Questionnaire Primer:

Scenario:

You are working as a part of the marketing team at a company and have been tasked to create and modify several questionnaires. The company you are working for want these questionnaires specified using a programming language specifically designed for this purpose. This is because questionnaires are styled differently depending on whether the user is using the website or mobile application etc. and the programming language allows all of these to be generated automatically with the same content.

Your tasks will ask you to interact with this programming language in two different ways, one is with a text based program in which you will write the language directly. The other is via a web application which will use a variety of other methods to allow you to interact and write a questionnaire program.

Questionnaires:

The company you work for have strict rules about how questionnaires should be structured. This section will describe these rules:

A questionnaire is made up of lots of different pages called *sections*.

Each section then contains a series of *Titles*, *Descriptions*, *Textual Questions* and *Multiplechoice Questions*. It may contain any number of these objects in any order, for example one section might have lots of questions separated into categories with titles between them.

A *Title* is a large piece of text which might be used to draw attention from the user
A *Description* is a smaller piece of text which might be used to describe the next couple of questions or to display other messages to the user
A *Textual Question* is a question which gives the user a space to write a text response
A *Multiplechoice Question* is a question which gives the user a number of options to select the correct answer from.

A user is shown an entire section at a time, once they have completed this section the questionnaire will, by default, automatically go to the next section if there is one. This can however be changed, a section can be marked as the end of the survey OR if a section contains a multiple choice question, the user's answer can determine which section should be shown next. For example if a section has a question "Do you prefer Tea or Coffee?", when the user finishes the section we may wish to send them to a "Tea lovers" section if they chose the "Tea" option and likewise with coffee.

Questionnaire Code:

To create a Section we simply write the following:

```
Section NAME {
        CONTENTS GO IN HERE
}
```

We can replace the NAME part with anything we want to call the section so we can easily refer to it later. This name will **not** be shown to the user. Inside the curly braces { } we will list the contents of the section. Everything inside those curley braces will be displayed on this section's page.

We specify the different content items as follows:

```
        Title " TITLE TEXT "

        Description " DESCRIPTION TEXT "

        TextQuestion " QUESTION TEXT "

        MultpleChoiceQuestion " QUESTION TEXT " {
                Answer " OPTION 1 "
                Answer " OPTION 2 "
                …. etc ...
        }
```

The order of the contents inside the section indicates the order they will appear in the questionnaire to the user. For example:

```
Section MySection {
        Title "My First Questionnaire"
        TextQuestion "Do you like programming?"
        MultipleChoiceQuestion "What is your favourite colour?" {
                Answer "Red"
                Answer "Green"
                Answer "Other"
        }
        Description "Thank you for completing my survey"
}
```

Will create a survey with a single page, which may look like the following:

My First Questionnaire	
Do you like programming?	_____
What is your favourite colour?	[ ] Red [ ] Green [ ] Other
Thank you for completing my survey	

Choosing which pages the user sees:
A questionnaire can have multiple sections (pages), in a questionnaire file we can thus write several sections one after another:

```
Section TheFirstPageOfMyQuestionnaire{
        CONTENTS GO HERE
}

Section TheSecondPage{
        CONTENTS GO HERE
}
```

By default once a user has completed a section in the generated questionnaire, they will go to the next section down in the code file. We can specify a different behaviour if the user chose certain multiple choice answers. We do this by adding *goto* SECTIONNAME to the end of the answer within the question e.g.:

```
Section FirstSection{
        MultipleChoiceQuestion “Do you want to go to section A or B?” {
                Answer “A” goto MySectionA
                Answer “B” goto MySectionB
        }
}

Section Section2 {
        Title “This section would normally come next”
}

Section MySectionA{
        Description “This section will come next if the user chose answer A”
}


Section MySectionB{
        Description “This section will come next if the user chose answer B”
}
```

Then, in the example given above, if the user selects option A, after they complete the remainder of the section they are in, they will be taken to section MySectionA. If they instead chose answer B they will go to section MySectionB.

Note: If a user chooses two options which both have “goto” options, only the first such goto will be used.

The other way we can change this behaviour is by specifying what should happen after a section is completed. We may add “goto SECTIONNAME” after a section descrtiption like so to go to a particular section:

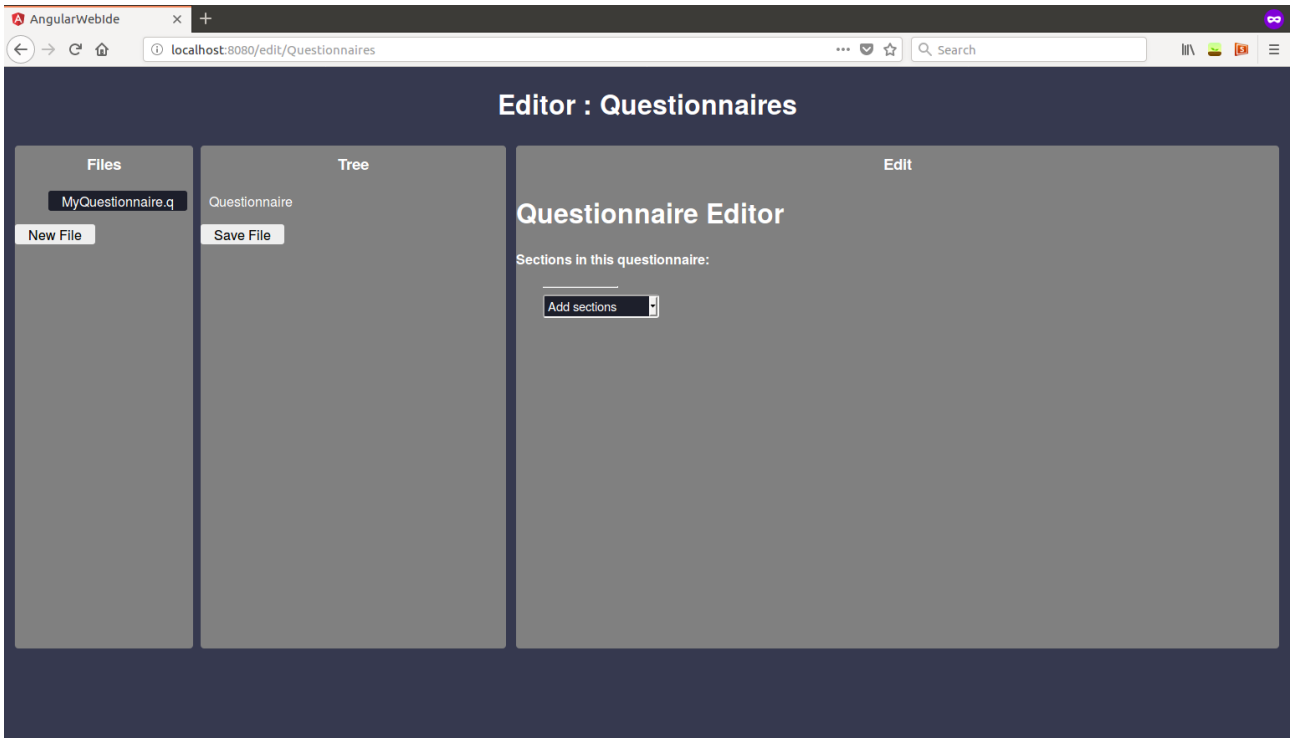
```
Section MySection{
        ….
} goto MySectionTwo
```

Or, if we don’t want a user to see any more pages we can mark a section with the ”End” keyword as follows:

```
Section MySection{
        ….
} End
```

This means that once a user has completed the page they will not be shown the next page, regardless of whether any more exist or not.

Web Application:
The web application works by adding elements one at a time to build up the questionnaire. Upon creating a questionnaire file you will be presented with this screen for adding sections and displaying an overview of existing sections:

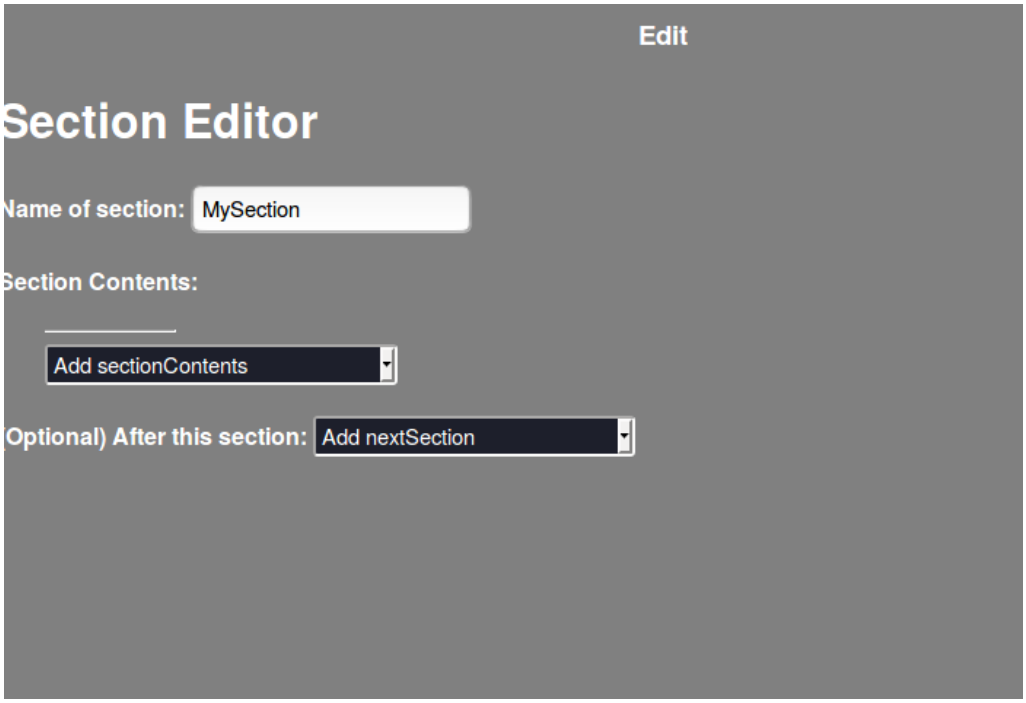


Click the “Add section node” in the “add sections” dropdown to add a section. **Note:** sections must be added in the order in which you want them to appear in the final questionnaire.

To navigate around the editor we use the navigation window to the left of the main editing pane.

Clicking an item will take you to the editor for that item. Clicking the + sign next to the item, if it has one, will show the things contained by that item. So in order to modify the sections of our questionnaire we first click the + icon next to the questionnaire item to show the sections it contains.

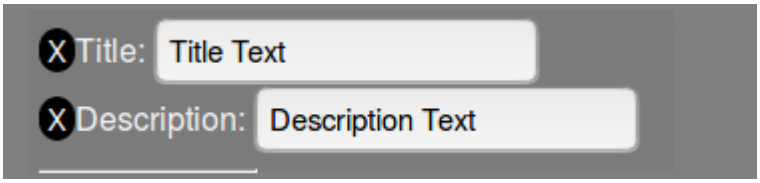
We then click on the section to edit it. After doing this we are presented with the Section editor screen in the right hand side edit panel.



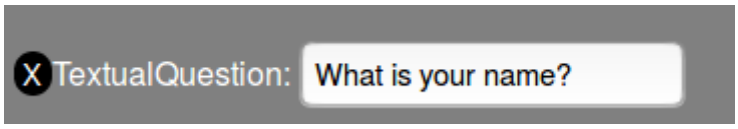
To edit a section's name (this won't be shown to the user but will be used to refer to this section `later) we simply enter it into the text box next to the "Name of Section" text.

To add contents to a page we use the dropdown "Add sectionContents" and then select the item we want to add. **Note:** Items must be added in the order that you want them to appear in the section!

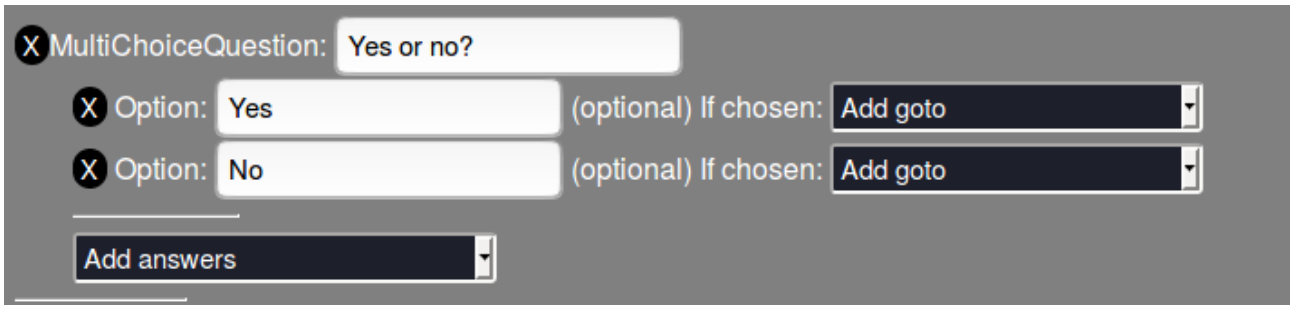
Editing a Title or Description:
To edit the text displayed in a title or description simply enter it into the textbox



Editing a Textual Question:
To edit the question displayed to the user simply enter it into the textbox

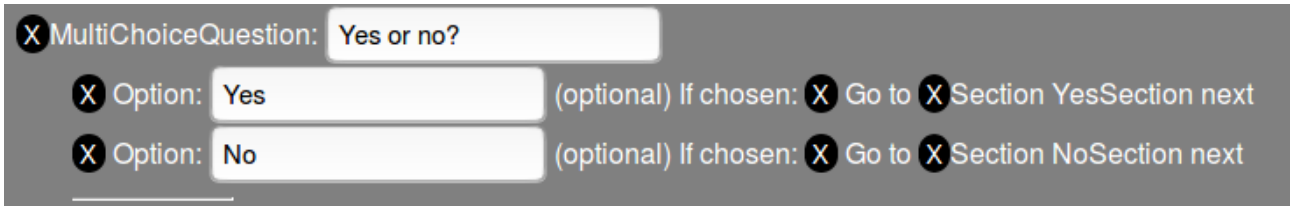


Editing a Multiple Choice Question:
To edit the question displayed to the user simply enter it into the textbox as with textual questions
To add options the user may select use the "add answers" drop down.
An answer then has space to write the answer to be displayed and an optional "goto" used for controlling which section the user should see next.



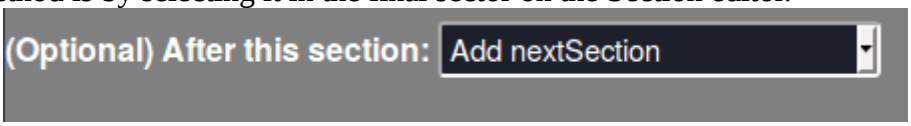
Controlling section flow:
By default when a user completes a section they will be taken to the next section along. This behaviour can be changed in a couple of ways.

The first is by using the answer picked as a response to a multiple choice question. By using the optional "Add goto" selector we can pick a different response to go to next if the user chooses that answer



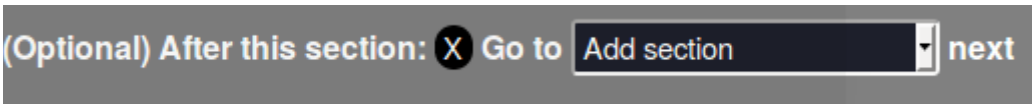
Note: If a user chooses two options in the same section which both have "Go to" options, only the first such "go to" will be used.

The second method is by selecting it in the final sector on the Section editor.



Here we have two options, we can signal that the questionnaire should end after this section for the user (say the following sections aren't relevant) by ussing the selector to add a "EndOfQuestionnaire" node.

The other option is to select a "SectionReference" node, which will then give you the choice of choosing a specific section to go to next, perhaps to skip irrelevant sections



Removing Elements:

To remove elements the small red crosses to the elements left can be used.