

Student Score Report

Description

This sample creates a presentation showing the college admissions test scores for a group of students. This sample demonstrates how to use PowerPointWriter formulas and using the **Continue** modifier with **RepeatSlide** marker.

The Data

The data for this sample is a data table of randomly generated college admission test scores. The following code is used to generate the data table.

```
private DataTable GetScores()
{
    DataTable dt = new DataTable();
    dt.Columns.Add("StudentID", typeof(string));
    dt.Columns.Add("Reading", typeof(int));
    dt.Columns.Add("Writing", typeof(int));
    dt.Columns.Add("Math", typeof(int));
    dt.Columns.Add("Total", typeof(int));
    Random rand = new Random();
    int rScore, wScore, mScore;
    for (int i = 0; i < 30; ++i)
    {
        rScore = rand.Next(400, 800);
        wScore = rand.Next(400, 800);
        mScore = rand.Next(400, 800);
        dt.Rows.Add(
            string.Format("S{0:000000}", rand.NextDouble() * 1000000),
            rScore, wScore, mScore, rScore + wScore + mScore
        );
    }
    DataTable dtSorted = dt.Clone();
    foreach (DataRow row in dt.Select("", "StudentID asc"))
        dtSorted.ImportRow(row);
    return dtSorted;
}
```

The Template

The template presentation consists of three slides containing data markers and formulas.

The second slide in our presentation contains the **Continue** modifier and **RepeatSlide** marker. When used together on a slide, PowerPointWriter will import data on to a slide until MaxRowsPerSlide is reached. Then, PowerPointWriter will copy the slide and continue adding data to the new slide. This will be repeated until all the data in the data source has been imported. See [Fitting Data on to Multiple Slides](#) to learn more.

The third slide contains several formulas summarizing the information from the first two slides. Formulas should follow the syntax **%%=FORMULA_NAME(DataSource.DataCol)**. See [Adding Formulas to a Presentation](#) for more information and a list of supported formulas.

Our finished template will look like the following:

COLLEGE ADMISSION TEST SCORES

Student ID	Reading	Writing	Math	Total
%%=Scores.StudentID	%%=Scores.Reading	%%=Scores.Writing	%%=Scores.Math	%%=Scores.Total

1

COLLEGE ADMISSION TEST SCORES

Student ID	Reading	Writing	Math	Total
%%=Scores.StudentID(continue)	%%=Scores.Reading(continue)	%%=Scores.Writing(continue)	%%=Scores.Math(continue)	%%=Scores.Total(continue)

2

COLLEGE ADMISSION TEST SCORES

Number of Students:
%%=COUNT(Scores.Total)

	Reading	Writing	Math	Total
Average	%%=AVERAGE(Scores.Reading)	%%=AVERAGE(Scores.Writing)	%%=AVERAGE(Scores.Math)	%%=AVERAGE(Scores.Total)
Stdev	%%=STDEV(Scores.Reading)	%%=STDEV(Scores.Writing)	%%=STDEV(Scores.Math)	%%=STDEV(Scores.Total)
High	%%=MAX(Scores.Reading)	%%=MAX(Scores.Writing)	%%=MAX(Scores.Math)	%%=MAX(Scores.Total)
Low	%%=MIN(Scores.Reading)	%%=MIN(Scores.Writing)	%%=MIN(Scores.Math)	%%=MIN(Scores.Total)

3

The Code

```

public void Formulas()
{
using (PowerPointTemplate pptt = new PowerPointTemplate())
{
pptt.Open("template.pptx");
//Get a Data Table of scores using the helper method
DataTable ScoreData = GetScores();
//Create DataBindingProperties
DataBindingProperties dataBindProps = pptt.CreateDataBindingProperties();

//Only import 10 rows on a slide
dataBindProps.MaxRowsPerSlide = 10;
//Bind the data
pptt.BindData(ScoreData, "Scores", dataBindProps);
pptt.Process();
pptt.Save(Page.Response, "ScoreReport.pptx", false);
}
}
private DataTable GetScores()
{
DataTable dt = new DataTable();
dt.Columns.Add("StudentID", typeof(string));
dt.Columns.Add("Reading", typeof(int));
dt.Columns.Add("Writing", typeof(int));
dt.Columns.Add("Math", typeof(int));
dt.Columns.Add("Total", typeof(int));
Random rand = new Random();
int rScore, wScore, mScore;
for (int i = 0; i < 30; ++i)
{
rScore = rand.Next(400, 800);
wScore = rand.Next(400, 800);
mScore = rand.Next(400, 800);
dt.Rows.Add(
string.Format("S{0:000000}", rand.NextDouble() * 1000000),
rScore, wScore, mScore, rScore + wScore + mScore
);
}
DataTable dtSorted = dt.Clone();
foreach (DataRow row in dt.Select("", "StudentID asc"))
dtSorted.ImportRow(row);
return dtSorted;
}
}

```

Result

The resulting formula slide is below:

COLLEGE ADMISSION TEST SCORES

Number of Students: **30**

	Reading	Writing	Math	Total
Average	630.53333	640.8	616.03333	1887.36667
<u>Stdev</u>	127.85329	120.49707	111.19336	202.88599
High	791	796	789	2280
Low	400	403	452	1548

Downloads

- * Template: [template.pptx](#)
- * Sample output: [output.pptx](#)