

Programming Project

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10 Marathon Management User Guide

The Marathon Management System records entries and runners' race times, and prints (on the screen) runners results.

Users do not want to know how to edit and compile programs. All they want to know is how to install and use your program. They give you their money. You give them the executable and instructions on how to use your program. You don't even need to explain how to use Windows or the MSDOS Command Line, how to copy files or how to change directories.

10.1 Installation

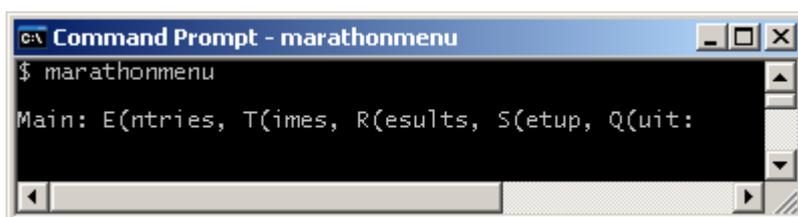
In Microsoft Windows:

1. open a command line window and navigate to a chosen directory
2. from the given disk or memory stick copy
 - a. marathonmenu.exe
 - b. entries2010.datto your directory.

The program runs in the command line window.

10.2 The Menu System

The program is started by entering *marathonmenu* at the command line prompt.



The main menu has five options.

Entries allows you to enter and amend entries to the marathon. Times allows you enter the race start time and the runners' finish times. Results enables you to see the race results for both the half and full marathons. Setup is used to define the filenames for the next marathon. Quit returns you to the command line prompt.

You make a menu selection by entering the capital letter shown by your choice. You may enter your choice either as a capital or a lower case letter. An entry that is not one of e, t, r, s or q is ignored.

```

c:\ Command Prompt - marathonmenu
$ marathonmenu
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit: e
Entries: A(dd, W(ithdraw, P(rint, Q(uit:

```

The Entries menu has four options. Add allows you to store a new entry's details. Withdraw allows you to mark an entry as withdrawn. If you need to change an entry's name or address you first mark the entry as withdrawn then add a new entry. Print allows you to view the entries on screen. Quit returns you to the main menu.

```

c:\ Command Prompt - marathonmenu
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit: t
Times: S(tart, F(inish, P(rint, Q(uit:

```

The Times menu has four options. Start sets the race start time. This time is the same for all runners regardless of when they passed the start line. A runner is an entry that has passed over the start line. Finish allows you to set the finish time for each runner. Print allows you to view all the runners that have finished. Quit returns you to the main menu.

```

c:\ Command Prompt - marathonmenu
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit: r
Results: H(alf marathon, F(ull marathon, Q(uit:

```

The Results menu has three options. Half marathon enables you to view the results for the half marathon. Full marathon enables you to view the results for the full marathon. Quit returns you to the main menu.

```

c:\ Command Prompt - marathonmenu
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit: s
The current file names are:
entries2010.dat, run2010.dat, hmresults2010.dat, fmresults2010.dat
Change file names (y/n)? y
Entry file name? entries2011.dat
Runner file name? run2011.dat
Half marathon file name? hmresults2011.dat
Full marathon file name? fmresults2011.dat
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

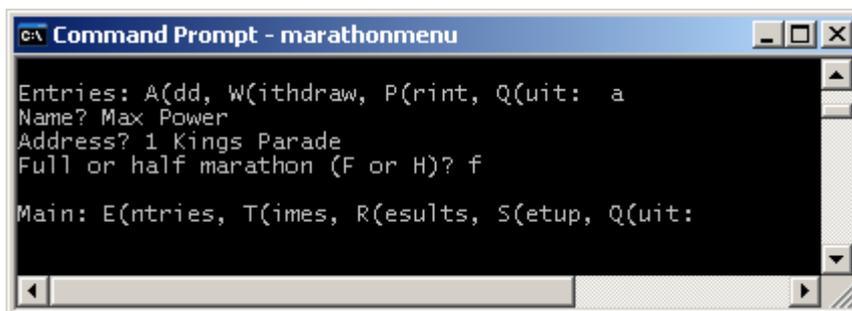
```

The Setup option displays the current filenames and invites you to change them. If you enter *no* then control returns to the main menu. If you enter *yes* then you are invited to enter filenames for entries, runners, half marathon results and full marathon results. The

filenames you enter should not contain any spaces and, customarily, end in .dat. You would use setup once a year ready for the next marathon.

10.3 Add a New Entry

From the entries menu choose Add. Respond to the prompts for Name, Address and Full or half marathon.



```

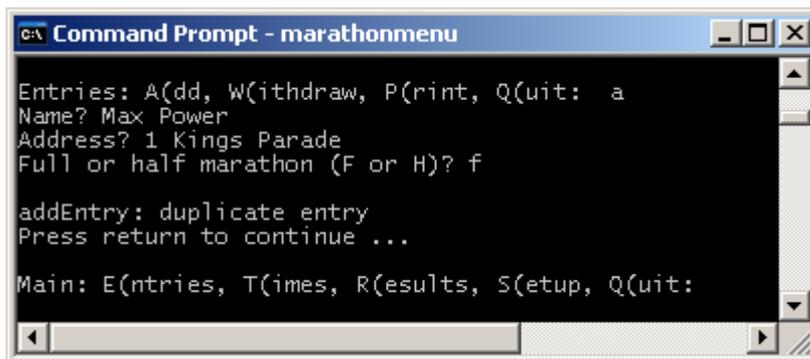
C:\ Command Prompt - marathonmenu
Entries: A(dd, W(ithdraw, P(rint, Q(uit: a
Name? Max Power
Address? 1 Kings Parade
Full or half marathon (F or H)? f

Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

```

When you have added a new entry control returns to the main menu.

You will be warned if you try to add the same entry twice.



```

C:\ Command Prompt - marathonmenu
Entries: A(dd, W(ithdraw, P(rint, Q(uit: a
Name? Max Power
Address? 1 Kings Parade
Full or half marathon (F or H)? f

addEntry: duplicate entry
Press return to continue ...

Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

```

A duplicate entry is one with the same name and address as a previous entry.

A competitor number is automatically assigned to each entry, in order of addition to the file.

10.4 Withdraw an Entry

From the entries menu choose Withdraw. Then enter the competitor number. If you do not know the competitor number then use Entries, Print to identify the entry to be withdrawn. If you ask for a none-existent entry to be withdrawn, you will get a *no entry with given number found* message.

```

c:\ Command Prompt - marathonmenu
Entries: A(dd, W(ithdraw, P(rint, Q(uit: w
Number? 7

Main: E(ntries, T(imes, R(esults, S(etup, Q(uit: e

Entries: A(dd, W(ithdraw, P(rint, Q(uit: w
Number? 9999

getEntryFromFile: no entry with given number found
Press return to continue ...

Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

```

10.5 Print all Entries

From the Entries menu choose Print.

```

c:\ Command Prompt - marathonmenu
Entries: A(dd, W(ithdraw, P(rint, Q(uit: p
Number Name           Address              Category  Status
1 Max Power          1 Kings Parade     full     current
2 Andy Mann          2 Queens Drive     half     current
3 Kay Nine           3 Princes Place    full     current
4 May Day            4 Princess Avenue  half     current
5 Ann D'Pandy        5 Earles Court     full     current
6 Anna Sassin        6 Dukes Drive      half     current
7 Sue Me             7 Duchess Avenue  full     withdrawn

Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

```

10.6 Set Race Start Time

From the Times menu choose Start. You will be asked for the start time hour, minutes and seconds.

```

c:\ Command Prompt - marathonmenu
Times: S tart, F(inish, P(rint, Q(uit: s
Start time: hour? 9
Minutes? 30
Seconds? 0

Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

```

If you enter an invalid time you will get no warning.

```

c:\ Command Prompt - marathonmenu
Times: S tart, F inish, P rint, Q uit: s
Start time: hour? 25
Minutes? 61
Seconds? 61

Main: E ntries, T imes, R esults, S etup, Q uit:

```

So, you should be sure to enter the correct start time. Normally, the start time is automatically set by the timing apparatus. But we have not got that here.

10.7 Set Finish Times

From the Times menu choose Finish. You will stay in set finish times mode until there are no more runners. You can exit from set finish times mode by just pressing return for runner number.

```

c:\ Command Prompt - marathonmenu
Times: S tart, F inish, P rint, Q uit: f
Enter 0 for runner number when finished
Number? 2
Finish hour? 10
Minutes? 45
Seconds? 0

Number?

```

As with set start time previously, there is no checking for invalid times. If the time are presented out of order you get race time not in order error message and the runner's time is not included.

```

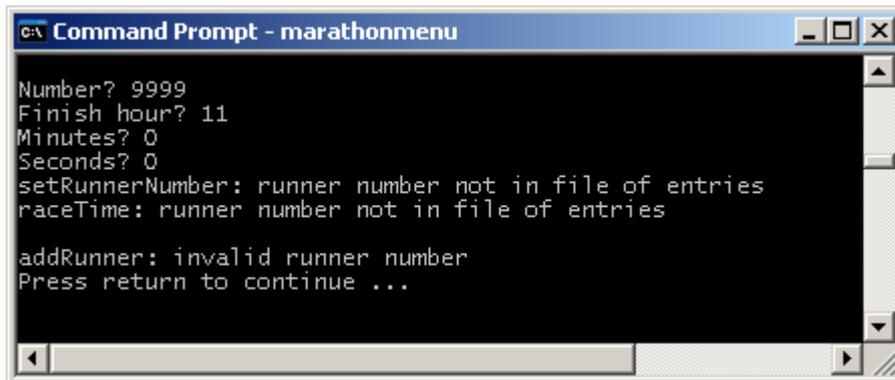
c:\ Command Prompt - marathonmenu
Times: S tart, F inish, P rint, Q uit: f
Enter 0 for runner number when finished
Number? 2
Finish hour? 10
Minutes? 45
Seconds? 0

Number? 6
Finish hour? 10
Minutes? 40
Seconds? 0

addRunner: race time not in order
Press return to continue ...

```

If a runner number that is not in the file of entries, a series of error messages are generated



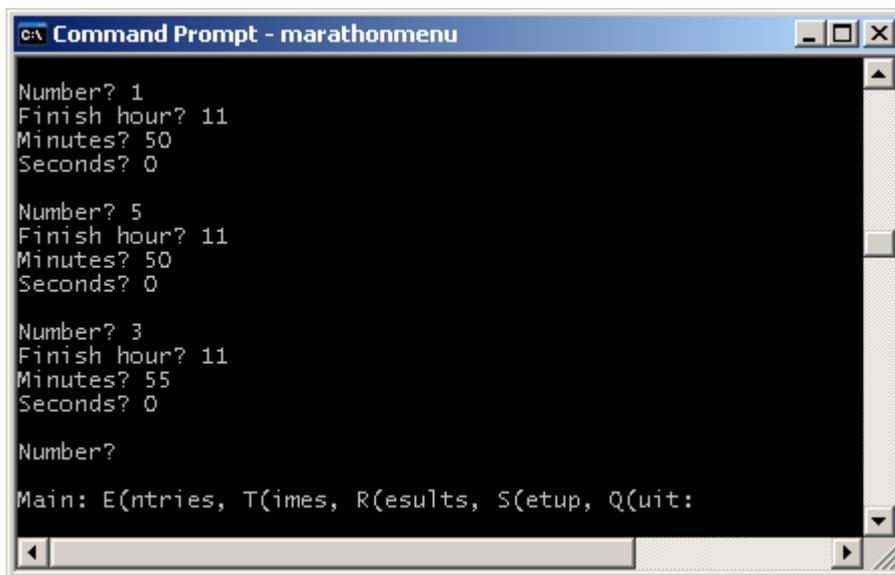
```

C:\ Command Prompt - marathonmenu
Number? 9999
Finish hour? 11
Minutes? 0
Seconds? 0
setRunnerNumber: runner number not in file of entries
raceTime: runner number not in file of entries

addRunner: invalid runner number
Press return to continue ...

```

To finish recording runners' finish times you can press the Enter key in response to the prompt *Number?* Control is returned to the main menu.



```

C:\ Command Prompt - marathonmenu
Number? 1
Finish hour? 11
Minutes? 50
Seconds? 0

Number? 5
Finish hour? 11
Minutes? 50
Seconds? 0

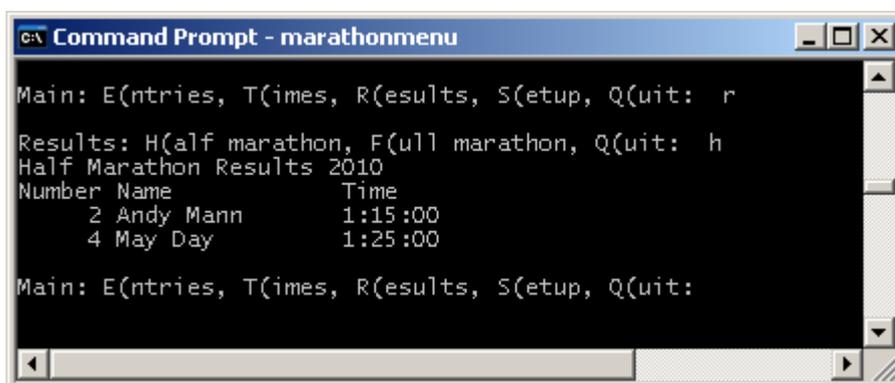
Number? 3
Finish hour? 11
Minutes? 55
Seconds? 0

Number?
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

```

10.8 View Half Marathon Results

Choose Results from the Main menu, then select Half marathon.



```

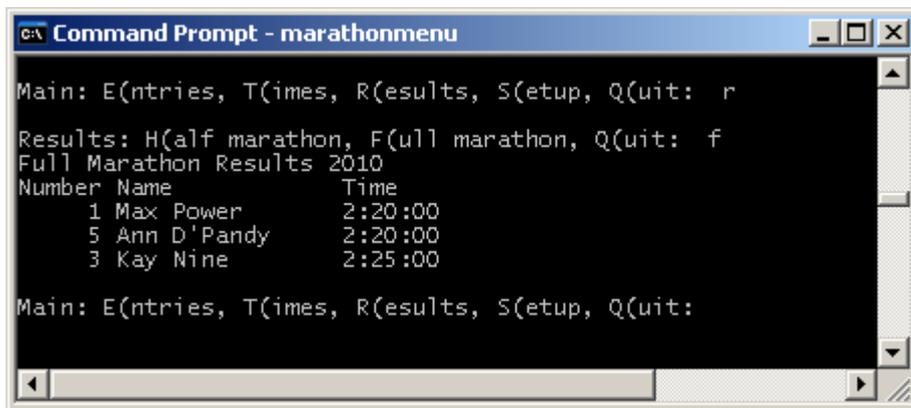
C:\ Command Prompt - marathonmenu
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit: r
Results: H(alf marathon, F(ull marathon, Q(uit: h
Half Marathon Results 2010
Number Name          Time
   2 Andy Mann        1:15:00
   4 May Day           1:25:00

Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:

```

10.9 View Full Marathon Results

Choose Results from the Main menu then choose Full marathon.



```
Command Prompt - marathonmenu
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit: r
Results: H(alf marathon, F(ull marathon, Q(uit: f
Full Marathon Results 2010
Number Name           Time
  1 Max Power         2:20:00
  5 Ann D'Pandy       2:20:00
  3 Kay Nine          2:25:00
Main: E(ntries, T(imes, R(esults, S(etup, Q(uit:
```

10.10 Contact

Contact me at www.tmarris.com if you have any problems with the Marathon Management Program.