The **Examcard** class

March 29, 2013

Commands and Environments

<pre>\begin{card} <> \end{card}</pre>	card environment generates a dashed box of a fixed size. The content of the card is descriped in the body of environment	
\setcardwidth{ <width>}</width>	Sets width of the card. If this command is not used anywhere in the document the width is set to 90mm by default.	
\setcardheight{ <height>}</height>	Sets height of the card. If this command is not used anywhere in the document the height is set to 70mm by default.	
\cardhead[<color>]{<number>}</number></color>	Inserts header with a card number. Headers are created with the help of $TikZ$ package. If option field is empty the color is set to lime by default. You have direct access to the following colors: red , green , blue , cyan , magenta , yellow , black , gray , darkgray , lightgray , brown , lime , olive , orange , pink , purple , teal , violet and white . And you can define all the colors you might want – see the $TikZ$ manual.	
\quest[<class>]{<number>}{<question>}</question></number></class>	Produces question name with a number assigned to a specific class. <class> is an option and may be left empty.</class>	
\listgen	Produces a list of all questions used in the document before it. The list is based on the information extracted from \quest command.	
\classlist{ <class>}</class>	This command is similar to \listgen , but it displays only questions of a given class. Type NoClass as an argument to show question wich are not assigned to any class.	

Examples

\begin{card}
\cardhead{1}
\quest[Physics]{1}{Maxwell's Equations}\\
\quest[Physics]{2}{Lorentz transformation}\\
\quest[Physics]{3}{Poynting's theorem}\\
\end{card}

Card 1

- 1. Maxwell's Equations
- 2. Lorentz transformation
- 3. Poynting's theorem

\begin{card}
\cardhead{2}
\quest{4}{Not}\\
\quest{5}{Assigned}\\
\quest{6}{Questions}\\
\end{card}

Mathematics example:

Graphics example:

Card 2

- 4. Not
- 5. Assigned
- 6. Questions

Card 3

7. Maxwell's Equations (answer)

$$\operatorname{div} \mathbf{E} = 4\pi \rho$$

$$\operatorname{div} \mathbf{H} = 0$$

$$\operatorname{rot} \mathbf{E} = -\frac{1}{c} \frac{\partial \mathbf{H}}{\partial t}$$

$$\operatorname{rot} \mathbf{H} = \frac{4\pi}{c} \mathbf{j} + \frac{1}{c} \frac{\partial \mathbf{E}}{\partial t}$$

Card 4

8. Circle



Table example:		

Text example:

No header example:

Card 5

9. Numbers

1	2	3
4	5	6
7	8	9

Card 6

10. Blindtext

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11. No header

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Card 7

12. Lorem

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Card 9

14. Dolor

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Card 8

13. Ipsum

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Card 10

15. Sit Amet

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There is no special environment or command for creating an array. Simply put the cards one after another. They will be placed automatically. It is recommended to insert double backslash \\ in a code after each row in array to keep all cards on the list placed properly.

List of all questions (based on questions used in this manual):

\listgen

- 1. Maxwell's Equations
- 2. Lorentz transformation
- 3. Poynting's theorem
- 4. Not
- 5. Assigned
- 6. Questions
- 7. Maxwell's Equations (answer)
- 8. Circle
- 9. Numbers
- 10. Blindtext
- 11. No header

- 12. Lorem
- 13. Ipsum
- 14. Dolor
- 15. Sit Amet

List of questions of ${\tt Physics}$ class:

\classlist{Physics}

- 1. Maxwell's Equations
- 2. Lorentz transformation
- 3. Poynting's theorem7. Maxwell's Equations (answer)

List of questions that are not assigned to any class:

\classlist{NoClass}

- 4. Not
- 5. Assigned
- 6. Questions