

FORMULA 1 DATABASE



A RECORD OF THE 1-2-3 RESULTS
OF EVERY FORMULA ONE WORLD
CHAMPIONSHIP RACE

SOFTWARE BY GRAHAM HAGUE

F1 Database

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Published by Graham Hague

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USEFUL EXTERNAL LINKS

[My Web-site Software Page](#)

[Wikipedia Formula One Results Page](#)

1 ABOUT THE APPLICATION

1.1 Introduction

This application, an executable file called “F1Database.exe”, is a record of the 1-2-3 results for each Formula One World Championship from the first race in 1950 to date. It contains details of the drivers, constructors, engines, circuits and venues for each race.

The data in the application is searchable using user-selected filters.

This manual is to be read in conjunction with the application “F1Database”.

1.2 System Requirements

The minimum system requirements for this application are not known, and I don't know how to establish them. For what it is worth, the application was developed on a PC with the following specification:

- Windows 7 Home Premium 64-Bit, upgraded to Windows 10 Home, version 1607, build 14393.187.
- Chillblast Radeon HD 5850 1024MB Graphics Card.

- 4GB PC3-12800 1600MHz DDR3 Memory.
- Asus P7P55D-E LX Motherboard with USB 3.0.
- Intel Core i7 875 Processor (2.93GHz) Overclocked to 3.8GHz .
- Asus Xonar DS 7.1 PCI Sound Card.

If you use the software on a PC with a different specification, I would be very interested to hear of any issues you might have had, or indeed, if you don't get any issues at all! There is a link on my web-site software page (see the link in the section following) which opens a feedback form for you to contact me.

I will be honest here and state that the application should run happily under most Operating Systems and hardware specifications.

1.3 Application Version

I will only update this manual if something major is changed to the way the application functions for the user, or if I have added more features or something along those lines. Simple improvements, bug fixes and the like, are not likely to generate an update to the manual. But you are advised to visit my website "Software" page and view the current version number of the manual to see if I have updated it, and from where you can download the latest version.

[Graham Hague Software](#)

The application itself will be updated for similar reasons. For the application, the "build" or version is described by a construction in the format: "Version 1.2.3". The first number, "1" in the example, is the "main" version. This will only change with major changes to the coding which cause the application to run, or display, significantly differently to the previous version. If this main version number should change, the following numbers are reset to unity, i.e. "1.2.3" would reset to "2.1.1". The second number, "2" in the example, is used to record changes that may appear to the user, but which do not significantly alter the way the application works. Changes to

the second number reset the third, so “1.2.3” would become “1.3.1” for example. Finally, the third number, “3” in the example, is simply used to record minor changes to the code which may improve the function without seriously changing the way it behaves. Examples of such changes would be speed improvements, for example.

Regularly visit my website Software page in order to view the latest versions of the application and this manual. You can then choose to download updated versions if you wish.

You can check the version of the software application you have in the usual fashion by clicking the menu option “Help” and selecting (by clicking it) the menu option “About” which appears in the drop down list.

1.4 Copyright

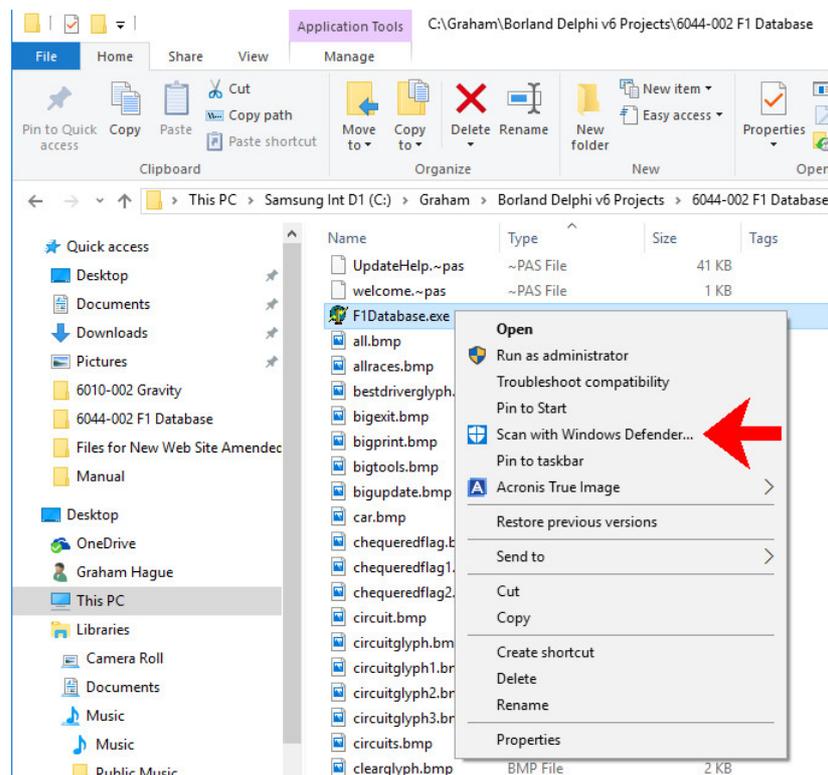
The software was created by me, Graham Hague, and is offered for download as free software. The copyright of the application “F1Database.exe” and this manual: “F1Database.pdf” belongs to me, and is not transferable. You are permitted to freely download the software and manual, and to share it with your friends.

You are not permitted to “reverse engineer” the application code, or to make any changes to it whatsoever. If you think it can be improved, use the feed-back form, obtained via a link on the software page, to inform me of what you would like, and I will incorporate it if I can when I get the time. In a like fashion, you are not permitted to edit this manual in any way. I spent a lot of time compiling the application and intend to make no money from it, nor should you, so you are not permitted to sell the application or the manual in any way, either electronically or physically.

When you download any software or document from my web-site, you are automatically agreeing to these conditions, and those included on the software page, which you are strongly urged to read before doing so.

1.5 Precautions

Many people, myself included, are nervous of running an executable file (a file with the extension “.exe”) that has been downloaded from what is called an “unknown site”. It may be that when you attempt to download the file, your browser may block it completely, or may save it with a different filename and extension. Chrome performs the latter if you have set the “*Privacy*” option in Chrome’s settings to “*Protect you and your device from dangerous sites*”. In this case, you can simply download the file and in Explorer, re-name the file to “F1Database.exe”, so the protection offered in this case is not very rigorous. Since a recent major Windows 10 upgrade, Chrome has stopped doing this.



Having downloaded any file from the internet, you can always run your virus checker over it before you run or open it. In Windows 10 Explorer, you can right-mouse-click on the file, and from the window that opens, select “*Scan with Windows Defender*”, as shown in the screen grab above. Although I do recommend you always perform this on something downloaded from the internet, I

have no idea how good it may be at finding a virus embedded in any particular file type.

The software has been thoroughly tested on my PC, and will not be offered for download until it appears to run correctly and without causing my PC to “lock up” or “crash”. However, my PC is Windows 10 OS (Operating System) so I cannot test it on other systems. That said, it should be fairly stable. Nevertheless, you are strongly urged to save any data in other programs or applications that are running before you launch this application. That way, something untoward happening will not lose you data.

1.6 Compiler

The software was compiled by me using Delphi v3 initially, and then using Delphi v6 which I have just (September 2016) installed on my Windows 10 PC. I am an amateur programmer, so please accept that it probably won't have the polish of a professional application, and you are getting it for free! I will never post an application on my web-site that has ever caused my own PC to crash. That does not mean it will never do so on anyone else's PC and set up. It seems to work on Windows 7, 8 and 10 with no issues. I would suggest that you never run an application with unsaved work open in any other app. This is just common sense, really.

Please notify me via my web-site if you do get a crash. Feel free to contact me with suggestions, hates, ideas for improvement, or anything else that takes your fancy. This link will take you to my web-site feedback form, which you can use to contact me. Obviously, tell me which software you are commenting on, and what you were doing if you got a crash. I'll get back to you as soon as I can.

[Graham Hague Feedback](#)

2 **INSTALLATION AND REMOVAL**

2.1 Installing the Software

This section is rather inaptly named, as there is no installation necessary beyond downloading the software to an appropriate location on your PC. The file contains all the data and code required to run. However, you are strongly urged to perform the download in a certain way, which makes the removal, or un-installation of the application, very easy.

Basically, I recommend creating a new folder in which to download and store the application and this manual. This folder can be created anywhere on your computer's hard drive, external drive, or even a USB memory stick, and within any existing folder structure you have already created.

Once downloaded, the executable file can be launched by double-clicking it in Explorer. If you think you may want to run it quite frequently, you may think it helpful to create a short-cut to it. Simply right-mouse-click on the file in Explorer, and choose "*Create Shortcut*" from the drop down list. You can then drag the shortcut where you want, perhaps to your desk-top. The application can then be run by double-clicking on the shortcut icon. You may also want to single click twice (not too fast) and rename the shortcut to something more meaningful.

2.2 Files Created by the Application

When it runs, the application creates a number of files that are interesting to the more experienced user who may like to interrogate them. The files are named with the extensions “txt” as pure text files, or “ini” as slightly more structured text files. In both cases, they can be opened by right-mouse-clicking on them in Explorer, and choosing Notepad as the application to open them. My Windows 10 PC has Notepad available on it, you may have to hunt to find it, but mine was in the folder “c:Windows/System32”. You can download similar apps from Windows Store, but they must be “pure” text editors. That is, editors that do not “insert” any formatting codes, for example, as does Word.

Whilst these are simple text files, I urge you not to play with them or change them, as you may inadvertently do something that confuses the application when it next launches. If you must play, then only edit them in Notepad, do not use Word for example. It must be a “pure” text editor. And if you do modify a file and it suddenly causes the application to work strangely, or even not at all, simply delete the subject file you edited, and the application will then recreate it when it next runs.

2.3 Removing, or uninstalling the application

When you get fed up with this application, you may decide to uninstall it. This is where the advice about downloading it to a folder of its own comes into play, as all you have to do is delete the folder. And that’s it, application uninstalled. This method is only suitable if the executable file was downloaded to, and always launched from, a folder dedicated to it and it only. If you put the executable into a folder containing other stuff, then it is a matter of identifying files the application creates itself, as well as the executable and this manual, and deleting them yourself using Explorer. Much easier is to delete a folder and its contents!

2.4 Changes to your Computer

I have written all my software so that it makes no changes to the host computer whatsoever, except for those files it creates itself and which are always saved to the folder from which it is launched.

The application makes no changes to your computer's registry settings, nor creates any itself. Uninstalling by deleting the file is therefore the only removal action needed to delete it from the computer.

If you followed my advice and downloaded the application and manual files to a dedicated folder for them, and always ran the application from there or by a shortcut originally created there, the simplest way to remove it is to delete the folder and its contents.

2.5 Using the Application

The application has been designed to be similar to most other applications. There is a "Menu Option" list at the top, with names "File", "Search" and "Help", and each has a list of "Sub-Menu" options which appear when you click the main option. Most, if not all, the actions associated with these menu options are also available by either clicking tool buttons, or filter buttons.

All the tool buttons have a hint about their use, which appears when you hover the mouse over them.

You are advised to read section 4 "Performing a Search" which uses the filter buttons in the filter panel at the right-hand side of the application window.

Under the "Help" menu option is a sub-option "About". This gives details about the current build status of the application. This also appears in the window title bar.

You can change how the application appears, how it displays data, the amount of data it displays, and so on using the Preferences option (under the File menu option, or the tool button with a pair of tools on it), as described in section 5.

All settings made during a session, including form positions, colours, search filters and so on, are saved when the application is closed, and reloaded when it is next run.

The main executable file is only updated at the end of each season. You can download from my web-site an “updater” file which contains relevant race data for a current, incomplete, season, in order to obtain that data. I will maintain this file after every race of a season. Section 6 describes the updater file in more detail.

You can print the search result output using the menu option File > Print, or by clicking the tool button with the image of a printer on it. Printing is described in detail in section 7.

3 ***ABOUT THE DATA***

3.1 Introduction

The data in this database is the 1-2-3 result, i.e. the drivers on the podium, of every race in the Formula One World Championship, from the first such race in 1950 to today.

The details of the race, venue, circuit, drivers, constructors and engines are recorded and available to view. Occasionally, a comment about the race has been included.

You can choose to list these races with filters that refine the search results. You can list as follows:

- All the results (takes a few seconds)
- A particular season from 1950 to date
- Results for a particular driver, constructor, or engine, and for a particular circuit or venue.

The application interrogates its data and compiles lists of race wins and championship wins by driver, constructor and engine. There is even a “Specials” which lists races of particular significance such as longest and shortest distance, fastest and slowest speed, etc.

The data embedded in the application are complete seasons only. An “update” file will be available for download from my site which contains the additional race data for the current unfinished season. This update file will never be more than 6KB in size, and will download in just a couple of seconds. I will update it pretty soon after each race. This is more convenient than downloading the full application file of 1.6GB (as in 2016) which takes 15 to 20 seconds. At the end of the season, I will embed the update file data into the application and reset its version number; this permits you to download the revised file and dispense with the update file until the next season starts.

3.2 Sources of the Data

The application is fairly large, most of which is the embedded data. The data was compiled by me using as my source (for seasons 1950 to 1994) the publication “*Grand Prix Data Book*”, by David Hayhoe and David Holland, ISBN 0 9525121 0 6. I am much indebted to their extensive research necessary in order to compile the hand book. My copy is falling apart after much use. I don't know if current copies are still being printed. AbeBooks at:

<http://www.abebooks.co.uk/book-search/author/david-hayhoe-david-holland/>

seems to have a few copies for just a couple of pounds, but the date is 1996 and I don't think a later version is available. For subsequent seasons, I recorded the data from watching the races on television and using their race summary at the end, or by reference to the Wikipedia pages linked from:

https://en.wikipedia.org/wiki/List_of_Formula_One_seasons

The best thing on this page is to scroll down to the bottom and click the season year link you are interested in, as it includes the current year in the list.

I was tempted to record all race placings, but doing just the first three took me a lot of effort, and I think I would be in another place before I would finish that task.

4 PERFORMING A SEARCH

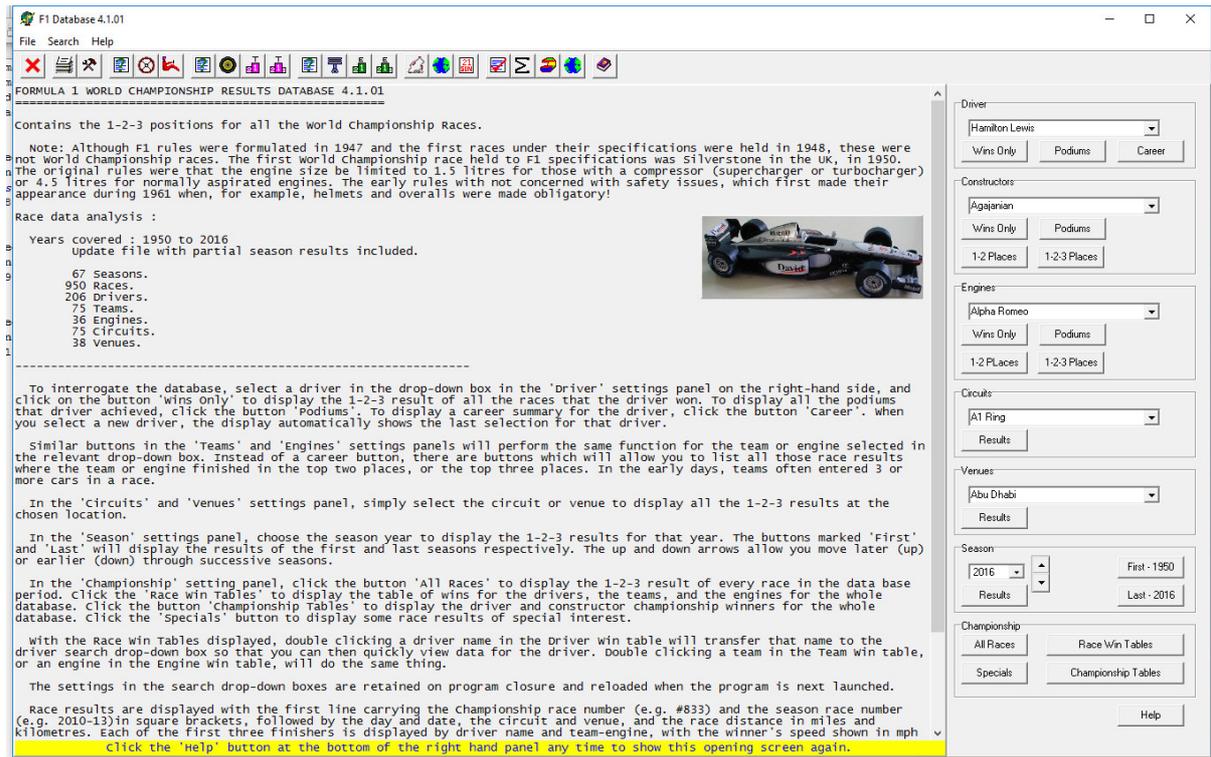
4.1 Introduction

When you first launch the application, after the usual “Splash Screen” which is shown whilst the data is set up, it displays a simple synopsis of the database. It tells you what seasons are covered, and whether an update file was detected. Refer to section 6 about the update file.

You can stop the splash screen from appearing by a setting in the preferences window, see section 5.

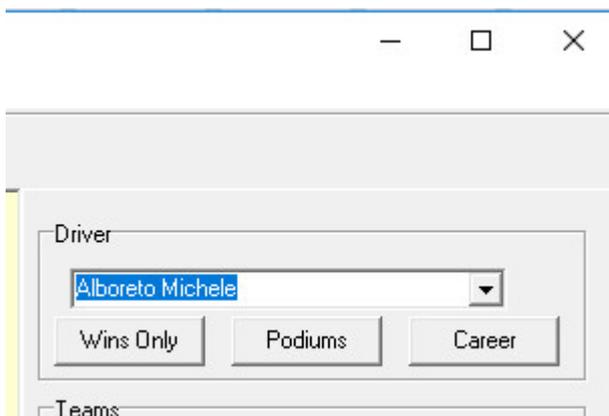
The main area contains the introduction screen shown below; at the top are some tool buttons which provide you with quick ways of performing actions, whilst on the right-hand side is a panel with the controls which allow you to select your search filters, and perform searches on them. You can review the opening introduction screen anytime by clicking the button marked “Help” at the bottom of this right-hand panel.

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4.2 Setting Driver Search Filters

Describing how to set a “Driver” filter, for example, really describes the way to set any filter. So to start, let’s say we want to look at driver “Lewis Hamilton”. The “Driver” filter section appears at the top of the right-hand panel:

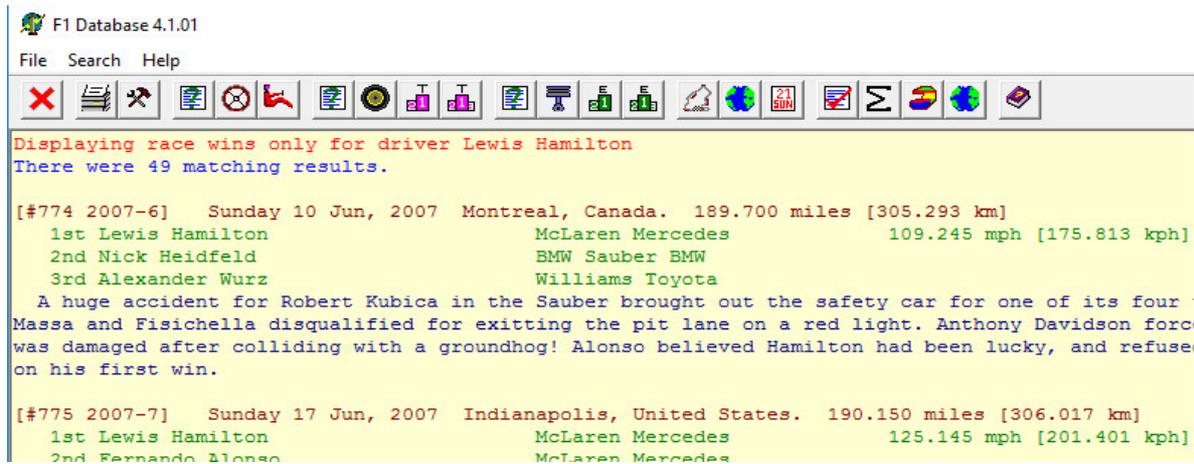


Note that in this case, the driver’s name appears as surname first. This is to help you find a driver to search for. The current name may or may not be highlighted. Click the small down arrow at the right hand end of the name box, and a small drop down list will appear with a few names in alphabetical order. If you now press

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the “h” key (case is not significant), the list now starts with those drivers whose surname begins with “H”. If necessary, scroll down the list until the driver name appears, then click on it.

You have set driver “Lewis Hamilton” as the search filter. The main display will automatically display the race wins for that driver. This is the same as selecting the driver by typing in his name, and clicking the button marked “Wins Only”, but you are better off using the selection method, as then name spelling errors won’t occur.



The colour of your display may be different to the screen grab shown. Colours are set using the “Preferences” screen, as described in section 5.

Now try clicking the three buttons in this “Driver” section. The button marked “Podiums” will list all the races for which the named driver was on the podium, i.e. finished in first, second or third places, whilst the button marked “Career” will give a career summary for the driver. “Wins Only” will again list the default result of only those races which the named driver won.

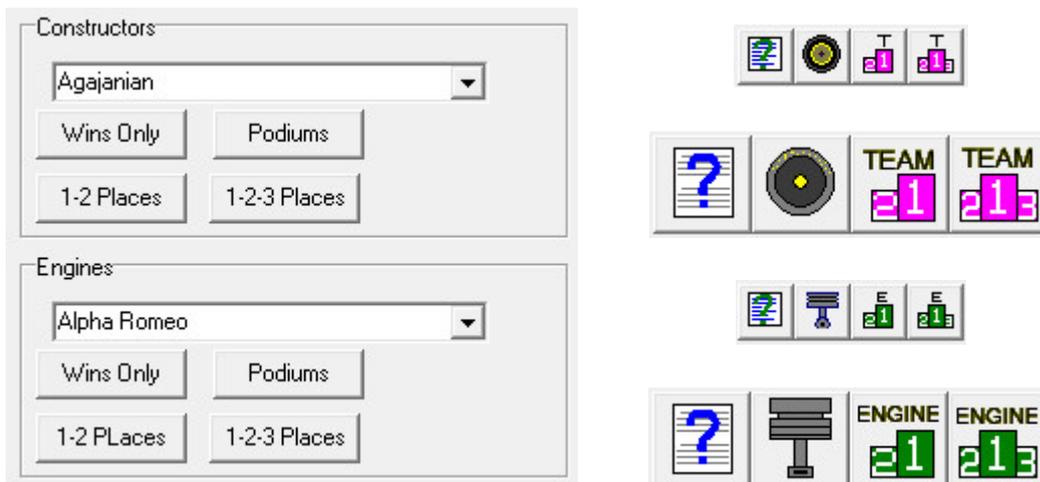


The three buttons can also be actioned by clicking the appropriate tool button shown above.

Please note that the “Career” option only lists the first occurrence of a podium place, and the constructors the driver drove for when he achieved a podium finish, and not the first time he actually drove for a team. And if he never achieved a podium finish for a team, the list of teams will not include it.

4.3 Setting Constructor and Engine Search Filters

The method of choosing a constructor or engine is similar to that for the driver. Clicking the down arrow at the right hand end of the name box displays a list which can be scrolled, or moved to by pressing the first letter of the constructor or engine name, and the desired one chosen by clicking on it. The simplest way to understand it is to try it.



Constructors and engines have similar buttons to the driver, marked “Wins Only” and “Podiums”, which perform similar functions for the constructor or engine. But they also have two additional buttons instead of the “Career” button. The button marked “1-2 Places” will list those races where the constructor or engine finished in the first two places, and the button marked “1-2-3 Places” where they finished in all three places. You won’t get many recent results for the latter, since the times when constructors could enter more than two cars in a race have long gone.

4.4 Circuit and Venue Searches

The screenshot shows two search panels. The top panel, titled 'Circuits', has a dropdown menu with 'A1 Ring' selected and a 'Results' button below it. To the right of this panel are two small icons: a red and white checkered flag and a globe. The bottom panel, titled 'Venues', has a dropdown menu with 'Abu Dhabi' selected and a 'Results' button below it. To the right of this panel are two small icons: a green and white track layout and a globe.

These filters are set in the same way you are becoming accustomed to. In this case, selecting a name, or clicking the button marked “Results”, lists the races for that circuit or venue.

4.4 Season Searches

These filters are slightly different, but their function should be fairly obvious.

The screenshot shows a search panel titled 'Season'. It features a dropdown menu with '2016' selected, two arrow buttons (up and down) to its right, and a 'Results' button below the dropdown. To the right of the dropdown are two buttons: 'First - 1950' and 'Last - 2016'. To the right of the entire panel are two small calendar icons: one showing '21 SUN' and another showing '21 Sun'.

The box shows a box in the top left corner that displays the last season in the database for which results are available. Next to it are two buttons that index this season year forwards (the up arrow moves later) or backwards (the down arrow moves earlier). Clicking either arrow displays the full season results for the season year that appears in the filter box. The years will not advance beyond the latest season year in the database, nor earlier than the first year (1950). The button marked “Results” performs the same thing, by displaying all the results for the selected year.

The two additional buttons are really self-explanatory, but anyway, here goes. Clicking the button marked “First – 1950” will display the race results for the first season in the database, i.e. 1950.

Clicking the button marked “Last -2016” will display the race results for the last season in the database. As the database is updated, this second button label will automatically reflect the last year.

4.5 Championship Searches

The final section of controls in the right-hand panel is marked “Championship” and contains four buttons.



The button marked “All Races” will list all the races in the database, from the first one in 1950 to the last. As of the 2016 Singapore race, this is no less than 950 race results. This is a lot of data manipulation, and depending on the speed of your computer, may take a while (but in the order of a few seconds, not minutes!) to complete.

The button marked “Specials” lists those races which may be termed to be significant for the Formula One World Championship. These include: longest, fastest, shortest, slowest, plus a few others. These do not take into account races included in an updater file.

The button marked “Race Win Tables” will display three lists, or tables. The left-hand list is the Driver’s Wins, with the driver with the most at the top. Currently, this is Michael Schumacher with 91 wins, a record I think is unlikely to be matched. The list is ordered by wins, but where drivers have the same number of wins, it is further ordered by second places, then thirds. The middle list is the wins by constructors, and the right hand list is those by engines.

These lists include all the races in the database, including those contained in any update file (see section 6).

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Although the update file can give you race data for the current season, the championship data will only be available for completed seasons.

In the latter case, though, the right-hand list is in fact, two lists, and show the counts of championship wins for both drivers and constructors.

Driver win List

1	Michael Schumacher	91
2	Alain Prost	51
3	Lewis Hamilton	49
4	Sebastian Vettel	42
5	Ayrton Senna	41
6	Fernando Alonso	32
7	Nigel Mansell	31
8	Jackie Stewart	27
9	Niki Lauda	25
10	Jim Clark	25
11	Nelson Piquet	23
12	Juan Manuel Fangio	22 (+ 2 shared)
13	Nico Rosberg	22
14	Damon Hill	22
15	Kimi Raikkonen	20
16	Mika Hakkinen	20
17	Stirling Moss	15 (+ 1 shared)
18	Jenson Button	15
19	Graham Hill	14
20	Emerson Fittipaldi	14
21	Jack Brabham	14
22	David Coulthard	13
23	Alberto Ascari	13
24	Carlos Reutemann	12
25	Alan Jones	12
26	Mario Andretti	12
27	Rubens Barrichello	11
28	Felipe Massa	11
29	Jacques Villeneuve	11
30	Sebastian Vettel	10

Constructor win List

1	Ferrari	219
2	McLaren	183
3	Williams	114
4	Lotus	81
5	Red Bull Racing	51
6	Mercedes	49
7	Renault	35
8	Brabham	35
9	Benetton	27
10	Tyrell	23
11	BRM	17
12	Cooper	16
13	Alpha Romeo	16
14	Vanwall	9
15	Mercedes Benz	9
16	Matra	9
17	Maserati	9
18	Brawn	8
19	Ligier	7
20	Lancia	5
21	Jordan	4
22	wolf	3
23	March	3
24	Honda	3
25	Talbot Ligier	2
26	John Zink	2
27	Fuel Injection	2
28	Belond Exhaust	2
29	wynns Friction Proof	1
30	Force India	1

Engine win List

1	Ferrari	225
2	Ford	176
3	Renault	168
4	Mercedes	136
5	Honda	75
6	Climax	40
7	Porsche	26
8	BMW	20
9	BRM	18
10	Alpha Romeo	12
11	Offenhauser	11
12	Maserati	11
13	vanwall	9
14	Mercedes Benz	9
15	Recco	8
16	Matra	3
17	Westlake	1
18	TAG Heuer	1
19	Mugen-Honda	1

Driver	Championships	wins	Races	Pts	Constructor	Championships	wins	Races	Pts	Championship Success	
2015	Lewis Hamilton	10	19	381	2015	Mercedes-Mercedes	16	19	703	Driver	
2014	Lewis Hamilton	11	19	384	2014	Mercedes-Mercedes	16	19	701	Michael Schumacher	7
2013	Sebastian Vettel	13	19	397	2013	Red Bull Racing-Renau	13	19	596	Juan Manuel Fangio	5
2012	Sebastian Vettel	5	20	281	2012	Red Bull Racing-Renau	7	20	460	Sebastian Vettel	4
2011	Sebastian Vettel	11	19	392	2011	Red Bull Racing-Renau	12	19	650	Alain Prost	4
2010	Sebastian Vettel	5	19	256	2010	Red Bull Racing-Renau	9	19	498	Niki Lauda	3
2009	Jenson Button	6	17	95	2009	Brawn-Mercedes	8	17	172	Nelson Piquet	3
2008	Lewis Hamilton	5	18	98	2008	Ferrari	8	18	172	Lewis Hamilton	2
2007	Kimi Raikkonen	6	18	110	2007	Ferrari	9	18	204	Jackie Stewart	3
2006	Fernando Alonso	7	18	134	2006	Renault	8	18	206	Jack Brabham	3
2005	Fernando Alonso	7	19	133	2005	Renault	8	19	191	Ayrton Senna	3
2004	Michael Schumacher	13	18	148	2004	Ferrari	8	18	262	Mika Hakkinen	2
2003	Michael Schumacher	6	16	93	2003	Ferrari	8	16	158	Jim Clark	2
2002	Michael Schumacher	11	17	144	2002	Ferrari	15	17	221	Graham Hill	2
2001	Michael Schumacher	9	17	123	2001	Ferrari	9	17	179	Fernando Alonso	2
2000	Michael Schumacher	9	17	108	2000	Ferrari	10	17	170	Emerson Fittipaldi	2
1999	Mika Hakkinen	3	16	76	1999	Ferrari	6	16	128	Alberto Ascari	2
1998	Mika Hakkinen	8	16	100	1998	McLaren-Mercedes	9	16	156	Phil Hill	1
1997	Jacques Villeneuve	7	17	81	1997	Williams-Renault	8	17	123		

Note that the colours may be different when you first launch, and can be changed using the Preferences option, described in section 5.

5 **SETTING PROGRAM AND SEARCH PREFERENCES**

5.1 Introduction

You can access the screen on which you can make program and search preferences by any one of three methods:

- Choosing the menu system options “File” > “Preferences”
- The keyboard shortcut “Ctrl-T”
- The tool buttons:



Note that which of these tool buttons that appears in the window is due to a setting in “Preferences” (see section 5) and the initial launch defaults to the smaller image.

The screen which opens is displayed on the following page. The various options are checked according to the last settings you made on this screen, so may be slightly different when you open the window.

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Each section of the window is a group of options associated with similar things, and each will be described in turn.

Header & Footer Data

- Show Day of Week
- Show Venue
- Show Circuit
- Show Race Comment

Drivers & Engines

- Show Winning Driver(s)
- Show Second Place Driver(s)
- Show Third Place Drivers
- Show Car Engines

Race Distance

- In Miles
- In Kilometres
- Both miles and kilometres
- Do not display Race Distance

Winning Race Speed

- In Miles Per Hour
- In Kilometres per Hour
- Both MPH and KPH
- Do not display Race Speed

Colours (if check box checked in "Program" panel)

- Search Results Window
- Driver Win List Window
- Team Win List Window
- Engine Win List Window
- Driver Championship Window
- Team Championship Window
- Engine Championship Window

Program

- Large Tool Buttons
- Small Tool Buttons
- Coloured Text
- Show Opening Splash Screen
 - Font Courier New 10pt
 - Font Arial 10pt

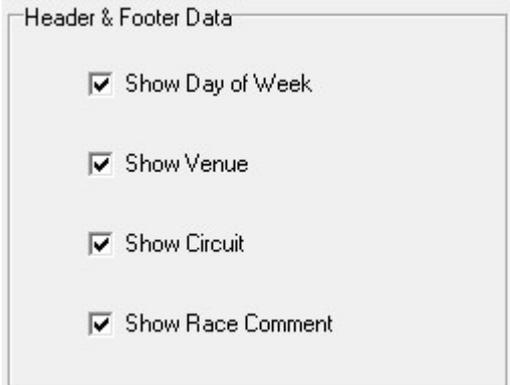
R

G

B

Buttons: Cancel, Save & Close, Help

5.2 Header & Footer Data



Header & Footer Data

- Show Day of Week
- Show Venue
- Show Circuit
- Show Race Comment

This section refers to the race data displayed following a search request. There are four options. If checked, the relevant option will be active, if unchecked, it will not be.

5.2.1 Show Day of Week.

If checked, then the day of the week will be included in the race result header, if unchecked, it won't be. So far, every race has always been undertaken on a Sunday, so including this data may be considered rather superfluous.

5.2.2 Show Venue

In case you don't want the venue to be included in the result data, this option provides the ability to include it (checked) or exclude it (unchecked).

5.2.3 Show Circuit

As with the venue, this is for you to decide whether you want to include it (checked) or not (unchecked).

5.2.4 Show Race Comment

This option will either display a race comment (checked, and if there is one) or not (unchecked).

5.3 Drivers & Engines



Drivers & Engines

- Show Winning Driver(s)
- Show Second Place Driver(s)
- Show Third Place Drivers
- Show Car Engines

This section gives some options for the race result display for the three podium positions.

5.3.1 Show Winning Driver(s)

If checked, which presumably will be the usual selection, the winning driver(s) will be displayed, if unchecked he (or they, and maybe one day, she) won't be. The plural is because some early drives were shared by two or even three drivers.

5.3.2 Show Second Place Driver(s)

This option, when checked, will show the second placed driver(s), or if unchecked, will not.

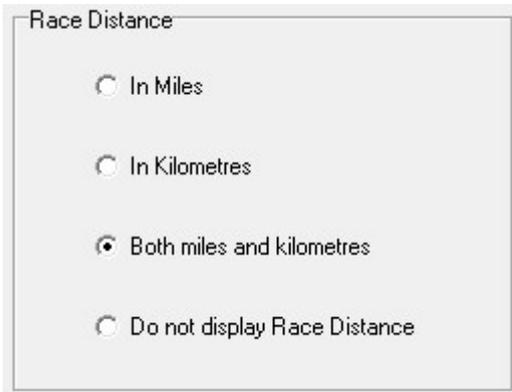
5.3.3 Show Third Place Driver(s)

This option, when checked, will show the third placed driver(s), or if unchecked, will not.

5.3.4 Show Car Engines

This option, when checked, will show the constructor name followed by the engine name (if different). If unchecked, only the constructor name will be displayed.

5.4 Race Distance



Race Distance

- In Miles
- In Kilometres
- Both miles and kilometres
- Do not display Race Distance

This section is where you can choose how to display the race distance units. The four choices are all mutually exclusive; selecting one will deselect the others.

5.4.1 In Miles

If checked, the race distance will be displayed in miles.

5.4.2 In Kilometres

If checked, the race distance will be displayed in kilometres.

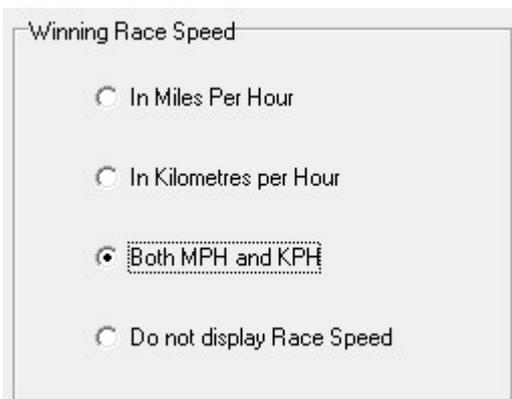
5.4.3 Both Miles and Kilometres

If checked, the race distance will be displayed in miles followed by the distance in kilometres in square brackets.

5.4.4 Do not display Race Distance

If checked, the race distance will not be displayed in the race header.

5.5 Winning Race Speed



Winning Race Speed

- In Miles Per Hour
- In Kilometres per Hour
- Both MPH and KPH
- Do not display Race Speed

These options are very similar to those provided for the Race Distance, and determine how the race speed is displayed.

5.5.1 In Miles Per Hour

If checked, the race winning speed will be displayed in miles per hour.

5.5.2 In Kilometres per Hour

If checked, the race winning speed will be displayed in kilometres per hour.

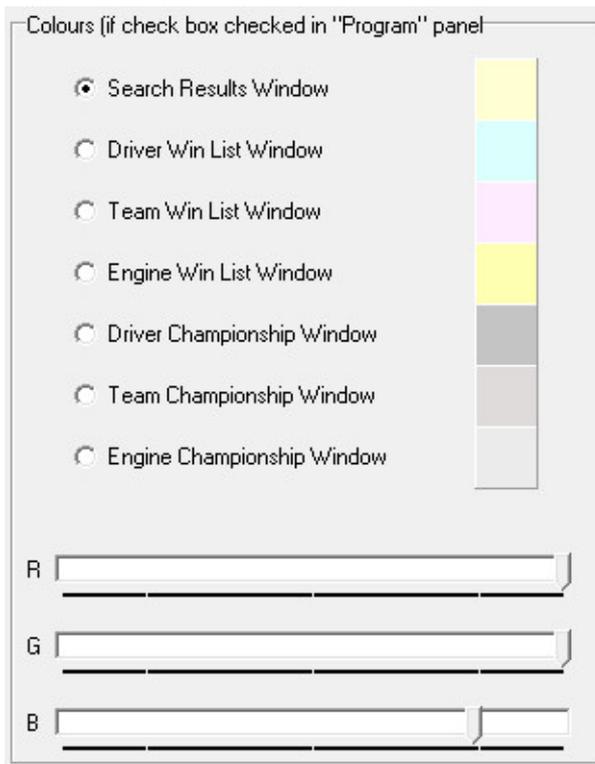
5.5.3 Both MPH and KPH

If checked, the race winning speed will be displayed in miles per hour followed by the winning speed in kilometres per hour in square brackets.

5.5.4 Do not display Race Speed

If checked, the race winning speed will not be displayed in the race line for the winning driver.

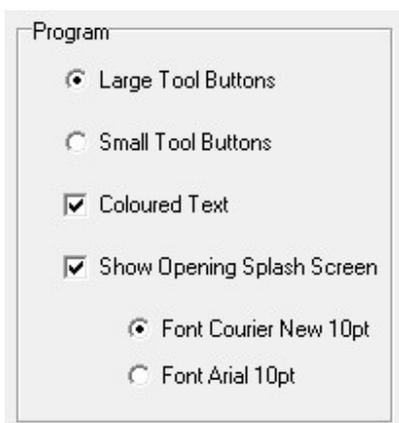
5.6 Colours [if check box checked in “Program” panel]



This box allows you to change the colours used by the application when you display result data, or tables of wins. There are seven buttons you can select, from “Search Results Window” to “Engine Championship Window”. Selecting one automatically de-selects any other, and then the colour for that selection can be adjusted using the red, green and blue sliders at the bottom of the section. The colour is displayed in the small panel alongside the selection.

None of these features can be selected unless the check box “Coloured Text” is checked in the next section.

5.7 Program



This section allows you to make some changes to the way the program itself behaves.

This section lets you choose whether to display the tool buttons Large (“Large Tool Buttons” selected), or Small (“Small Tool

Buttons” selected). Checking the box “Coloured Text” will cause the results to display in colour, and will make the colour adjustment controls in the previous section active. If the check box “Show Opening Splash Screen” is unchecked, then next time the application launches, the splash screen will not be displayed. The setting up of the data still has to be performed, so the application will seem to pause for a while until that is complete. The final two options are mutually exclusive, and determine the font used when printing. This can also be changed when you invoke a print.

5.8 Saving the Changes

When you first open this screen, the button marked “Save & Close” is inactive. You can “Cancel” the window using the button marked “Cancel”. But if you make any changes to any of the selections and options on this screen, the “Save & Close” button becomes active, so you can save your changes. Once you save, the “Save & Close” button again becomes inactive.

If you try and “Cancel” with the “Save & Close” button active, even if all you did was make a change and immediately change it back, then you will get a warning that you have unsaved changes on this screen. This is just to prevent you from inadvertently cancelling when you wanted to save the changes. The message is “Changes have been made and not saved. Close Preferences anyway and loose changes?” You then have two options: “yes” will close the screen and lose your changes, “No” will abort the cancel command, and you can then make more changes, or save them.

All the changes you made on this screen are immediately activated when you close it, and are stored so that next time you launch the application, these amended options will be used.

6 *UPDATER FILE*

6.1 Introduction

The application comes with the data for all completed seasons embedded within it. Data for a partially completed season can be obtained by downloading a file from my web-site “Software Page”:

www.grahamhague.com/softwaref1database.shtml

So during a season, and before it has been completed, regularly visit the site to download the updater file. The link is “Updater File” and attempts to download a file called “update.txt”; case is not significant. When the application is launched at any time, if it “sees” a file called “update.txt” in the same folder as the executable application was launched from, it will assume the file contains updating data, and will attempt to incorporate the data it contains into the database.

Because this file is a text file, and the browsers are clever enough to recognise it as such even when I gave it an arbitrary extension such as “F1D”, some browsers (Chrome is one) actually open the text in a browser window. I have not yet found a way to prevent this. So you will need to right-mouse-click on the window, and from

the drop down list that appears, select “Save As”. Now you can navigate to your F1 Database folder, and save the text file “update.txt” to it. The next time you launch the application, it will detect the file and use the data in it. If you have already downloaded an earlier updater file, allow the new one to overwrite it.

6.2 File Details

The application will expect the data to be in a very precise format, and if you load the downloaded file into some word processor or whatever and then save it, you may well screw it up. You can upload it to Notepad if you want to have a look at it, but even then, it’s best not to save it in case there are unintended changes. If you want to mess with this file, I give a detailed breakdown of how the data is constructed in section 6.3, but I would always recommend making a copy of the file before you mess with it. That said, you can always re-visit my site and download the file again.

The updater file should never exceed about 6KB in size, and should download on a reasonable connection in just a few seconds.

At the completion of every season, I will embed the update data into the executable. Therefore, at the end of the season, visit the web-page and download the new version of the executable application, over-writing the old one. Remember to delete the updater file “update.txt” from your folder at the same time, or it may confuse the application by carrying data which has been embedded.

6.3 Construction of Data

It is possible you may at some time in the future be no longer able to download an updater file from my web-site. In an attempt to prevent this ruining the validity of the F1 Database application, you can update it yourself. This is not as difficult as it might seem on the surface.

F1 DATABASE

The updater file is pure text, so do not modify it using anything other than a pure text editor such as Notepad.

The file is made up of three sections, but when updating only the current season, only the first will contain any data.

This first section contains the race result data for each race in the partially complete season as a single discreet line. Each of the 21 elements of data are separated by the “pipe” symbol : “|”, located (on my keyboard) at the bottom left corner, a shifted backslash. The 21 elements are:

1	Race date in the universal format <code>yyyymmdd</code> , so 27 th September, 2016 would appear as <code>20160927</code> . Note the month is “09” and not “9”.
2	Race Venue. This is the country in which the race took place
3	Race Circuit. This is the circuit at which the event was held.
4	Race distance in miles.
5	Winning Driver name, Christian name and surname.
6	2 nd Shared winning driver, these days usually empty
7	3 rd Shared winning driver, these days usually empty
8	Winning Constructor Name.
9	Winning Engine Name (even if like Mercedes or Ferrari, it is the same, it must be present)
10	The Race winning speed is calculated by entering the race time in hours, minutes and seconds.
11	Second placed Driver name, Christian name and surname.
12	2 nd Shared second placed driver, these days usually empty
13	3 rd Shared second placed driver, these days usually empty
14	Second placed Constructor Name.
15	Second placed Engine Name (even if like Mercedes or Ferrari, it is the same, it must be present)
16	Third placed Driver name, Christian name and surname.
17	2 nd Shared third placed driver, these days usually empty
18	3 rd Shared third placed driver, these days usually empty
19	Third placed Constructor Name.

20	Third placed Engine Name (even if like Mercedes or Ferrari, it is the same, it must be present)
21	Comment (optional)

I construct the update file by using an Excel spreadsheet to contain the race data lines, and a formula that takes that data and constructs the data line that needs to go into the update file, with the proper separators and empty fields. In this way, I can use copy-paste to transfer data from previous lines, very helpful with circuits, venues, drivers, constructors and engines.

Except for the last element, and all fields containing shared winning, second placed and third placed drivers, the other fields are mandatory, and are shown in red. Even an empty field such as for the shared drivers must exist in the file, though it will be empty. The units for the race distance MUST be miles in the data line, but for ease of obtaining the data which is usually metric, they must be entered on the spreadsheet as kilometres. The spreadsheet automatically converts the distance into miles, and uses the distance and time entered (in hours, minutes and seconds) to calculate the winning speed in miles per hour.

Perhaps the easiest way to see the data line is to view the file in Notepad. Or take a look at this line which was constructed by my Excel spreadsheet from data for the last race (at the time of writing) at Singapore on 18th September, 2016:

```
18/09/2016|Singapore|Marina Bay|191.897|Nico
Rosberg||Mercedes|Mercedes|99.415|Daniel
Ricciardo||Red Bull Racing|TAG Heuer|Lewis
Hamilton||Mercedes|Mercedes|Nico Rosberg led for
all the laps. Lewis Hamilton was never able to
challenge for the lead, after a mistake in
qualifying left him 3rd on the grid. He had to
withstand a spirited challenge from Kimi Raikkonen
for much of the race.
```

Things to note are the format of the date (dd/mm/yyyy in the update file, but entered in the spreadsheet as yyyymmdd), the fact that distance is in miles and speed in miles per hour though

distance must be entered in the spreadsheet as kilometers, and the “empty” fields after each driver’s name showing there were no shared drives. If Nico Rosberg had shared the drive with “Joe Bloggs”, for example, the data line would have started:

```
18/09/2016|Singapore|Marina Bay|191.897|Nico
Rosberg|Joe Bloggs||Mercedes|Mercedes|...
```

With only one empty field after the winning drivers’ names.

The updater file is only intended to carry race data for the incomplete season, however in case it is needed to extend over to more seasons, there are the other two sections already mentioned. These sections contain data for completed seasons, and are normally empty. The race data section is terminated by a specific separator, a line of three asterisks: “***”. The driver championship data follows this separator, and is ended by another separator, a line of three plus signs: “+++”. The Constructor championship data follows that separator. Both driver and constructor championship data lines are constructed in a different way, and are included in the Excel spreadsheet on additional pages.

The driver championship update lines are constructed as follows:

1	Season Year
2	Number of Races in Season
3	Winning Driver’s Name
4	Constructor-Engine Name
5	Number of Races Won by Driver
6	Number of Points obtained by Driver

All are in red because all fields are mandatory. Each of the six elements is separated by that pipe symbol, and a data line for 2015 season would have been:

The constructor championship lines are very similar:

1	Season Year
2	Number of Races in Season
3	Constructor-Engine Name
4	Number of Races Won by Constructor

5 Number of Points obtained by Constructor

Again, all are in red because all fields are mandatory. Each of the five elements is separated by that pipe symbol, and a data line for 2015 season would have been:

```
2015|19|Mercedes-Mercedes|16|703
```

A note about the “Constructor-Engine” name in both cases. These are not obtained by a drop-down box for constructor and one for engine. You construct the name yourself. I cannot remember why I did it this way, and may change it later.

```
All the previous race results for 2015 season
ending with...

29/11/2015|Abu Dhabi|Yas Marina|189.74|Nico
Rosberg||Mercedes|Mercedes|115.57|Lewis
Hamilton||Mercedes|Mercedes|Kimi Raikkonen||
Ferrari|Ferrari|
***
2015|19|Lewis Hamilton|Mercedes-Mercedes|10|381
+++
2015|19|Mercedes-Mercedes|16|703
```

If you can no longer download the updater from my site and have decided to maintain it yourself, note that the race data area, and the other two areas, can contain data for more than one season. So when a season has completed and you have added the last race data to the first section, add the driver championship data to the second section, and the constructor championship data to the third section. Within each section, the order must be calendar, so the first race of the next season must always start after the last race of the previous, and the championship data lines must always be consecutive.

These latter two sections would have appeared in a maintained update file that was including season 2015, for example, as shown above. The box shows a completed maintained file for a single season (2015), with the championship sections in this case

populated. The maintained file including completed seasons 2015 and 2016 might (and I mean, might) be as follows:

```
All the previous race results for 2015 and 2016
seasons ending with...
18/09/2016|Singapore|Marina Bay|191.897|Nico
Rosberg||Mercedes|Mercedes|99.415|Daniel
Ricciardo||Red Bull Racing|TAG Heuer|Lewis
Hamilton||Mercedes|Mercedes|Nico Rosberg led for
all the laps. Lewis Hamilton was never able to
challenge for the lead, after a mistake in
qualifying left him 3rd on the grid. He had to
withstand a spirited challenge from Kimi
Raikkonen for much of the race.
***
2015|19|Lewis Hamilton|Mercedes-Mercedes|10|381
2016|21|Nico Rosberg|Mercedes-Mercedes|10|410
+++
2015|19|Mercedes-Mercedes|16|703
2016|21|Mercedes-Mercedes|17|734
```

Note how the race, driver championship and constructor championship data are kept in the separate sections, separated by the separators. In each section, the data must be in chronological order. There must be no empty lines anywhere in the file; be especially careful about a line at the end of the data, the last line MUST be a data line, not the cursor on the next empty line.

6.4 The Excel Spreadsheet.

I constructed the spreadsheet to do two things. From the entered data, it constructed the data line in the precise format I need to paste it into the relevant procedure of my RAD project file. You need not be interested in that. The second thing was to create the line that was to be pasted into my update file, which is what you will want to know about. I have therefore altered the spreadsheet so it only does the latter, as a special file for you to download once and then use, whilst I could keep the original for my own use.

You can download the Excel spreadsheet from my web-page. The file is named "F1Update.xlsx". I think it unlikely I will update it very

often, but a version number will be shown in the download link, and in the file itself.

When entering the race data, copy and paste from previous entries wherever possible. Note that you enter the race time in hours, minutes and seconds, the formula in column H must be copied from the row above to calculate the Race Speed. The distance entered in column D must be in kilometres. The spreadsheet automatically converts the distance and speed to miles and miles per hour. You must also copy the formulae in columns T, U and V from the previous row for each new one.

The compiled data line appears in column X, coloured red to help you identify it. You will need to copy the formula from the row above to make it work for the new data line you have entered.

Entering new data for the Driver and Constructor Championship sections is done on the second and third pages of the spreadsheet respectively. Apart from that required to compile the data line, there are no formulae on these sheets. When complete, just copy down the compiled data line from the previous row, to display the new data line to be included in the relevant section of the updater file.

7 *PRINTING*

7.1 Introduction

Printing the results of a search or other interrogation of the database is pretty simple. It can be invoked in one of three ways:

- Selecting the menu option under “File” > “Print”
- The keyboard shortcut “Ctrl-P”
- The tool buttons:

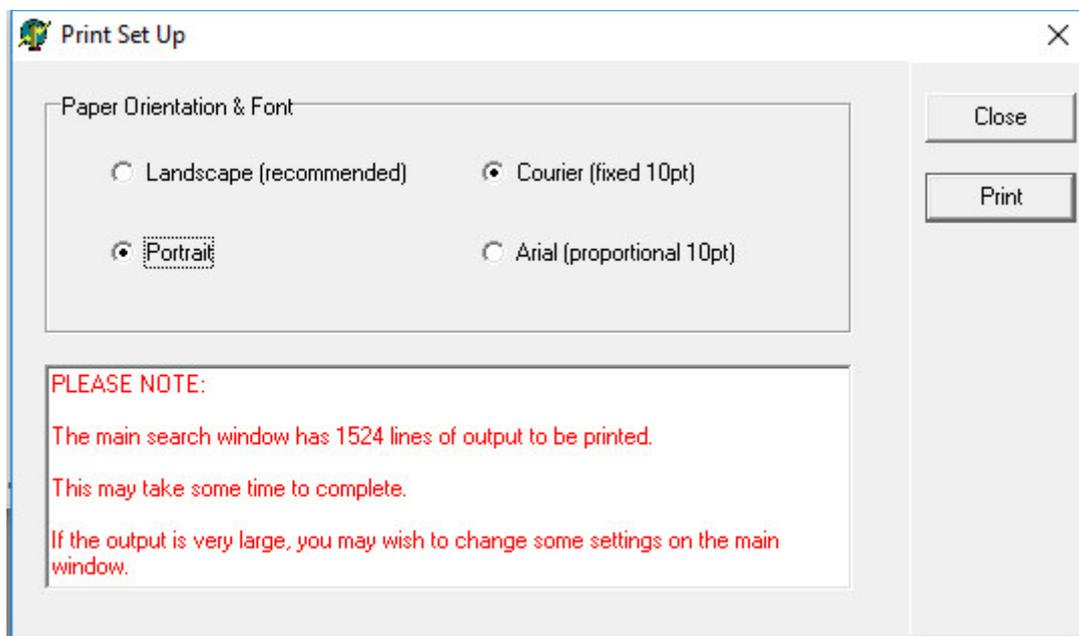


Note that which of these tool buttons that appears in the window is due to a setting in “Preferences” (see section 5) and the initial launch defaults to the smaller image.

The Print window that opens allows you to cancel the request by clicking the “Close” button. You can also select two options.

7.2 Page Orientation

The two controls on the left of the section marked “Page Orientation & Font” allows you to select either portrait or landscape. You should be able to guess how each one looks. But if you are printing the result of a search, you are recommended to use “Landscape”, as the data to print is less likely to scroll around the print lines.



7.3 Font

There are two fonts offered, which should be available on any PC. Courier is fixed at 10 pt size, and this means the character spacing is fixed. So sections of a line appear under the same sections of a previous line. Ariel, also at 10 pt, is a proportional font, so the character spacing is not equal, and this can cause different sections of a line to shift from where they appeared in a previous line. The best thing to do is try both, and then stick with what you like.

7.4 Large Output

On occasion, and as shown in the screen grab above, a small window opens with the print screen, with a message about the number of lines you intend to print. This is simply a warning in case you have inadvertently sent a large print request to the printer, and allows you to reconsider before proceeding. The warning doesn't appear if the number of lines to print is less than 200.

7.5 Print Button

Clicking this button prints the data. If you invoked Print from a search result window, the search result is printed. If you invoked it from the Tables window, or a Help window, then that data is printed.

7.6 Cancel Print

Although this option is provided, it is of little practical use. Printers these days have large memories, and large amounts of data can be sent to them very quickly, so trying to interrupt a print is usually impossible. That said, I shall experiment with ways of halting a print even under these circumstances, and if successful, will embody it on a future revision.

8 *HELP AND THE ABOUT WINDOW*

8.1 Help

There is some limited help available from within the application. It does not take the form of current “Compiled Help” screens, but I am working on compiling such a help method for the application. If I can get it to work, I will include the file as an additional download, and make links to the appropriate sections of it from within the application, in the normal, current manner.

The Help that is presently embedded in the application is simply a small window that opens with some help on it. Help screens stay open whilst you perform actions on the screen you were using when you invoked the Help, and close when you close that screen.

The contents of a help window can be printed.

8.2 About

The “About” window, accessed by clicking the “Help” main menu option, and then choosing the “About” menu option, will display the About screen. This contains the version number of the software, and a short history of its development.

F1 DATABASE

This window is the best one to use to check the version of the application you are using. The version is also displayed in the top header of the main form.



Close this About screen by clicking the small close gadget (X) in the top, right-hand corner of the title bar.

If you click on the image of the McLaren, you will open my web-site software page.

The image is a photograph I took of a model I own. There are some great Formula One pictures on the internet; I got hold of a

fabulous one of Lewis Hamilton crossing the line in his Mercedes with the chequered flag waving, but haven't been able to get permission to use it yet. Since I am giving the software away, I can hardly pay a fee for permission of use for an image.