**Basic Report Tutorial**

1. You need to create new report.

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Figure - New Report Tab

1. New Report Wizard will pop out and you will need to finish the initial setup of the document. This is the sequence of the setup:
   1. Select the report template that u want to use. Most of the time when we create new report, Blank A4 would be the best one.
   2. Rename your report name.
   3. Choose the data adapter that you want to use. Data adapter (Database data source for the report).
   4. Setup complete and you can continue to design your report.

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Figure - New Repor Wizard

1. Then you need to add the Query for your report.
   1. First you click ‘Dataset and Query Editor Dialog’ button.
   2. Dataset and Query dialog will pop out.
   3. Data adapter will be default to your choice when you set at first setup. (Refer 2. C)
   4. Fill in your query and click ‘Read Fields’ for the editor to read your query and identify the fields based on your query.

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Figure - Dataset and Query Editor Dialog Button

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Figure - Dataset and Query Editor Dialog

1. Now you can start designing your report on the white canvas.
   1. There are a few bands for the reports. But most of the time only these band will be used depend on the purpose of the report. It can be report (Table) or report (Template):
      1. Report - Table
         1. Title – For the report title
         2. Page Header – For date generated of the report
         3. Column Header – Table header
         4. Detail – Detail of the report table
         5. Summary – Row summary of the table
      2. Report – Template
         1. Title – Template Title
         2. Page Header – Template Header
         3. Detail – Template content
         4. Summary – Template summary
2. Remove **UNUSE** band.
   1. You can remove the unuse band to make the report is much easier to be designed.
   2. You can just click on the band, example Title band. Then just right click -> delete or just press the Delete button on your keyboard.

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* 1. Once you have removed the band it should be looking like this.

Table

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1. Then you can start to insert the element that you want to use.

Table

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Title Band

Summary Band

Page Footer Band

Column Header Band

Page Header Band

Detail Band

* + 1. For this tutorial the used elements are:
       1. Static Text – Title Band/ Page Header Band/ Column Header Band/ Column Header Band/ Page Footer Band
       2. Text Filed – Detail Band/ Summary Band
    2. As you can see, there are no shape being used. All the borders can be set at Static Text and Text Field Properties.
    3. Static text can be used to display unchanged data or in other word just to display static word.
    4. For Text Field can be used to display the data from the query. Let say your query result shows 5 data so the detail band will display 5 row of data and it can be down by insert the text field and assigned the field that you want to display.
    5. From the detail band and summary band you can see different kind of style to display the data.
       1. $F{account\_number} - $F representing the field that have been extracted from your query.
       2. $V{sum\_assigned\_total\_arrears} - $V mean variable. It can be created by using the field from your query. The function of the variable is to make changes from your field. Let say you want to have a sum for all the field. You can set the variable of the related field and set sum for the calculation.
       3. “Total” – Text field also can display text as static text, but you need to add “” before displaying your text.
    6. This is how to create a variable
       1. On the outline panel, just right click on the variable and choose ‘Create variable’.

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* + - 1. Then from the outline you can see the variable that you created.
      2. Click on the variable and you can configure the variable on the properties tab.

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* + - 1. Variable properties
         1. Name – Give the name of your variable. It is suggested to use simple name that anyone can understand your variable. Let say you just want to have a variable for sum of the field marks, then you should just have the same name as the field. It will be much easier for you too to understand the report.
         2. Calculation – You can set the calculation for the variable. It can be sum/ average/ count or any else depend on the need for the report.
         3. Expression – Is where you set what field did you want to use for the variable. If field marks, then just choose field marks on the expression editor.

Expression editor can be click at the right button on the expression field.

1. After you have complete design the report. You can preview it by click the ‘Preview’ button. This also should be done in order to see whether your design have error, or it is successfully generated without any issues.
   1. Preview button

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* 1. Report previewed

Table

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* 1. As you can see the report is successfully generated by following the design that you have created before.

1. If there are issues. The error dialog box will appear, and you need to check again where the error comes. It will be either the design issue or query issue.
2. Additional notes:
   1. The band height should be following the size of the static text height or text field size height in order for the report to be display perfectly as a table without any white gap.
   2. Text field alignment:
      1. You need to know on how the data should be displayed in order to be presentable for the reader.
      2. Example:
         1. Money – On the right side
         2. Name – Can be on left side ore in the middle
         3. Count of any amount – On the middle
      3. The alignment also will be dependent on what is the requirement of the reports.
   3. Data formatting:
      1. Data formatting is important in order to display the data correctly by following the global standard.
      2. As example for date, it can be by dd-MM-yyyy/ dd-Mon-YYYY or any else depending on the requirement of the report. Example:
         1. Date – dd-MM-yyyyy **/** dd/MM/yyyyy **/** dd-Mon-YYYY
         2. Amount - #,##0.00
      3. All of this can be set at text field properties under Text Field at Pattern field.

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* + 1. You can also set the pattern at text field expression. Example as figure below. Sometime when you want to display any text and value from field, but the field should be in correct format, you can do as below. It will depend on how you want the display the data inside your report.

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1. Lastly you need to try and error in order have more understanding on how all of these are connected.