# Instructions for using the CCC Grader

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# How to register for an account on the CCC Grader

1. To create an account on the CCC Grader, go to:

#### http://cccgrader.com/register.php

and fill out the necessary information. You will need to your school's CEMC "school number", which is what was used to register your school for the CCC: your math or computer science teacher will have that number.

The biographical information on that page should be self-explanatory.

- 2. The supervising teacher will need to authenticate you as a student. They can do so by following the instructions outlined in the section How to authenticate a student.
- 3. Once you are authenticated, you will receive an email message of the form:

Your account in the CCC Contest System has been created. You can log in at http://cccgrader.com/index.php. Your username is "XXXXXXX" and your password is the one you chose during registration. Good luck on the contest!

You can then login to the CCC Grader and submit solutions to contests. Full details can be found in the next section, How to submit programs to the CCC Grader.

Note: Teachers **do not** need to create an account for themselves. Each school has its own "school account" which teachers can use to submit solutions to problems. See the section How to use your "school account".

# How to submit programs to the CCC Grader

1. Login to:

#### http://cccgrader.com

using your CCC Grader userid and password.

- 2. "Enter" a contest from the main page.
- 3. Select a "Problem" to submit a solution for.
- 4. Select a "Language" from the drop-down list.
- 5. Upload a file using the "Browse" button.
- 6. Click the "Submit" button.
- 7. You will be brought to the submission page which gives you information about your submission as it run on all test cases. You can see your score, and you may wish to refresh this page to be updated on the status of your submission.
- 8. The feedback you will receive from the CCC Grader is one of:
  - compilation error (e.g., your program did not compile),
  - time-limit exceeded (e.g., your program took too long to find an answer),
  - run-time error (e.g., segmentation fault in your program),
  - wrong answer (e.g., your program gave incorrect output),
  - skipped test (e.g., within one test batch, you have failed one of the tests, and thus the remainder of the tests within that batch have been skipped), or
  - correct (e.g., your output matches the expected output exactly).
- 9. To return to the contest page and submit another solution to a problem, click on "Contest".

# How to write "live" contests using the CCC Grader

- 1. First, follow the steps outlined in the previous two sections How to register for an account on the CCC Grader and How to use the CCC Grader.
- 2. Once you login and select a "live" contest (e.g., the Junior or Senior CCC), you will be prompted to review your biographical information. In particular, ensure that:
  - your first and last names are spelled correctly,
  - your email address is correct,
  - your date of birth is correct, and
  - your status as being "official" or "unofficial" is correct: eligibility rules are available through CCC Recognition, which is also available on the biographical information page.
- 3. Once you have verified your biographical information, you then click "Register/Start timer".
- 4. The timer will begin and you will see your remaining time on the contest page. Once the time has expired, you will be unable to submit any solutions to the grader for either contest.
- 5. Note that you may submit solutions for problems on either the Junior or Senior CCC. We will only take the highest score between the two contests as the contest you have written. You do not need to do anything extra to indicate your preference.
- 6. Students should write the contest at the time specified by your supervising teacher. That is, all students should write the same contest at the same time, rather than at different times during the day.
- 7. Internet connections, server loads and other features of online systems are inherently unpredictable. Therefore, since we are only able to accept submissions successfully received through the CCC Grader within the 3-hour time limit, there is some risk when submissions are made near the end of the contest.
- 8. Beware that the system will generate an automatic logout after approximately 10 minutes of inactivity. When this happens, the timer continues to run but as long as time is left, you will still be allowed to login again and submit.

# How to avoid common pitfalls

- Ensure that all filenames contain only alphanumeric, underscore (\_), or dash (-) characters.
- For Python programs, ensure that the correct version of Python is chosen when choosing the compiler. That is, Python 2 programs and Python 3 programs are not interchangeable.
- Java programs **must** be written in a file called Main.java, and thus have:

#### public class Main

as the class name in that file. Compilation will fail otherwise.

- In general, we strongly recommend that input and output be performed using techniques demonstrated in the provided sample programs. In particular, note that in Java, using multiple Scanner or other input objects may cause programs to fail. Use at most one such input object to read from System.in.
- Occasionally, to obtain a perfect score, "fast input" is required which means using something like BufferedReader in Java or scanf in C++.
- Python limits the depth of recursion more strictly than Java and C++ but this can be controlled using sys.setrecursionlimit(*limit*).

# How to authenticate a student

1. Teachers should login to:

#### http://cccgrader.com/teachers/

You will need to enter your CEMC school number and your school password.

2. Once you login to the system, you should "Approve" (or, if they are not your student, "Delete") your "Unverified Users". Students will then receive a message saying that they can use the CCC On-line Grading system, and that email will contain their userid.

# How to reset student passwords

1. Teachers should login to:

#### http://cccgrader.com/teachers/

You will need to enter your CEMC school number and your school password.

- 2. Locate the user that you wish to update the password for in your "School Roster".
- 3. Type the new password into the "Password" field.
- 4. Click the "Update" button.
- 5. This will cause an email to be sent to the email address associated with that user (which you can see in that same row of the "School Roster" table). As sample of such an email is shown below.

Your CCC Contest System password has been reset by your teacher. You can log in to the system by accessing http://cccgrader.com/index. php with the following credentials: username: "USERNAME" password: "NEWPASSWORD"

# How to inactivate (e.g., graduate/ungraduate/hide) students

#### How to graduate a student

1. Teachers should login to:

#### http://cccgrader.com/teachers/

You will need to enter your CEMC school number and your school password.

- 2. Locate the user that you wish to graduate in your "School Roster" table.
- 3. Click on "Graduate". This will move the student from your "School Roster" table to the "School Alumni" table, and remove their access to the CCC Grader.

#### How to un-graduate a student

1. Teachers should login to:

#### http://cccgrader.com/teachers/

You will need to enter your CEMC school number and your school password.

- 2. Locate the user that you wish to un-graduate in your "School Alumni" table.
- 3. Click on "Un-Graduate". This will move the student from your "School Alumni" table to the "School Roster" table, and grant access to the CCC Grader.

#### How to hide a student

1. Teachers should login to:

#### http://cccgrader.com/teachers/

You will need to enter your CEMC school number and your school password.

- 2. Locate the user that you wish to hide in your "School Alumni" table.
- 3. Click on "Hide". This will remove the student from your "School Alumni".

#### Notes:

- You cannot "un-hide" a student: it is a permanent operation.
- Hiding does not delete the student record: it is still stored in our database system, so the information can be accessed if it is ever needed in the future.

# How to monitor student performance

1. Teachers should login to:

#### http://cccgrader.com/teachers/

You will need to enter your CEMC school number and your school password.

- 2. Under "Contests", find the contest results you wish to see.
- 3. Click on the "Scoreboard".

Note: the scoreboard will be updated in real-time; simply refresh the page to see any updates.

# How to use your "school account"

1. Teachers should login to:

#### http://cccgrader.com/

using your CEMC school number and your school password. Note that this site is the "user" login page.

- 2. Follow the direction indicated in the section, How to use the CCC Grader, if you wish to submit solutions to any contest problems.
- 3. You may also view student solutions/submissions from your school on a specific contest selecting that "Contest" and then scroll down to "All Submissions" at the bottom of the page. Clicking on a submission will show what the student submitted, as well as the result of the submission.