papi.sty
A style-file for creating questionnaires with LaTeX

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<u>IMPORTANT</u>:

The presented style provides a basis for the construction of paper&pencil interviews (papi).

papi only works in combination with the documentclass `scrreprt`. Furthermore it is recommended to choose the following margin sizes

\usepackage[top=2.5cm,bottom=2.5cm,left=1.5cm,right=1.5cm]{geometry}

in the preamble. It is strongly recommended to define the right and the left margin by 1.5 cm. In contrast the distance at the top and at the bottom can be varied.

The font size should be adjusted to 10pt.

1 The formatting of the questionnaire

papi offers the possibilty to endue questionnaires with a projectnumber that appears top left on each page. If this option shall be used, it is necessary to enter the command \projectnumber{...} in the preamble. The ... are replaced by the designated number.

1.1 The design of the questionnaire

At the beginning a starting page or an introductory section can be constructed. It is possible to include logos or other information concerning the study. This part can be arranged according to the requirements of the project.

The questionnaire starts with \begin{questionnaire} and is finished at the end by \end{questionnaire}. Within this environment all questions, answer-categories and instructions have to be entered.

The basic layout of *papi* consists of a framing of the text and a column on the right, in which filterinstructions for the interviewer can be realised. The command \interviewtime inserts the start and end time of the interview as a row in the questionnaire.

1.2 Creating a question with \question

Because of the existence of different numbering methods, *papi* doesn't number questions itself. Provision is made for numbering each question manually. In *papi* the command \question{#1}{#2} generates questions. #1 is substituted by the number of the question and the questiontext takes the place of #2. The questiontext itself can be formated by the usual LaTeX commands. But attention should be paid to the fact that a line break or a paragraph can only result from \smallskip, \medskip and \bigskip.

1.3 Instructions

Instructions for the interviewer and / or the respondent can follow after a question. *papi* offers therefore different options.

(i) **Hand ☞ , that points a finger at a bold, italic text:**

   This has to be realised with the command \instruction{#1}. #1 is replaced with the text, the hand shall point at.

   <u>Annotation:</u> This question cannot work on its own. It only performs within a \question or within one of the following four alternatives.

(ii) **Text inside a box:**

If the instruction of the interviewer or respondent shall appear within a separate box, the command \framing{#1} has to be used.

Annotation: The command \instruction can also be employed inside the command \framing.

(iii) **Centered text:**

The explanatory text can be positioned centered underneath a question. Then the therefor destined text has to be inserted into the command \centertext{...}.

(iv) **Left-aligned text:**

If the explaining text shall appear left-aligned, then the command \lefttext{...} has to be used.

(v) **Right-aligned text:**

If the explanation shall be formated right-aligned, then the command \righttext{...} has to be used.

1.4 Parting lines with \separator and \pageseparator

It is necessary to separate a question and the associated answer categories from other questions. Therefore *papi* provides the commands \separator and \pageseparator.

\separator has to be used, if both questions, that shall be separated, are placed on the same page. If there should be a page break, then \pageseparator has to be applied.

1.5 A minute example

In the preceeding sections 1.1 till 1.4 methods for constructing a questionnaire with *papi* have been described. In the following this shall be examplified.

The commands

```
\begin{questionnaire}
\interviewtime
\separator
\question{1.}{Sagen Sie mir bitte zu jeder der einzelnen Aussagen, ob Sie
  persönlich derselben Meinung sind oder ob Sie anderer Meinung sind.}
\centertext{\instruction{Vorgaben bitte vorlesen!}}
\separator
\question{2.}{\instruction{Liste 5 vorlegen!}\medskip
  Was von dieser Liste würden Sie für das {\bf Wichtigste} halten, das ein Kind
  lernen sollte, um sich auf das Leben vorzubereiten?\smallskip
\framing{\instruction{Bitte in \underline{jede} Spalte \underline{ein} Kreuz!}}
\end{questionnaire}
```

generate:

☞ **Beginn des Interviews eintragen!** ⇒ [　　　　　] Uhr

---

1. Sagen Sie mir bitte zu jeder der einzelnen Aussagen, ob Sie persönlich derselben Meinung sind oder ob Sie anderer Meinung sind.

☞ **Vorgaben bitte vorlesen!**

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2. ☞ **Liste 5 vorlegen!**

   Was von dieser Liste würden Sie für das **Wichtigste** halten, das ein Kind lernen sollte, um sich auf das Leben vorzubereiten?

   ☞ **Bitte in jede Spalte ein Kreuz!**

3

2 Vertical answer categories

Below answer options are presented where answer categories are grouped vertically.

2.1 Answer categories with `answer`

Vertical answer categories with a width of 7.5 cm can be generated by the various `answer`-versions. The functioning and the mode of operation of the severals versions are specified in the following list.

`\answer{...}`	The row is filled up with dots and ends with a box which can be marked with a cross.
`\answerwithfilter{...}{...}`	Like `\answer`, but in the second brace the number of the question has to be entered on which the filter on the right shall refer.
`\hybridanswer{...}`	Offers the insertion of answer categories from section 4.
`\answeropenone{...}`	The answer options are entered into the brace. In the next row follows a continuous line for an open answer.
`\answeropentwo{...}`	Like `\answeropenone`, but with two rows for insertion.
`\bulletanswer{...}`	Like `\answer`, but in front of every answer option stands a bulletpoint.
`\bulletanswerwithfilter{...}{...}`	Like `\answerwithfilter`, but in front of every answer option stands a bulletponit.

2.2 Answer categories with `longanswer` and `shortanswer`

Sometimes answer options with `answer` are not visually attractive because they are either too long or too short for this type. Because of this *papi* offers the alternatives `shortanswer` and `longanswer`.

The `shortanswer`-type is shorter than the `answer`-type. Here a width of 5 cm is designated. The commands are constructed in analogy to the ones of the `answer`-type and are named:

`\shortanswer{...}`

`\shortanswerwithfilter{...}{...}`

`\hybridshortanswer{...}`

`\shortansweropenone{...}`

`\shortansweropentwo{...}`

`\bulletshortanswer{...}`

`\bulletshortanswerwithfilter{...}{...}`

The functioning of the several variants corresponds to the `answer`-options from section 2.1.

The `longanswer`-variants are also defined in analogy to the ones of the `answer`-type. But the width for inserting the answer options is 10 cm. The `longanswer`-commands are:

`\longanswer{...}`

`\longanswerwithfilter{...}{...}`

`\hybridlonganswer{...}`

`\longansweropenone{...}`

`\longansweropentwo{...}`

`\bulletlonganswer{...}`

`\bulletlonganswerwithfilter{...}{...}`

2.3 Vertical blocks

Often so called **vertical blocks** are used. In this context several items, which possess the same answer options, are queried. This is pictured in a sort of tabular. In *papi* it can be chosen between three different types of vertical blocks which are described in the following sections.

2.3.1 \blockA

With `\blockA` vertical blocks can be created. To employ this the command `\blockA...` has to be used. The ... are replaced by the number which represents the number of the destined answer options.

tt `\blockAthree{#1}{#2}{#3}{#4}` for instance, generates a vertical block with three answer options. The input has to be done as follows:

#1, #2 and #3 are substituted by the desired answer options. #4 has to be replaced by the several items which shall be queried. To this the command `\textAthree{#1}{#2}` (The number must be consistent with the one of `\blockA...`) has to be used. #2 is replaced by the corresponding items. #1 offers the opportunity to number the items or to provide the items with a bulletpoint. For this the command `\papibullet` has to be entered. The command `\numbersA` numbers the answer options.

For a better comprehension an example follows. The insertions

```
\blockAthree{keine Kenntnisse}{mittel}{sehr gute}{
\numbersAthree
\textAthree{Textverarbeitung}
\textAthree{Tabellenkalkulation}
\textAthree{Statistikprogramme}
\textAthree{HTML / JAVA-Programmierung}}
```

create a vertical block of the type `\blockAthree` which has the form:

		keine Kennt-nisse	mittel	sehr gute
		1	**2**	**3**
A	Textverarbeitung..........................	☐	☐	☐
B	Tabellenkalkulation	☐	☐	☐
C	Statistikprogramme........................	☐	☐	☐
D	HTML / JAVA-Programmierung...........	☐	☐	☐

<u>Annotation:</u> With *papi* only vertical blocks with at least two and at most seven answer categories can be realised.

2.3.2 \blockB

Vertical blocks of the form \blockB differ from \blockA because they feature a „Don't know"-option on the right which is separated from the other categories by a vertical line. The instructions that were described in section 2.3.1 also apply to the construction of vertical blocks of the type \blockB.

Thus only a small example is provided at this point that shows the form of \blockB. The commands

```
\blockBtwo{keine Kenntnisse}{sehr gute}{
\numbersBtwo
\textBtwo{Textverarbeitung}
\textBtwo{Tabellenkalkulation}
\textBtwo{Statistikprogramme}
\textBtwo{HTML / JAVA-Programmierung}}
```

generate the following vertical block of the type \blockBtwo:

		keine Kennt-nisse	sehr gute	Weiß nicht
		1	**2**	
A	Textverarbeitung...........................	☐	☐	☐
B	Tabellenkalkulation	☐	☐	☐
C	Statistikprogramme........................	☐	☐	☐
D	HTML / JAVA-Programmierung...........	☐	☐	☐

<u>Annotation:</u> With *papi* only vertical blocks with at least two and at most seven answer categories can be realised.

2.3.3 `\blockC`

`\blockC` is similiar to `\blockA`, but all columns are separated by vertical lines.

The instructions for creating a vertical block from section 2.3.1 can be transfered to the type `\blockC`. Because of this it follows an example that demonstrates the form of `\blockC`. With the commands

```
\blockCfour{keine Kenntnisse}{etwas}{gute}{sehr gute}{
\numbersCfour
\textCfour{Textverarbeitung}
\textCfour{Tabellenkalkulation}
\textCfour{Statistikprogramme}
\textCfour{HTML / JAVA-Programmierung}}
```

the following vertical block of the type `\blockCfour` is achieved:

	keine Kennt- nisse	etwas	gute	sehr gute
	1	**2**	**3**	**4**
A Textverarbeitung	☐	☐	☐	☐
B Tabellenkalkulation	☐	☐	☐	☐
C Statistikprogramme	☐	☐	☐	☐
D HTML / JAVA-Programmierung	☐	☐	☐	☐

Annotation: With *papi* only vertical blocks with at least two and at most seven answer categories can be realised.

2.4 Scales

So called thermometer scales belong to vertical answer categories. The limit points of the scale are positioned at the top and at the bottom. Thermometer scales are shown to respondents with the request to mark with a cross.

For this purpose *papi* offers the commands `\vthermo...{#1}{#2}`. The ... are replaced by the number which corresponds to the desired number of boxes. #1 and #2 are replaced by the names of the scale endpoints.

Annotation: With *papi* thermometer scales with at least three and at most ten boxes can be constructed.

The insertion

```
\separator
\question{1.}{Würden Sie von sich sagen, dass Sie eher religiös oder eher nicht
religiös sind?}
\vthermoeight{religiös}{nicht religiös}
\separator
```

produces:

1. Würden Sie von sich sagen, dass Sie eher religiös oder eher nicht religiös sind?

religiös

□

□

□

□

□

□

□

□

nicht religiös

3 Open questions

In *papi* the command \longline produces a continuous line which belongs to open questions. \longline creates a single line. If more lines are needed, the command has to repeated as many times as lines are wanted.

For instance the commands

```
\separator
\question{1.}{Welche berufliche Tätigkeit üben Sie in Ihrem Hauptberuf aus?}
\longline
\longline
\separator
```

format the following open question:

1. Welche berufliche Tätigkeit üben Sie in Ihrem Hauptberuf aus?

    _____

    _____

4 Quantitative answer categories

As already mentioned in the sections 2.1 and 2.2 quantitative answer categories can also be used. For example it can be asked for a specific number, for periods of time such as hours, for percentage values, for kilometer information, or as the case may be. Boxes are needed, to insert such values into a questionnaire. *papi* offers this opportunity.

The commands `\onebox`, `\twoboxes`, `\threeboxes`, respectively `\fourboxes` create one, two, three, respectively four boxes. These commands can arbitrarily be inserted into the continuous text.

Values can also contain a comma. For producing such answer categories, the single commands have to be combined. The following example illustrates this. The input

```
\separator
\question{1.}{Können Sie mir ungefähr sagen, wie viele Arbeitslose es derzeit
  in Deutschland gibt?}
\hybridanswer{Ja, etwa \twoboxes , \onebox {\bf Millionen}}
\answer{Nein, kann ich nicht sagen}
\separator
```

causes:

1. Können Sie mir sagen, wie viele Arbeitslose es derzeit in Deutschland gibt?

   Ja, etwa ☐☐ , ☐ **Millionen**

   Nein, kann ich nicht sagen............... ☐

5 Closing page

On the closing page statistic information regarding the interview as well as further information concerning the project can be inserted.

The arrangement of this concluding last page can be extremly variable. *papi* offers a standard version. This page is created by the command \lastpage and is of the following design:

Listen-Nr. *Lfd. Nr.* *Welle* *Abrechnungs-Nr.*

Ort *Datum des Interviews*

Ich bestätige die korrekte Durchführung des Interviews und die Übergabe der "Erklärung zum Datenschutz":

Unterschrift des Interviewers

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