



*Malton Points Program
Version 1.1 Release 040526
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Malton Custom Software Company

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The current version has a limited usage period. You may use the program on an unlimited number of workstations, but you may only use the program 100 times before a full license is required.

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1. Introduction

1.1 Brief Description

This points system maintains a record of all student participation in various groups and achievements. Users can view student points status as well as award points to students who participate in their groups. An administrator can create groups, award points for academic achievement, and perform many other functions.

The need to create the Lincoln M. Alexander Points Program was presented to me in October of 2003 by the Jerry Powidajko, Principal of Lincoln M. Alexander Secondary School in Malton, Ontario. Jerry required a system that would serve as a record keeper of the achievements of the pupils in his school. I needed experience developing software in order to graduate from University. Hence, the program was born.

1.2 Installation

This points system will only work on a LAN, and not over the internet due to the nature of Java Security.

For a first time installation, you must first setup the server. The server should be a location accessible by all the client computers: You will also have to ensure for security purposes that only users allowed to use the system can access the folder it is store in.

You now run **serverSetup.exe** and enter the server location you decided upon above when prompted.

On each Client Computer

On every client computer, the latest version of Java should be installed. This may be downloaded from Sun Microsystems' website at www.sun.com.

You must then run **clientSetup.exe** on each computer and follow the prompts.

1.3 Starting the Program

When you installed the program, you specified a program files folder in which to place it. Just run that file. If this does not work, try re-installing Java, or contact your administrator.

2. How to use the Program

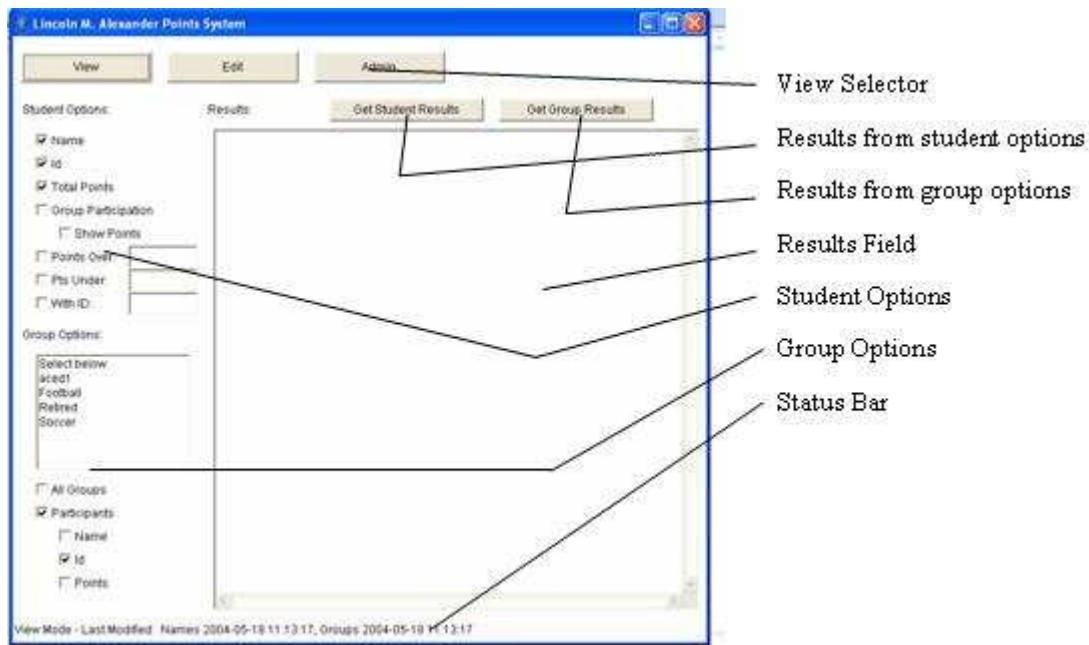
2.1 Initial Login

When you first start the program, a start-up screen appears consisting of the school's logo and a username and password field. Enter your username and password and then click on OK to enter the system. If the username and password was entered correctly, the viewer mode should appear.

If incorrect, an error will display at the bottom part of the window. If you have forgotten or do not have a password, please contact the administrator as he/she can reset it.

2.2 Viewer

The following is a diagram of the View Mode. You may use the View Selector to change between the View, Edit, and Admin modes, and the status bar will always indicate success and/or errors that may occur for any actions in all three modes.



The data that appears on the Results Field may at any time be copied using CTRL+C and then pasted into another document if the need occurs to do so.

2.2.1 Student Results

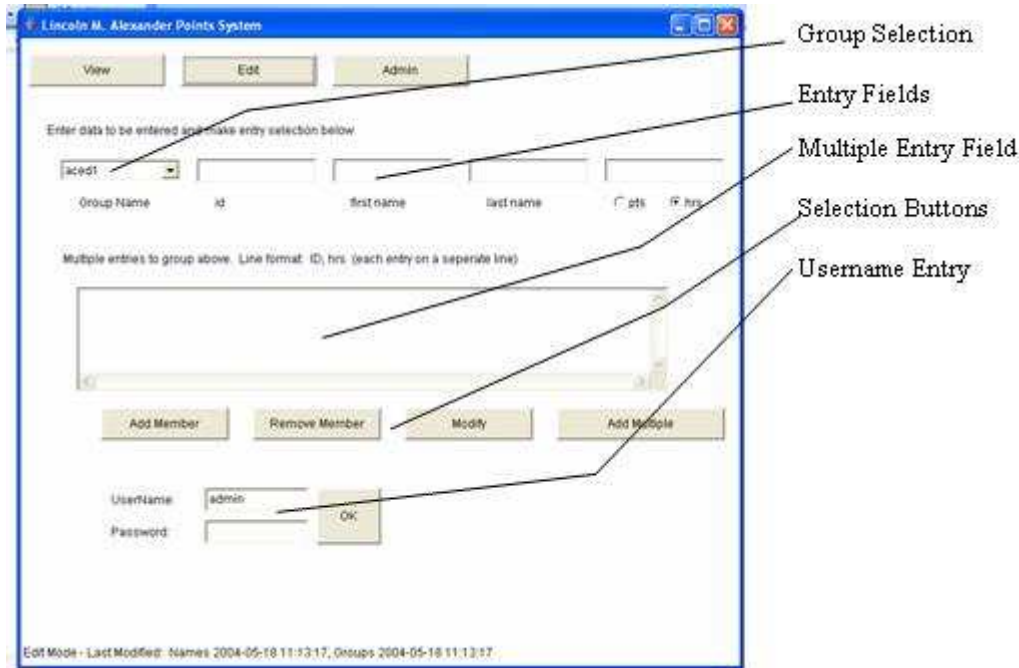
The student results show student information stored in the repository. You select options from the Student Options area, and click “Get Student Results” to view them. In particular, you may view the Name, Id, Total Points, Group Participation (with or without points per group), only students with a particular amount of points (useful for determining eligibility for awards), only students with points under a particular amount, and only the student with a given Id.

2.2.2 Group Results

The group results show group information stored in the database. You choose one or multiple groups (or select All Groups for them all), select view options, and then click on “Get Group Results” to view specific data for the selected group(s). In particular, you may view the group’s participants with their names, ids, and/or points given for that particular group.

2.3 Editor

The following is a diagram of the Edit mode. Like the Admin and View Modes, you still have the View Selector and the Status Bar. You also have a Group Selection drop-down menu, entry fields, a multiple entry field, and username entry. There are also selection buttons which will be discussed in the sections from 2.3.1 to 2.3.4.



The username and password field **will unlock one group at a time**, thus if you wish to add members to one group, you have to enter that particular username and password. If you then want to add to another group, you have to then enter that username/password (i.e. you cannot have more than one group unlocked at one time unless you have logged on as the administrator, in which case you can access them all).

2.3.1 Add

You may only add members to a group that is currently unlocked. To unlock, enter the username/password. Thus, you must be in charge of a group in order to add a member.

To add a member, select a group, supply either the Id or the First AND Last names, supply the hours or points and indicate the number of points, and then click on “Add Member.” A confirmation message will appear on the status bar. Should you award too many hours to a member (more than the max allowed for a group), the user will be awarded the max number of points. If you supply a points value that is under the min allowed for the group, he/she will still receive it.

2.3.2 Remove

To remove a member from a group, select that group, supply either the Id or the First AND Last name, and click on “Remove Member.” You will see a message on the status bar indicating success or failure.

2.3.3 Modify

To modify the hours/points for a group member, select the group, supply either the Id or the First AND Last name, the new hours/points for the member, and click on “Modify.” If the user was not in that group to begin with, an error message will appear.

2.3.4 Multiple Add

To add multiple students, you must enter their Id followed by a “comma” followed by the hours you wish to give them. Each entry should be separated by a line-feed (i.e. press enter). You then select the group and click on “Add Multiple.” The following is an example of a valid entry for id’s 123 and 456 to be given 10 and 20 hours respectively:

```
123, 10  
456, 20
```

2.4 Admin

The Admin Mode is only accessible by the administrator. Upon clicking on it, the status bar will indicate the need for the administrator to log in. Here, the administrator can choose to modify his/her password by using fields that automatically appear upon login/password entry.

The Admin View is shown in the figure below. Here, you have an action selector, a perform button, and an area that will contain the actions options. The actions available for this release include the changing of file locations, parsing of student master list, adding and removing of users/groups, showing and resetting user passwords, adding and removing of students, showing and changing of group options, and marks consideration. These options are discussed in detail from sections 2.4.1 to 2.4.8.

2.4.3 Add/Remove Users/Groups

Here, you are given the option of adding or removing groups and their respective users.

To remove a group, simply select the group from the drop down list, and click “Remove Group.”

To add a group, you must correctly specify all properties and click on “Add.” These properties are as follows:

- Total Hours – the number of hours to achieve max points, supplied as an integer
- Duration – the length of the event (e.g. one semester), supplied as words
- Min Points – the minimum points that a member will receive, supplied as an integer
- Max Points – the maximum points a member can receive by completing all hours, supplied as an integer
- Comments – supplied as words – NO COMMAS!!!!
- Max Students – the most students that can be in this group – supplied as an integer
- Username – must be unique – supplied as a word
- Password – supplied as a alphanumeric, numeric, or word

2.4.4 Show/Reset Password

Here, you select a username. You then click on “Show Password” to view the current password, or enter a password and click on “Change Password.”

2.4.5 Add/Remove Student

Here, you enter the student's information (id AND first name AND last name), and then either remove or add it.

2.4.6 Change Max Values

Immediately, the current max values will appear. You may then change them and click on “Change,” however, these values will not take effect until the next time the system is restarted.

2.4.7 Show/Change Group Values

Here you select a group from the drop-down menu, and click on “Show” to view its changeable values. You may then change the values and click “Change” to apply the changes. The values must be as in 2.4.3.

2.4.8 Marks Consideration

To consider marks, indicate the filename, the group you wish to create, the location of the id field, location of the marks field, the separator character, number of points to award if threshold met, and a threshold value. The threshold is a value such as 80 (representing a mark of 80%), and if someone exceeds that mark, they will be given the specified points. Please note: there is

no difference in awarded points between one who gets an 80 and one who gets a 90. If you want there to be, create separate groups! An error message containing lines that are invalid will appear.

2.4.9 Awards Consideration

To consider awards, you enter a group name representing the award you wish to hand out. You then specify the amount of points that will be needed. To see the people who have been awarded awards, you simply go to the view mode, and select the group name you created.

3. File Usage and Structures

The files that are on the server and clients serve specific roles. In particular, the following:

Server files:

- namelist.dat – stores the list of students (see 3.1)
- tablelist.dat – stores the list of groups and their members (see 3.2)
- passfile.dat – stores the usernames, passwords (encrypted) and their respective groups (see 3.4)
- varvals.dat – stores the values of max groups and max students that all clients share (see 3.5)
- lock.dat – stores if the group and name files are currently being read or written to (see 3.6)
- plock.dat – stores if the password file is currently being read or written to (see 3.7)

Client Files:

- run.jar – runs the program
- fileloc.dat – stores the location of the file server (see 3.3)
- lincoln.jpg – the splash image

Please remember to use a text editor (not MS Word) to modify these files should you decide to do so. I will not support any modification unless it is of the fileloc.dat.

3.1 namelist.dat

This file stores the ID, first, and last names in that order. The file begins with a <START> and ends with an <END>. The following is a valid example:

```
<START>
111, AAA, BBB
222, CCC, DDD
333. EEE, FFF
<END>
```

3.2 tablelist.dat

This file stores the group properties followed by the ids and hours and possibly overridden points of all group members. The format is as follows:

```
<START>
<NEWGRP>
Name, Total Hours, Duration, Min Points, Max Points, Comments, Max People
Id for member 1, Hours for member 1, <possibly> Overridden points for member 1
Etc. for rest of members
<NEWGRP>
Etc. for rest of groups
<END>
```

3.3 fileloc.dat

This file consists of the location of the server files. It must be put on the very first line. More about this is discussed in section 1.2. There must be a backslash at the end (“\”)!

3.4 passfile.dat

The password field is encrypted in an a manner that becomes very apparent when the source code is viewed. For security purposes, this will not be discussed here. Please contact the author of the program directly for this information.

The first line is <START>, followed by the admin password, followed by the groupname, username, password for all groups. Then it is followed by <END>.

3.5 varvals.dat

This consists of two numbers. They must be located on the first and second line. The first line is the maximum number of students and the second line is the maximum number of groups.

3.6 lock.dat

This file consists of either a 1 or 0. If no one is running this program, it should be 0. Please don not modify this value!

When a read or write is done to the namelist or group list, this is marked as 1 so that there is not a possibility of one client reading while another writes or other disastrous events. If it is read in as 1, the client will wait until it changes to 0.

3.7 plock.dat

This file consists of either a 1 or 0. If no one is running this program, it should be 0. Please don not modify this value!

This file works in exactly the same manner as lock.dat, except that it involves the password file as opposed to the group and names files.

4. About the Author

My name is Mohanjit Singh, and I am a University of Toronto Computer Engineering Graduate. This program was made in conjunction with Jerry Powidajko, Principal of Lincoln M. Alexander Secondary School.

You may contact me at the following for any reason, including obtaining the source code:

Email: moesingh@hotmail.com

Web: www.malton.org

5. Other Notes:

Malton Points Program is copyrighted. Please do not distribute licenses.

Mohanjit Singh, the author, will not be held liable for loss of information due to this program. As with all database systems, it is strongly recommended that the server files be backed up every month or so and ensure that users entering information have paper backups in case of software or hardware errors.