

Tilde Command Codes

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**Introduction**

The Mentometer software provides users with simple ways of displaying the voting results using some basic charts. However, users with special needs can design their own result slides and charts. This requires some level of expertise and experience with PowerPoint® graphic development, and requires the inclusion of internal commands called “Tilde codes.” The Mentometer software interacts with PowerPoint® by responding to embedded commands called tilde codes and replacing them with appropriate values from the system when a PowerPoint® slide with tilde codes is displayed.

**General format**

The general format for a tilde command code is “~ABCDx.y(z)” where:

ABCD : A four-letter command code

x : The answer key or place

y : Number of decimals to display, if omitted y is assumed to be 0

z : A reference to a keypad question. The reference can either be absolute, i.e. a SlideID that specifies the slide that contains the question, or relative, e.g. -1 that specifies the second-last question asked. If omitted, z is assumed to be 0, i.e. answers from the last asked question will be presented.

Some commands can be used by group: “~ABCDx.y(z)GROUPi(j)” where:

i : The group number, i.e. a number 1-10.

j : A reference to a keypad question that should be used to define the grouping. The reference can either be absolute, i.e. a SlideID that specifies the slide that contains the question that should be used for group assignment, or relative, e.g. -1 that specifies the second-last question asked should be used for group assignment. If omitted, the last asked question which has been specified as “Use for group assignment” is used.

Tilde codes can be used in textboxes to create horizontal or vertical bar charts, tables to display quiz winners with scores and response times and much more, but they may not be mixed with other text, i.e. the tilde command code must be the only text placed a text box or a cell in a table. Please also note that tilde codes may momentarily be visible when the slide first appears on the screen. However, as soon as the Mentometer software takes control of the visual and begins processing the event, the Tilde codes will disappear and be replaced with the correct values.

**Available tilde command codes**

**Alternative answer “x” ANSWx**

~ANSWx displays alternative options for answer “x”.

**Average keypad response ~ AVER.y**

~AVER.y displays the average keypad response calculated as (#of 1 responses multiplied by 1 + #of 2 responses multiplied by 2 + . . . + #of n responses multiplied by n) / total # responses. Where n = numeric keypad value. ~AVER.y can be used together with the GROUP specifier.

**Average Total(…;…) ~AVET(tilde code;tilde code….;…)**

~AVET (in development) returns the average of the values of the tilde codes inside the brackets (works like SUMT, just returns the average rather than the sum.

**Group winner name in “x” place ~GWNAx**

~GWNAx displays the name of the group that has a cumulative score that puts it in “x” place, relative to all other groups. Group scores are either calculated as the average score of all group members, or are set to the best individual scores among the group members. The calculation method is selected under the Options-menu.

**Group winner score in “x” place ~GWSCx**

~GWSCx displays the score of the group that has a cumulative score that puts it in “x” place, relative to all other groups. Group scores are either calculated as the average score of all group members, or are set to the best individual scores among the group members. The calculation method is selected under the Options-menu.

**Group winner score in percentage in “x” place ~GWSPx**

~GWSPx displays the score of the group that has a cumulative score that puts it in “x” place, relative to all other groups. Group scores are either calculated as the average score of all group members, or are set to the best individual scores among the group members. The calculation method is selected under the Options-menu.

**Group winner time in “x” place ~GWTIx**

~GWTIx displays the time for responding to questions of the group that has a cumulative score that puts it in “x” place, relative to all other groups. Group scores are either calculated as the average score of all group members, or are set to the best individual scores among the group members. The calculation method is selected under the Options-menu.

**Individual list of keypad responses ~IANS**

~IANS displays a list of the key numbers pressed for all active keypads. ~IANS can be used together with the GROUP specifier.

Individual means it refers to values for a single question, total means the total of the values for a specific keypad.

**Individual list of names ~INAM**

~INAM displays a list of the names assigned to the keypads for all active keypads. ~INAM can be used together with the GROUP specifier.

**Individual list of keypad IDs ~IKID**

~IKID displays a list of the keypad IDs for all active keypads. ~IKID can be used together with the GROUP specifier.

**Individual list of keypad time to reponse answer ITIM**

~ITIM displays a list of the keypad times for all active keypads. ~ITIM can be used together with the GROUP specifier.

**Individual list of total time to reponse answer ~ITOT**

~ITOT displays a list of the keypad total times for all active keypads. ~ITOT can be used together with the GROUP specifier.

**Individual list of single keypad scores to reponse answer ~ISCO**

~ISCO displays a list of the question scores for all active keypads. ~ISCO can be used together with the GROUP specifier.

**Individual list of single keypad scores to reponse answer ~ITOS**

~ITOS displays a list of the total scores for all active keypads. ~ITOS can be used together with the GROUP specifier.

**Individual Value x ~IVAL x**

~IVAL x is the individual value for keypad x. Returns the number of the multiple choice answer chosen or the numeric value typed by the user (for example weight, age, etc).

**Individual Color x ~ICOL x**

~ICOL x changes the fill color of a powerpoint shape based in the answer given by the single keypad x. You can use this for rooms layouts and show graphically what people answers based on their position in the room. The colors are taken from the ones chosen in the graph windows.

**Multiply(…;…) ~MULT.y(tilde code;tilde code….;…)**

 returns the multiplication of the value of the single tilde code inside the brackets.

**Number of correct responses ~NCOR**

~NCOR displays the number of keypads that responded with the correct answer, provided that the question has an authored correct answer. ~NCOR can be used together with the GROUP specifier.

**Number of keypads that responded with answer “x” ~NANSx**

~NANSx displays the number of keypads that responded using keypad key x, where x = 1 for key A/1, 2 for B/2 etc. ~NANSx can be used together with the GROUP specifier.

**Percentage of keypads that responded with answer “x” ~PANSx**

~PANSx displays the percentage of keypads that responded using keypad key x , where x = 1 for key A/1, 2 for B/2 etc. ~PANSx can be used together with the GROUP specifier.

**Percentage of correct responses ~PCOR**

~PCOR displays the number of keypads that responded with the Authored correct answer, provided that the question has an authored correct answer. ~PCOR can be used together with the GROUP specifier.

**Question ~QUES**

~QUES displays the keypad question.

**Question Winner Name** ~**QWNA**

~QWNA displays the name of the winner for an individual question. No group identifier.

**Question Winner ID ~QWID**

~QWID displays the keypad ID of the winner for an individual question. question winner ID. No group identifier.

**Question Winner Score ~QWSC**

~QWSC displays the score of the winner for an individual question. No group identifier.

**Question Winner Time ~QWTI**

~QWTI displays the time of the winner for an individal question. No group identifier.

**Resize a shape in proportion to the number of responses ~RSIZx.y**

~RSIZ resizes the shape the text is connected to in proportion to the number keypads that responded with the answer “x”. The y setting determines how the resize is performed. If y is omitted, the original shape size represents 100% and the shape is resized to the percentage of “x”-responses. If y is equal to 1, the original shape size will represent the percentage that the most frequent answer got, i.e. the shape that represents th most frequent answer “x” will not be resized.

**Sum Total(…;…) ~SUMT(tilde code;tilde code….;…)**

~SUMT (tilde code;tilde code….;…) returns the sum of the value of the tilde code inside the brackets.

**The total number of keypad responses ~TANS**

~TANS displays the total number of keypads that have responded with an answer that is within the valid range. ~TANS can be used together with the GROUP specifier. Same as the total in the green square

**Winner name in “x” place ~WNAMx**

~WNAMx displays the name assigned to the keypad that has a cumulative score that puts it in “x” place, relative to all other active keypads.

**Winner keypad ID in “x” place ~WKIDx**

~WKIDx displays the ID of the keypad that has a cumulative score that puts it in “x” place, relative to all other active keypads.

**Winner score in “x” place ~WSCOx**

~WSCOx displays the score of the keypad that has a cumulative score that puts it in “x” place, relative to all other active keypads. For example 8 correct answers out of 10 will display 8.

**Winner score in percentage in “x” place ~WSCPx**

~WSCPx displays the score in percentages of the keypad that has a cumulative score that puts it in “x” place, relative to all other active keypads. For example 8 correct answers out of 10 will display 80%

**Winner time in “x” place ~ WTIMx**

~WTIMx displays the total time for responding to questions of the keypad that has a cumulative score that puts it in “x” place, relative to all other active keypads.