



# ACM INTERNATIONAL COLLEGIATE PROGRAMMING CONTEST



California State University, Sacramento's

## PC<sup>2</sup> Contestant's Guide

This guide is intended to familiarize you with the process of submitting programs to Contest Judges using the PC<sup>2</sup> ("P-C-Squared") **P**rogramming **C**ontest **C**ontrol system. Starting PC<sup>2</sup> will bring up the PC<sup>2</sup> **login screen**, shown below:

CSUS PC<sup>2</sup> Login @ CSUS

**CSUS Programming  
Contest Control System**

Name

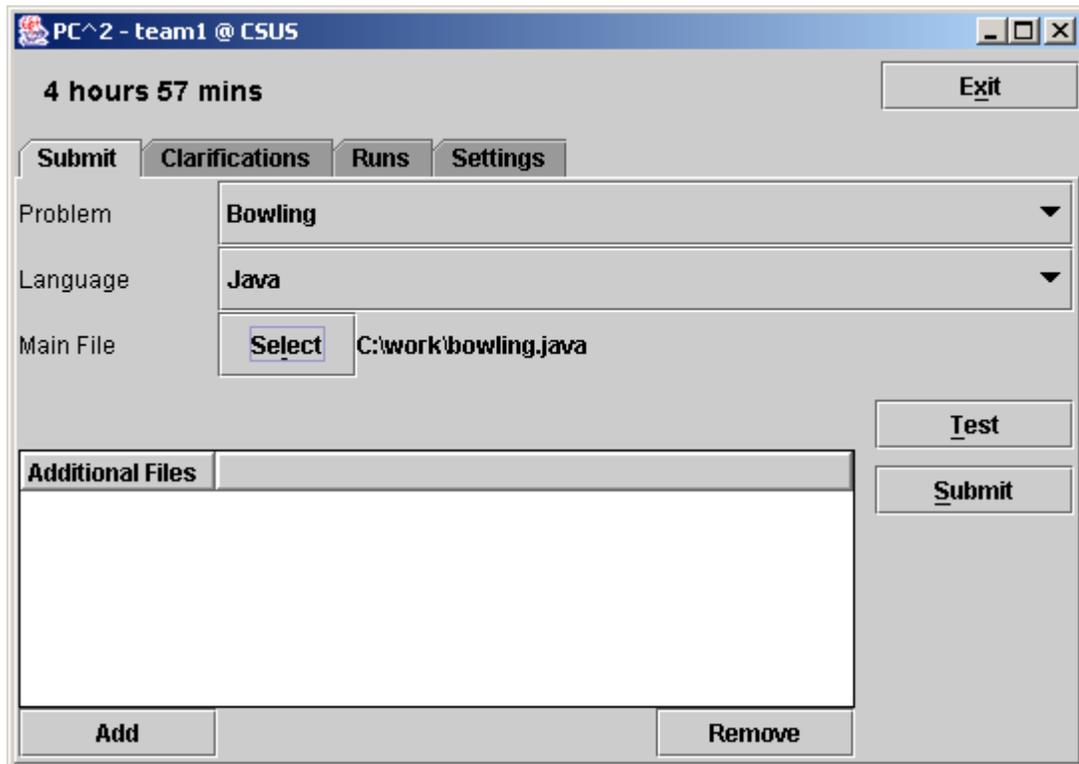
Password

Logon      Exit

To login to PC<sup>2</sup>, click once on the **Name** box on the login screen, enter your assigned team ID, press the TAB key or click on the **Password** box, then enter your assigned password. Your team ID will be of the form **teamxx**, where xx is your assigned team number (for example, "**team3**" or "**team12**"). After entering your team name and password, click on the **Logon** button.

## Submitting a Program to the Judges

Once the system accepts your login, you will be at the PC<sup>2</sup> **Main Menu** screen, shown below. Note that the team ID (“team1” in this case) and the team’s site location (“CSUS” in this case) are displayed in the title bar, and the amount of time remaining in the contest is displayed below the title bar.



Clicking on the **SUBMIT** tab near the top of the screen displays the **Submit Run** screen, which is shown above.

Clicking in the **Problem** field will display a list of the contest problems; choose the problem for which you wish to submit a program (called a “run”) to the Judges (in the example, a problem named “Bowling” has been chosen).

Clicking in the **Language** field will display a list of the programming languages allowed in the contest; choose the language used by the program that you wish to submit to the Judges (in the example, “Java” has been chosen).

To submit a program to the Judges, you must specify the name of the file containing your **main program**. Click on the **Select** button to invoke the “File Dialog” which lets you locate and select your main file. The Dialog lets you automatically navigate to the correct path and file location (in the example, the main program file “C:\work\bowling.java” has been selected).

If your program consists of more than one file, you must enter the additional file names in the **Additional Files** box. Click the **Add** button to invoke the dialog which lets you locate and select your additional files; select a file in the box and click the **Remove** button to remove a previously-selected file.

*Important:* you *must* specify the name of your *main program* file in the **Main File** field, *not* in the **Additional Files** box! Select only source code files for submission to the Judges. Do not submit data files or executable files.

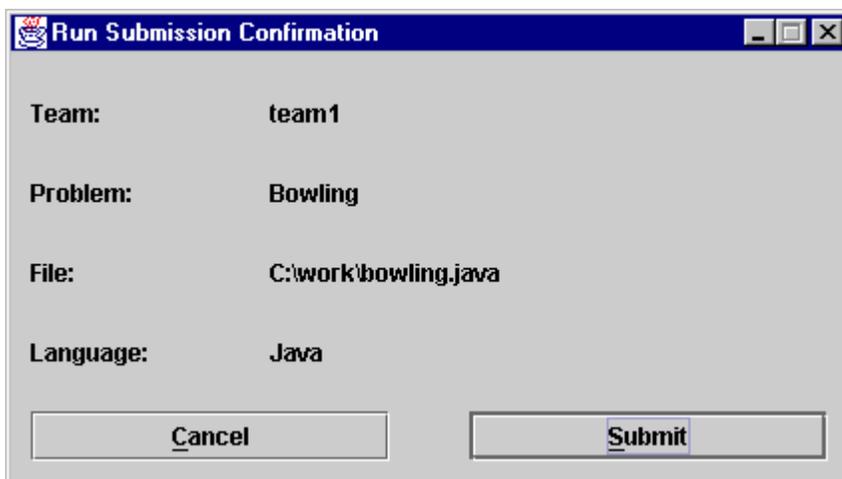
## Test Runs

Once you have selected the problem, language, and file(s) to be submitted to the Judges, you should click the **Test** button. This will make a “**TEST RUN**”, meaning it will compile and execute your program *on your machine*, using an environment as nearly identical to that of the Judges as possible (except that it will use *your* data file, not the Judge’s data file).

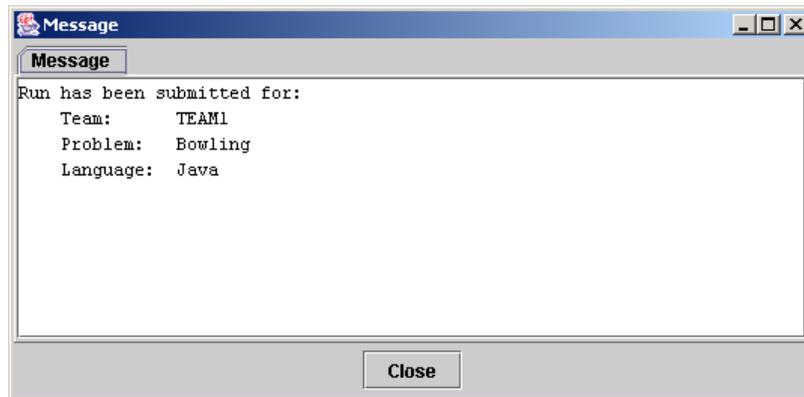
It is *important* to make a **TEST RUN** before submitting your program to the Judges. Just because your program runs the way you intend in the “development environment” in which you created it does NOT mean that it will necessarily run precisely the same way in the Judge’s environment. Making a **TEST RUN** will check this. Test Runs do not count against your score in the contest, but they may save you a lot of time and penalty points by identifying environment problems or differences *before* you submit the program to the Judges.

NOTE: prior to making a **TEST RUN**, you must insure that the data file for the program exists, in the same directory as the program file(s).

Once you are satisfied with the results of your Test Run, click the **Submit** button. The following confirmation will appear; verify the data and then click on **Submit** to confirm the submission and send the run to the judges.



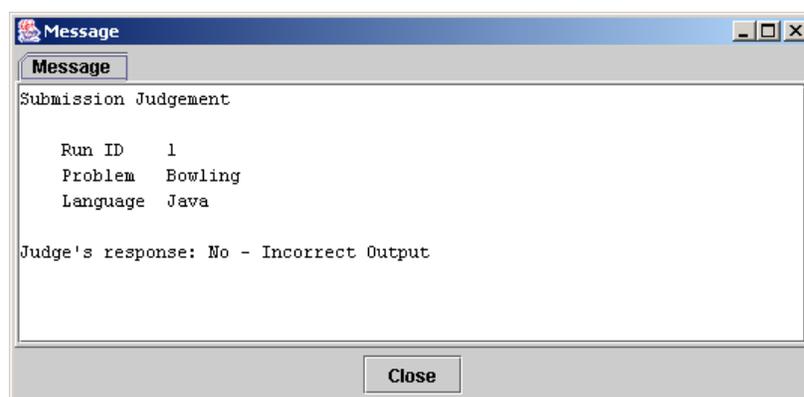
Once a run has been submitted to the Judges, you will receive a confirmation message on your screen similar to the example shown below.



This message indicates that the Judges successfully received your submission. After reading the submission confirmation message, click the **Close** button to delete it. NOTE: the confirmation only indicates that the Judges have *received* your submission, not that it has been judged. The time it takes to find out the result of your submission depends on how busy the Judges are at the time you submit the program.

## Run Results

When the Judges finish judging your submitted program, a "Submission Judgement" message similar to the one shown below will pop up on your screen (provided that PC<sup>2</sup> is still running on your machine). The Submission Judgement message identifies the submission and includes an indication of whether the submitted program correctly solved the problem or not.



To view the status of all runs you have submitted, first click the **RUNS** tab near the top of the Main screen, then click the **Refresh** button. This will produce a display similar to the one shown below. Note that the Runs display does not update dynamically; it is necessary to push the **Refresh** button to update the Run Display status.<sup>1</sup>

The refreshed Runs display shown here, taken with 4 hours 27 minutes left in the contest, indicates that three runs (for different problems and with different submission times) have been submitted by the team. Only two of the runs have been evaluated by the Judges; runs waiting to be evaluated show a status of “New”. The submission time is in “minutes since the start of the contest”.

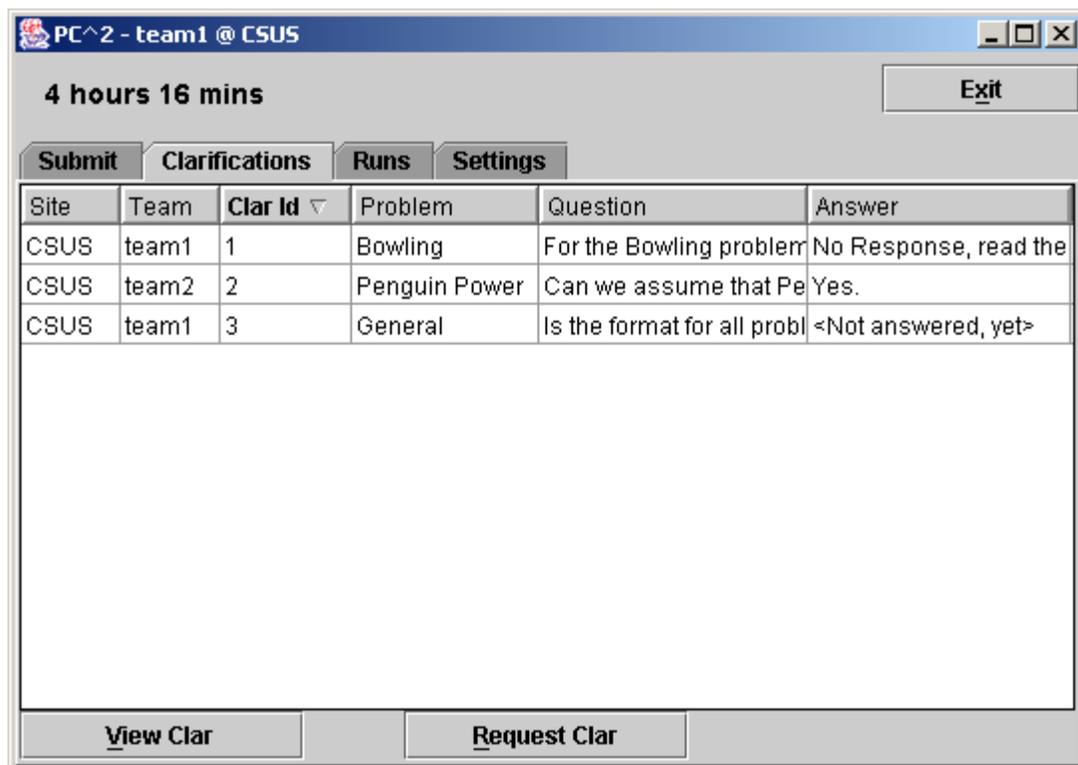
Site	Run Id	Problem	Time ▾	Status	Language
CSUS	1	Bowling	12	No - Incorrect Output	Java
CSUS	2	Penguin Power	24	Yes	C++
CSUS	5	Bowling	30	New	Java

The columns on the Runs display can be resized by clicking in the column header margin and sliding the margin left or right. The Runs display can be *sorted* based on any column by clicking in the desired column header. Clicking again in the column header will toggle the sort between ascending and descending order. (The small triangle in the TIME column header indicates that the display shown is currently sorted in ascending order of submission time.)

<sup>1</sup> Note: the Contest Administrator has a mechanism which allows suppression of the display of run status near the end of a contest; you will only be able to see the status of runs which were submitted prior to the suppression time determined by the Contest Administrator. Check with your Contest Administrator to determine what suppression time, if any, is being enforced.

## Clarification Requests

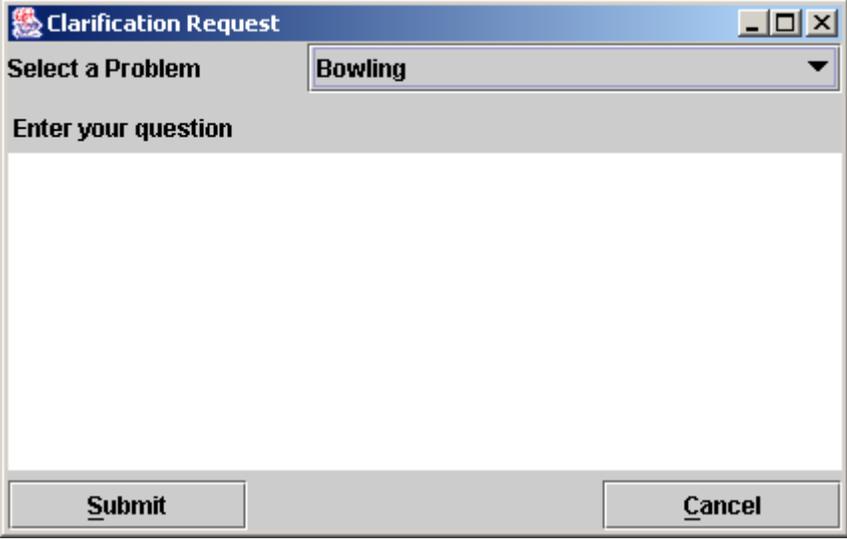
If you feel that one of the Contest problem statements is *ambiguous*, you may submit a “Clarification Request” to the Judges. To submit a Clarification Request, click the **Clarifications** tab near the top of the Main screen. This will bring up a display similar to the following:



If the Judges have previously sent any Clarification Responses to your team (for example, due to a Clarification Request submitted by some other team), the responses will be listed in the grid as shown above.

To view the complete text of a previous Clarification Request (and the Judge’s Response if there is one yet), click the corresponding row in the grid and then push the **View Clar** button. The columns in the Clarification display grid can be resized and sorted in the same way as previously described for the Runs display.

To send a new Clarification Request to the Judges, click the **Request Clar** button. This will produce a display similar to the one shown below.



The image shows a standard Windows-style dialog box titled "Clarification Request". At the top left, there is a small icon and the title. Below the title bar, there is a label "Select a Problem" followed by a dropdown menu that currently displays "Bowling". Below this is a large, empty text area with the label "Enter your question" above it. At the bottom of the dialog, there are two buttons: "Submit" on the left and "Cancel" on the right.

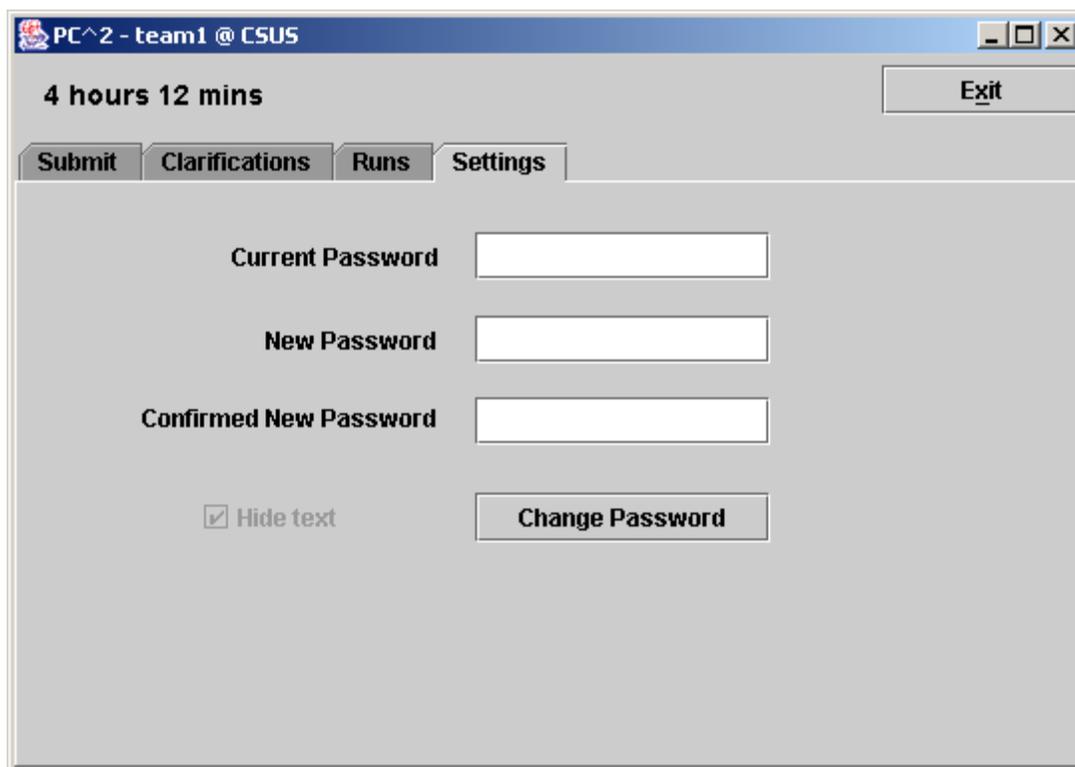
Click on the **Select A Problem** field to select the problem about which you wish a clarification (in the example, the “Bowling” problem has been selected), then click in the large text area in the middle. Type the text of your question, then click the **Submit** button to send the Clarification Request to the Judges.

When the Judges respond (which may take a while, depending on how busy they are and on the nature of your Clarification Request), you will receive an automatic message displayed on your screen similar to the automatic response messages for submitted runs.

*Note that while the Judges in a contest will consider requests for clarification of ambiguities in a problem statement, they will not normally respond to other types of questions. If you submit a “Clarification Request” which asks about something which the Judges feel is adequately covered in the problem statement, they may simply respond to your Clarification Request with an answer such as “No Response – Read the Problem Statement”.*

## Changing Your Password

To change your PC<sup>2</sup> password, click on the **Settings** tab on the Main screen. This will display a screen similar to the following,:



The screenshot shows a web application window titled "PC^2 - team1 @ CSUS". The window has a timer showing "4 hours 12 mins" and an "Exit" button in the top right corner. Below the timer is a navigation bar with four tabs: "Submit", "Clarifications", "Runs", and "Settings". The "Settings" tab is currently selected. The main content area contains three text input fields labeled "Current Password", "New Password", and "Confirmed New Password". Below these fields is a checkbox labeled "Hide text" which is checked. To the right of the checkbox is a "Change Password" button.

Enter the correct *current* password, then enter the new password and reenter the same new password in the “Confirmed” text box. Finally, click the **Change Password** button.

## Exiting PC<sup>2</sup>

The **Exit** button logs your team out and shuts down PC<sup>2</sup> on your machine. This does not affect the status of runs or clarification requests previously submitted, and any Run or Clarification responses sent by the Judges while PC<sup>2</sup> is shut down will be viewable in the corresponding grids the next time you login. Note however that the dynamic “instant notification” messages which pop up on your screen to notify you of responses from the Judges will not appear unless you are logged in to PC<sup>2</sup>.