnaire window)

- 3. Button to edit the selected questionnaire (displays the Create/Edit questionnaire window). Note that after the questionnaire has been run, it cannot be modified.
- 4. Button to delete the selected questionnaire. Any questionnaire can be deleted, so, be careful.
- 5. List of questions
- 6. Button to create a new question (displays the Question text editor window)
- 7. Button to edit the selected question (displays the Question text editor window)
- 8. Button to delete the selected question
- 9. Buttons to change the order of the selected question in the list. The list of questions should also support drag-and-drop to perform this operation.
- 10. List of choices
- 11. Button to create a new choice for the selected question (displays the Choice text editor window)
- 12. Button to edit the selected choice (displays the Choice text editor window)
- 13. Button to delete the selected choice
- 14. Buttons to change the order of the selected choice in the list. The list of questions should also support drag-and-drop to perform this operation.
- 15. Button to save the questionnaire.

Questionnaire text editor window

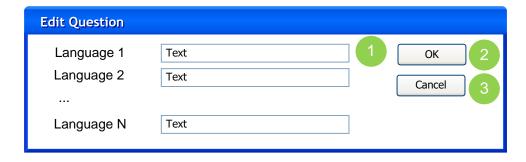
This window is used to specify options of a questionnaire.



- 1. Language of currently displayed title and description of Questionnaire (input title and description in all languages, when you are creating Questionnaire).
- 2. Title of Questionnaire.
- 3. Description of Questionnaire.

Question text editor window

This window is used to specify the text of a question in multiple languages.



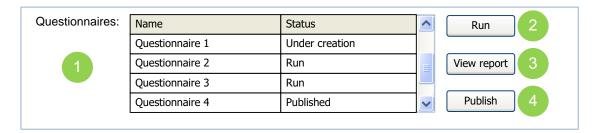
- 1. Dynamically generated list of languages and text boxes for specifying question text in each of those languages.
- 2. Button to accept the changes
- 3. Button to cancel the changes

Choice text editor window

This window is used to specify the text of a choice in multiple languages. Looks and behaves identically to the Question text editor window.

Conduct Questionnaires page

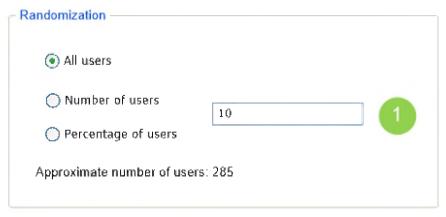
This page is used to run questionnaires, view reports, and publish reports to Users.

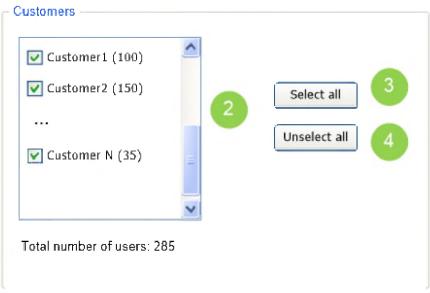


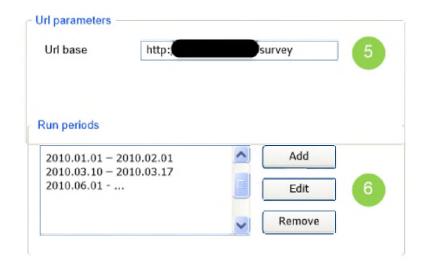
- 1. List of questionnaires
- 2. Button to open the "Run questionnaire" page.
- 3. Button to view report for the selected questionnaire (opens the View questionnaire report page)
- 4. Button to publish the selected questionnaire report to end users. Before publishing, only admin can view questionnaire report.

Run Questionnaire page

This page is used to manage questionnaire invitations and run periods. Questionnaire run period is time interval when users can participate in questionnaire. One questionnaire can be run several times.

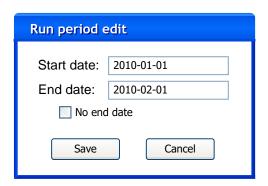






- 1. Randomization settings for the questionnaire (used to specify whether all users, a percentage of all users, or an absolute number of Users should be invited to fill the questionnaire). Also showed approximated number of users who will be invited.
- 2. List of customers whose users should be invited to fill the questionnaire (in parenthesis number of users related to customer and who have not participated in the current questionnaire in the current period). Only these users can participate in questionnaire and view questionnaire reports. There is total number of users for all selected customers showed below the list.
- 3. Button to select all customers in the list.
- 4. Button to unselect all customers in the list.
- 5. URL which will be placed in invitation message.
- 6. Run periods' list. New period can be added (both start and end dates must be in the future), existing period can be modified (start date can be modified only if it's the future date; the same true for the end date) or deleted (only if both start and end dates represents future dates). Also selected period can be inactivated\activated. Two periods cannot be intersected.
- 8. Button to send invitations and run the questionnaire.

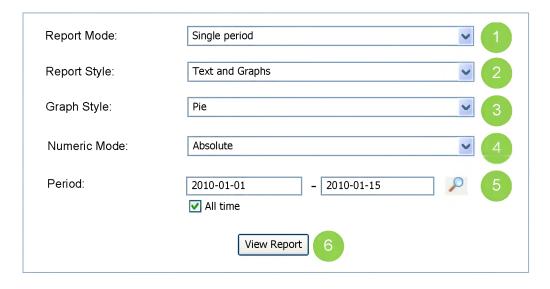
Questionnaire run period editor window



"No end date" means that period has no end date, in other words will never end.

View Questionnaire report page

This page allows administrator to view the questionnaire reports. The questionnaire is selected in the Manage questionnaires page. User can view report only for his customer's questionnaires.

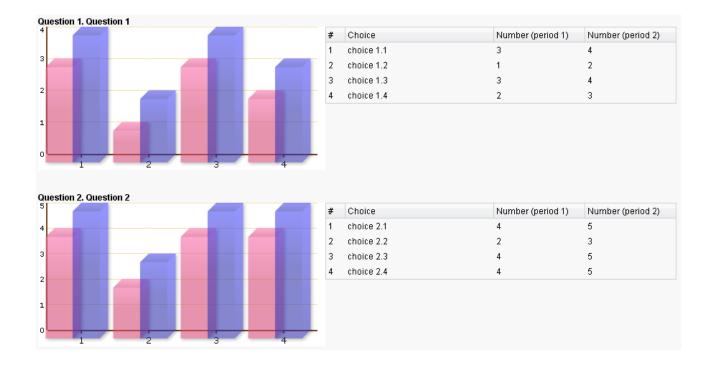


- 1. Report mode selector (options: Single period, Two periods comparison).
- 2. Report style selector (options: Text, Graphs, Text and Graphs).
- 3. Graph style selector (options: Pie, Bar).
- 4. Numeric mode selector (options: Absolute, Both).
- 5. Period selector (user can input arbitrary period or select one of questionnaire run periods). In "Two periods comparison" report mode, there are two period selectors.
- 6. Button to generate and display the report.

Questionnaire report examples

Used following options:

- report mode two periods comparison;
- report style text and graphs;
- graph style bar;
- numeric mode absolute.



Same options, but graph style - pie.

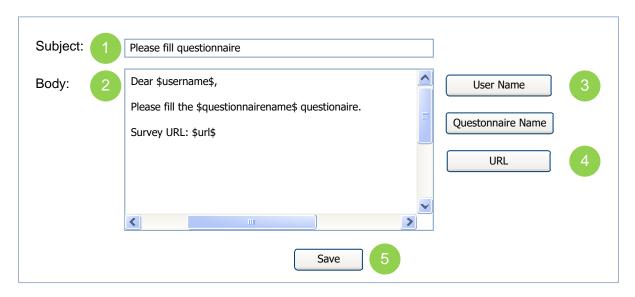


Also, on Questionnaire Report page you can view ratio of users, participated in questionnaire, to all invited user s (per period).

| Period Start | Period End | Ratio |
|--------------|------------|-------|
| 2010.01.01 | 2009.02.01 | 40.0% |
| 2010.03.10 | 2010.03.17 | 35.8% |

Email templates

This setting allows Administrator to set up an email template for inviting Users to fill questionnaires.



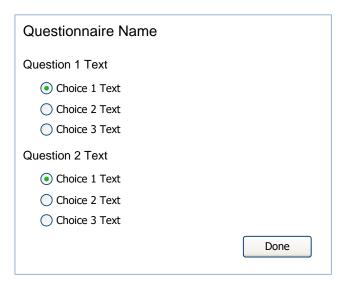
- 1. Email message subject
- 2. Email message body
- 3. Button to insert user name substitution macro
- 4. Button to insert questionnaire URL substitution macro
- 5. Button to save the email template.

User Area

Questionnaire pages

Questionnaire pages are not accessible from Survey user interface. They are accessible only via URLs sent to users by Administrator.

Questionnaire pages are generated dynamically based on the questionnaire contents. The following figure shows the structure of each questionnaire page.



Text of questionnaire name, questions and choices is shown in language which is selected by in dropdown with list of predefined languages.

View Questionnaire reports

Survey user interface contains the Questionnaire Reports menu that opens the View Questionnaire Reports page. This page is similar to the one in the Admin Area. The only difference is that it contains the Questionnaire list that displays only the questionnaires that the user is authorized to see.