
Autorating Calculator User Guide

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<https://bitbucket.org/liantze/autorating-calculator>
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Introduction

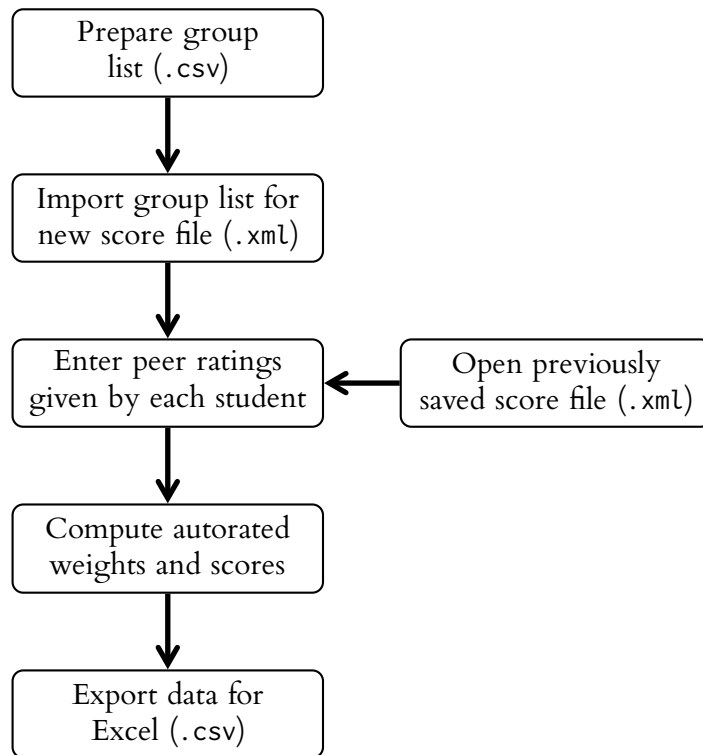
An ‘autorating’ system uses peer ratings to award marks to individual students in team assignments [1, 2]. `AutoratingCalculator` is a simple tool intended to help educators streamline the calculation process of autorated marks, available for download at <https://bitbucket.org/liantze/autorating-calculator>. You will need a Java Runtime Environment (≥ 1.6)¹ to run it.

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¹<http://java.com/download>

Quick Guide to Workflow



I Preparing the Group List of a Class

- I. In Notepad, compile the list of group members in your class, using the following format:

```
10032, Mary Tan
10143, Prabakar Murugan
10033, Tan Beng Huat
10165, Calvin Ong

10052, Mooi Siok Lan
10114, Bong Chin Keat
10432, Joseph Calvin
10281, Suresh Kappan
```

- Record the *ID* and *name* of a student on each line.
 - Use a comma (,) to separate the ID and name on each line.
 - Leave an *empty line* between groups.
2. Save the group list file using .txt or .csv extension, e.g. DIT1234-Apr2013-groups.txt.

You may also prepare the group list in Excel. List the IDs in column A and the IDs in column B. Save the file as a Comma separated values file (CSV). In the Export Filter Settings, set text delimiter to blank, and field separator to comma (,).

2 Importing a Group List for a New Assignment Score File

1. Launch the AutoratingCalculator tool by double-clicking on its icon in Windows Explorer.
2. From the menu bar, select **File** > **Import...** or press **Ctrl** + **I**.
3. Select a *group list file* (*.txt, *.csv) to import from, e.g. DIT1234-Apr2013-groups.txt.
4. AutoratingCalculator will then ask you for a *new* file name to save the new score list as (*.xml), e.g. DIT1234-Apr2013-Assgn1.xml.

Make sure the .xml score filename selected does not already exist. Otherwise the existing score file **may be overwritten without warning!**

5. AutoratingCalculator imports the group lists and displays the student IDs and names in the main panel (Figure 1).

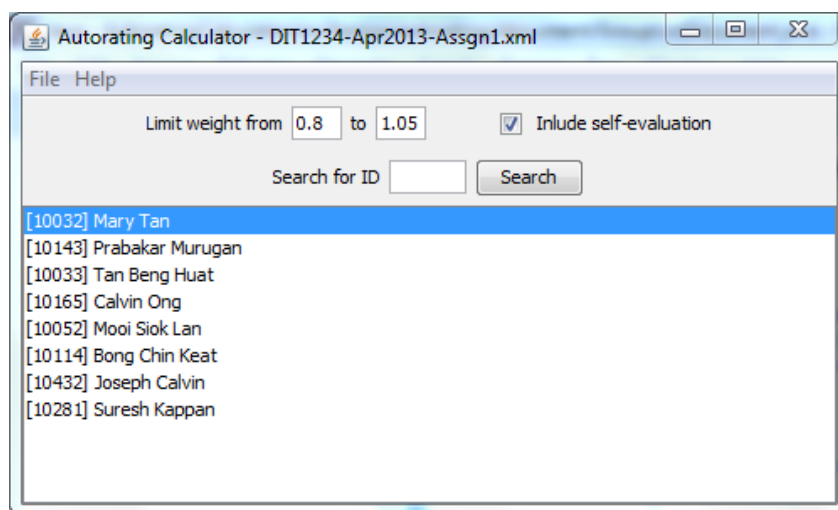


Figure 1: Imported group list

3 Computing Autorated Scores from Group Scores and Peer Ratings

3.1 Setting Options

Two options may be set at the top of the main AutoratingCalculator window.

- You may set the minimum and maximum autorating weight caps. Defaults are set at 0.8 and 1.02.
- You may choose whether to include self-evaluated peer ratings. The default is to include self ratings.
- If you change the settings, make sure to save them from the menu **File** > **Save** or pressing **Ctrl** + **S**.

3.2 Selecting Students from List

Double-click on the name of a student in the list to display the peer review score entry window.

3.3 Searching Students by ID

You can also load the peer ratings entry window of a student by keying in the ID number in the search box, and then click on the button.

3.4 Entering Scores and Ratings

Student Name	Rating
Mary Tan:	7
Prabakar Murugan:	8
Tan Beng Huat:	8
Calvin Ong:	9

Figure 2: Peer Ratings Window

1. In the peer ratings window for each student, enter the peer ratings given by the student to his/her teammates, including him/herself.
2. Enter also the overall score awarded to the group at the top of the window. (You only need to enter the group score once for each group.)
3. Click the button to save the ratings.
4. Close the current peer rating window. Continue entering scores for other students.
5. You may click on the tab to see ratings received by a student.

3.5 Computing Autorated Scores

1. When peer ratings of all students in a group has been entered and committed, click on the button. The computed weights and scores will be saved to file immediately.



Figure 3: Peer Ratings Received

- Click on the **Group Overview** tab to see autorated weights and scores for each student in the group.



Figure 4: Autorated Weights and Scores of Group Members

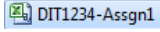
4 Opening Existing Assignment Score File

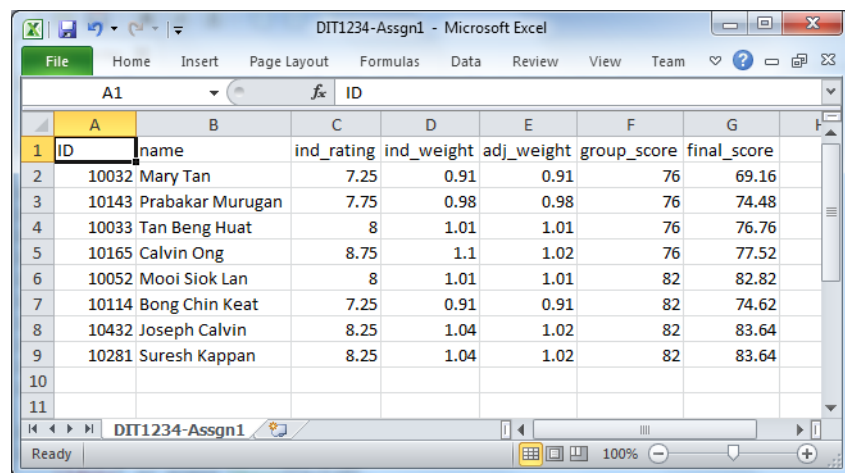
You may open an existing assignment score file (*.xml) to inspect scores, as well as to change settings and recalculate scores.

- To open an existing score file, access the menu item **File > Open...** or press **Ctrl+O**.
- Locate and select the *.xml file to open.

5 Exporting Data for Excel

The autorated scores can be exported for further processing in Excel.

1. Select **File** > **Export...** from the menu, or **Ctrl** + **E**.
2. Select a file name to save the exported data in. The file will be saved with a .csv extension. 
3. In Windows Explorer, locate the .csv file and double-click on it to open it in Excel.
4. If warning messages are displayed, keep on clicking **OK** or **Yes** to ignore them.
5. When the data is displayed, you may save the file as an .xlsx or .xls Excel file, and continue processing it.



ID	name	ind_rating	ind_weight	adj_weight	group_score	final_score
10032	Mary Tan	7.25	0.91	0.91	76	69.16
10143	Prabakar Murugan	7.75	0.98	0.98	76	74.48
10033	Tan Beng Huat	8	1.01	1.01	76	76.76
10165	Calvin Ong	8.75	1.1	1.02	76	77.52
10052	Mooi Siok Lan	8	1.01	1.01	82	82.82
10114	Bong Chin Keat	7.25	0.91	0.91	82	74.62
10432	Joseph Calvin	8.25	1.04	1.02	82	83.64
10281	Suresh Kappan	8.25	1.04	1.02	82	83.64

Figure 5: Exported data in Excel

References

- [1] R. W. Brown. Autorating: Getting individual marks from team marks and enhancing teamwork. In *Proceedings of Frontiers in Education Conference*, pages 15–18, 1995.
- [2] Deborah B. Kaufman, Richard M. Felder, and Hugh Fuller. Accounting for individual effort in cooperative learning teams. *Journal of Engineering Education*, 89(2):133–140, 2000.