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User Manual

1. Introduction

1.1 Purpose

The purpose of the system is to allow the easy management of multiple bookings and client information for a Heating Repair company.

It achieves this with the following features:

- Creation of Bookings
 - o Does not Allow Bookings to be created at the same time as other bookings.
- The storing and editing of Client Information
 - o Client Data can be searched edited and deleted using the user interface.
- The creation and sending of Invoices to clients who provide an email address.

1.2 Intended Audience

The intended audience for the system was Home Heat Gas Services – a gas and heating Repair Company. Although with minor changes to design (such as logos incorporated into the user interface) the system can easily be adapted for other companies that require the same system.

2. Installation

2.1 Prerequisites

2.1.1 Software

The system has been compiled to a windows executable (.exe) so no software prerequisites are needed before making use of the system.

2.1.1 Hardware Configuration

The following is required as a minimum to make use of every feature in the system:

- A keyboard and mouse for input
- A Visual Display Unit as output
- A Hard Disk Drive for file storage
- An Internet connection to carry out the emailing of Invoices
- A minimum of 512MB of main memory to carry out processing
- A Printer for printing Quotes and Invoices (if email is not an option).

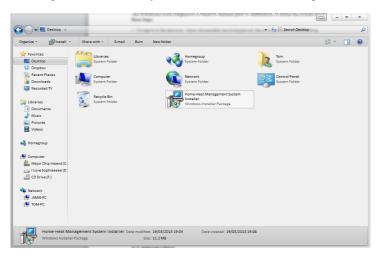
2.2 Operating System

The system was developed, tested and compiled solely on a Windows 7 64-Bit computer, this means that the default executable of the system will only run on a 64-Bit operating system. However a 32-Bit version will also be made in case the client does not have access to a 64-Bit machine.

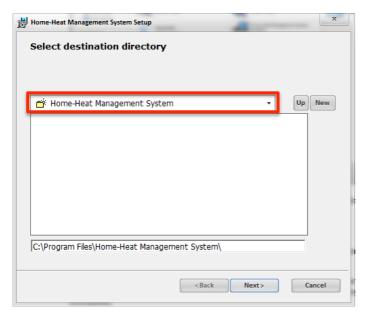
2.3 System Installation

The system has been compiled to a windows installer prior to distribution, to install the system follow these steps:

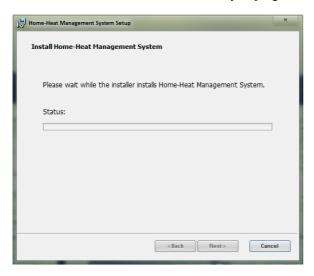
1. Navigate to the directory where the installer has been placed, this is case it was on the Desktop.



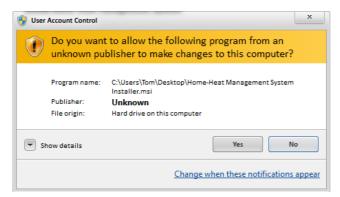
- 2. Double click with the left mouse button on the Installer to start the installation process.
- 3. Now choose a location to install the system using the drop down box highlighted in red below, I will be using the default location of "Program Files" for this demonstration.



4. Click on the "Next Button" when ready to progress the installation.



5. If a pop-up box appears asking for permission to install the system, click the "Yes" button.



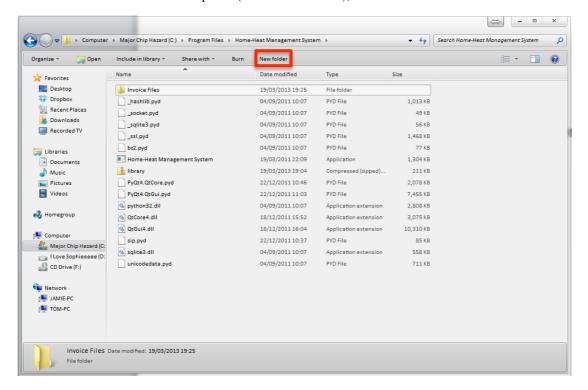
6. Click on the "Finish" button to close the installer.



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7. Navigate to the Directory where you installed the system in the previous steps and click the "New Folder" button in the Windows Explorer (see red box bellow), name this folder "Invoice Files".



8. If prompted for permission, click the "Continue" button.



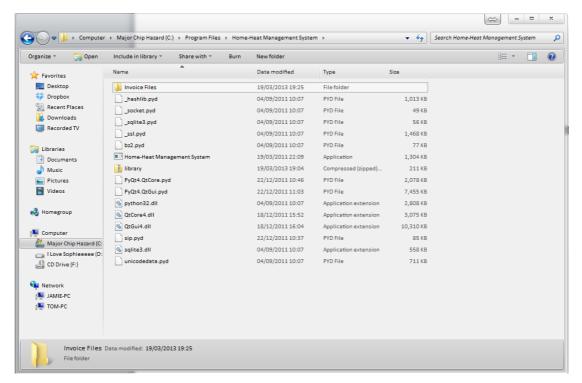
9. Installation Complete! See section "2.4 Running the System" for more information on running the newly installed system.

2.4 Running the System

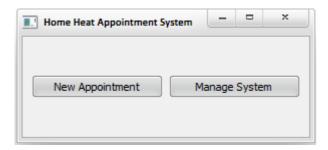
Once the system has been installed as shown in section "2.3 System Installation" it can be ran by doing the following:

(If the system has been installed in a different directory than above it will still be ran the same way and be fully functional as long as the folder "Invoice Files" is inside the same directory as the system executable)

1. Navigate to the Folder where the system has been installed.



- 2. Double click with the left mouse button on the Executable to start running the system.
- 3. The System will now load and be displayed on the screen once loading is complete.



4. The system is now running! It can now be used as needed and closed at any time by click the "X" button at the top right of the window.

3. Tutorial

3.1 Introduction

In section I will break down how to use each part of the system in the sections below, each sub-section will include one feature of the system explained with detailed text instructions and annotated diagrams to assist you in running the system to its full extent.

3.2 Assumptions

No assumptions of computer knowledge have been made when creating the system so no assumed knowledge is included in the following tutorials. The only assumption made in the following tutorials is that the system is already running, to find out how to run the system see section "2.4 Running the System".

3.3 Tutorial Questions

The Following sections will show you how to use each section of the system; they have been broken down into a Question and Answer format and can be referenced in the contents list below.

Contents:

Section Number	Question	Page Number
3.3.1	"How do I create a new Appointment?"	Error! Bookmark
		not
		defined.
3.3.2	"How do I Manage different areas of the System?"	Error!
		Bookmark
		not
		defined.
3.3.3	"How do I find a Client already in the database?"	Error!
		Bookmark
		not
		defined.
3.3.4	"How do I add a Client without creating a Booking?"	12
3.3.5	"How do I update a Clients details once they are already in the database?"	14
3.3.6	"How do I delete a client from the System?"	15
3.3.7	"How do I find an Appointment already in the database?"	17
3.3.8	"How do I add an Appointment without creating a Booking?"	19
3.3.9	"How do I update an Appointment details once they are already in the database?"	21
3.3.10	"How do I delete an Appointment from the System?"	22
3.3.11	"How do I find a Job already in the database?"	23
3.3.12	"How do I add a Job without creating a Booking?"	25
3.3.13	"How do I update a Job details once they are already in the database?"	27
3.3.14	"How do I delete a Job from the System?"	28
3.3.15	"How do I create an Invoice ready to be sent to a customer?"	30
3.3.16	"How do I send an Invoice to a customer?"	31

Tom Piggott Candidate Number: 0731

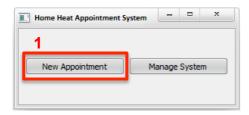
Centre Number: 22151

3.3.1 Creating a New Appointment

Question: "How do I create a new Appointment?"

Answer:

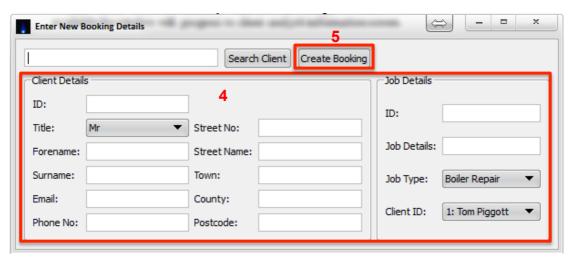
1. On the Main Menu click on the "New Appointment" button, the new booking screen will be displayed.



2. Choose a date from the calendar widget in the centre of the window and a time from the drop down box on the left of the window.



- 3. Click on the "Check Availability" button on the far right of window, if the time and date are available the window will progress to client and job information screen.
- 4. Enter the Client Information into the "Client Details" form on the left and the Job Information into the "Job Details" form on the right.



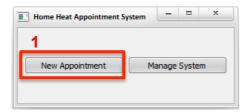
5. Click on the "Create Booking" button to finish!

3.3.2 Managing the System

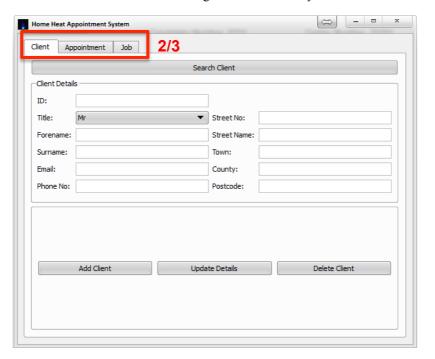
Question: "How do I manage different areas of the system?"

Answer:

1. On the Main Menu click on the "Manage System" button.



- 2. Here there are three Tabs; "Client", "Appointment" and "Job".
- 3. Click on the desired Tab to manage that area of the system.

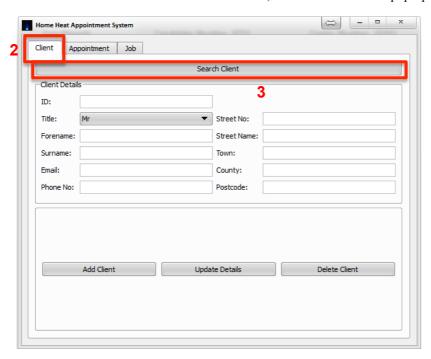


3.3.3 Searching for a Client

Question: "How do I find a client already in the database?"

Answer:

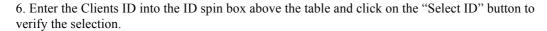
- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Click on the "Client" tab at the top of the window (It should be on this tab by default).
- 3. Click on the "Search" button under the Tabs, a search window will pop-up.

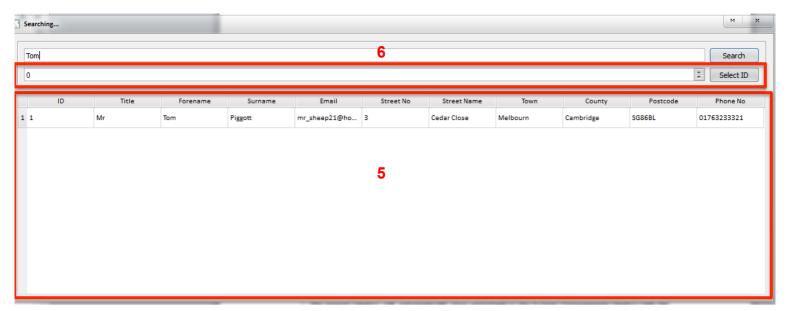


4. In the criteria input box input the Forename of the Client and click on the "Search" button to the left of the box to search the database.

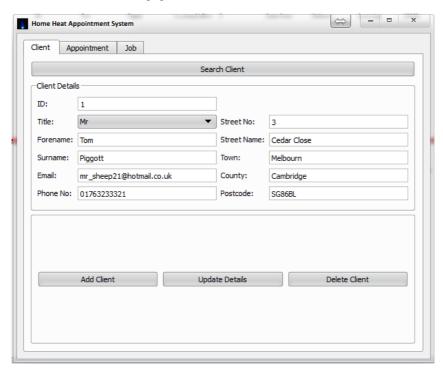


5. Results will appear in the table at the lower half of the window, look through these results to find the required Client and note their ID on the far left of the table (First column).





7. The Search window will automatically close and return to the System Management window with the Client information fields populated.

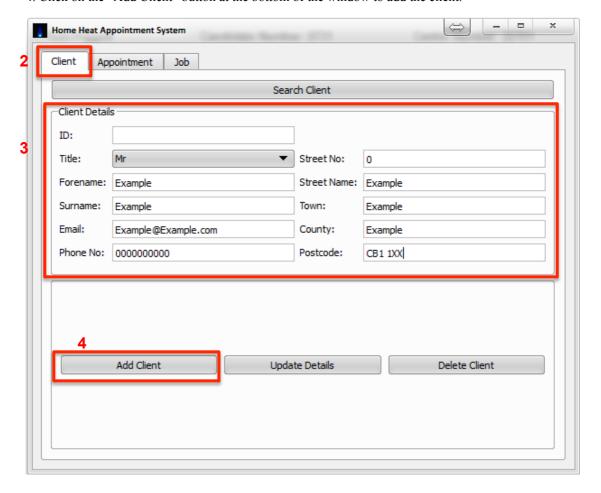


3.3.4 Adding a Client

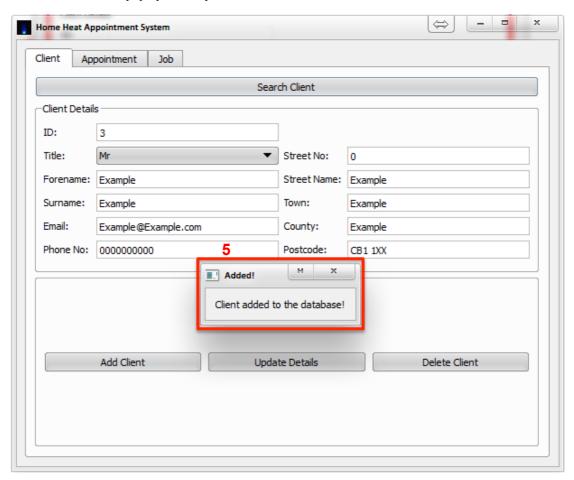
Question: "How do I add a Client without creating a Booking?"

Answer

- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Click on the "Client" tab at the top of the window (It should be on this tab by default).
- 3. Enter information for the Client into the "Client Details" input form.
- 4. Click on the "Add Client" button at the bottom of the window to add the client.



5. A notification will pop up to verify the Client has been added.

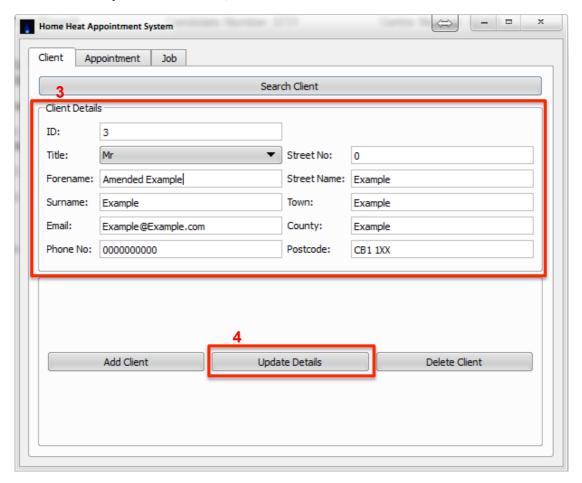


3.3.5 Amending a Client

Question: "How do I update a Clients details once they are already in the database?"

Answer

- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Follow the section "3.3 Searching for a Client" to find the required Client.
- 3. Change any information the needs updating in the "Client Details" input form.
- 4. Click on the "Update Details" button, the new information will be amended to the database.

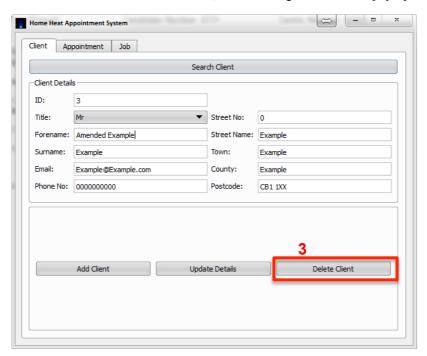


3.3.6 Deleting a Client

Question: "How do I delete a client from the System?"

Answer:

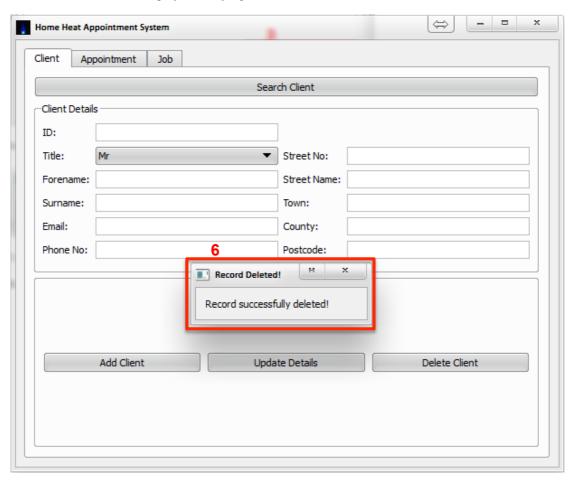
- *Deletion of a Client CANNOT be undone*
- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Follow the section "3.3 Searching for a Client" to find the required Client.
- 3. Click on the "Delete Client" button, second change window will pop-up.



4. Click on the "Yes" button to verify the deletion of the client, clicking "No" will cancel the deletion.



- 5. The pop-up window will automatically close and return to the "Manage System" window.
- 6. A notification will be displayed verifying the deletion of the client.

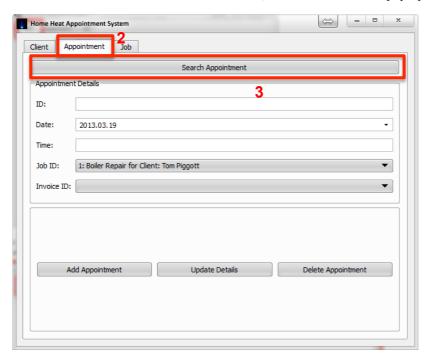


3.3.7 Searching for an Appointment

Question: "How do I find an Appointment already in the database?"

Answer:

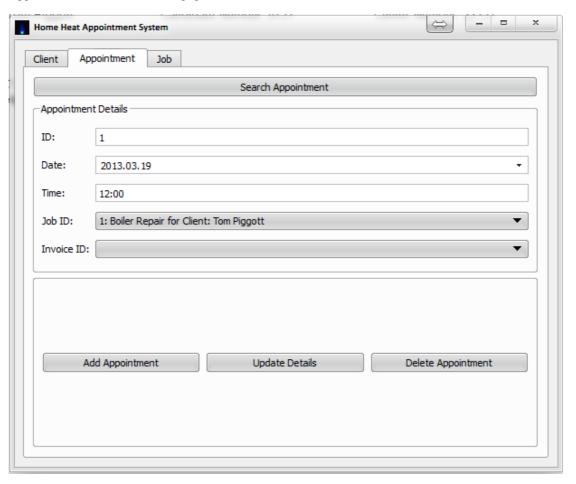
- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Click on the "Appointment" tab at the top of the window.
- 3. Click on the "Search" button under the Tabs, a search window will pop-up.



- 4. In the criteria input box input the Date of the Appointment in the format "YYYY/M/DD" and click on the "Search" button to the left of the box to search the database.
- 5. Results will appear in the table at the lower half of the window, look through these results to find the required Appointment and note their ID on the far left of the table (First column).
- 6. Enter the Appointments ID into the ID spin box above the table and click on the "Select ID" button to verify the selection.



7. The Search window will automatically close and return to the System Management window with the Appointment information fields populated.

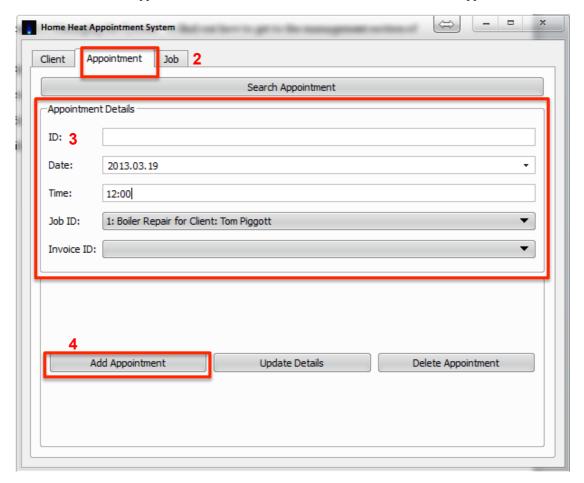


3.3.8 Adding an Appointment

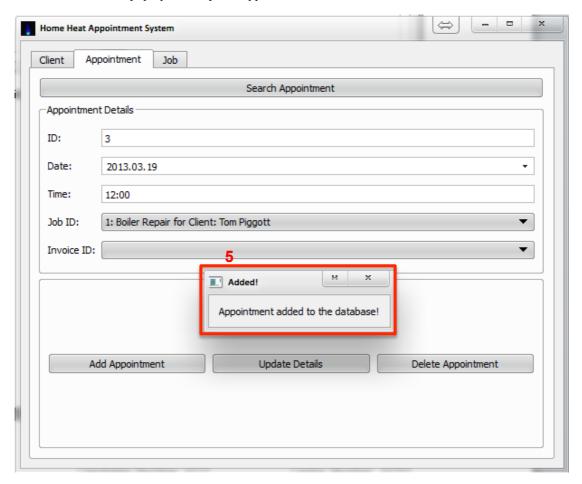
Question: "How do I add an Appointment without creating a Booking?"

Answer:

- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Click on the "Appointment" tab at the top of the window (It should be on this tab by default).
- 3. Enter information for the Appointment into the "Appointment Details" input form.
- 4. Click on the "Add Appointment" button at the bottom of the window to add the Appointment.



5. A notification will pop up to verify the Appointment has been added.

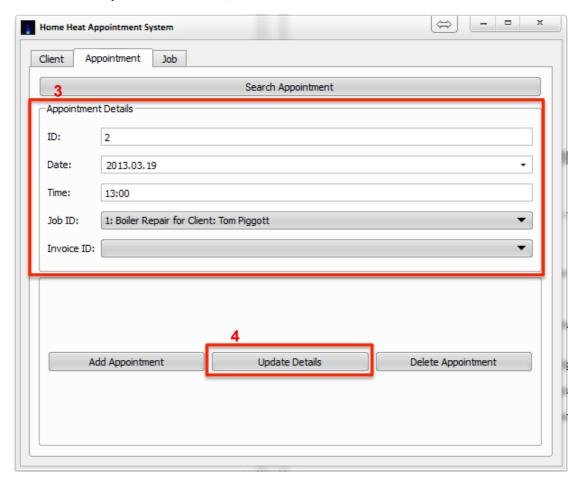


3.3.9 Amending an Appointment

Question: "How do I update an Appointment details once they are already in the database?"

Answer:

- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Follow the section "3.7 Searching for an Appointment" to find the required Appointment.
- 3. Change any information the needs updating in the "Appointment Details" input form.
- 4. Click on the "Update Details" button, the new information will be amended to the database.

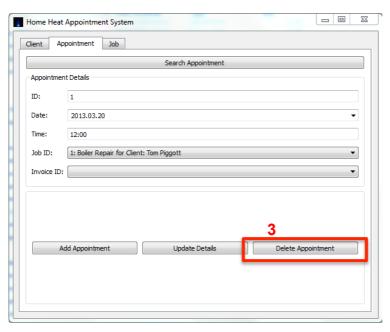


3.3.10 Deleting an Appointment

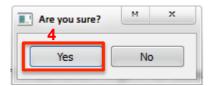
Question: "How do I delete an Appointment from the System?"

Answer:

- *Deletion of an Appointment CANNOT be undone*
- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Follow the section "3.7 Searching for an Appointment" to find the required Appointment.
- 3. Click on the "Delete Appointment" button, second change window will pop-up.



4. Click on the "Yes" button to verify the deletion of the appointment, clicking "No" will cancel the deletion.



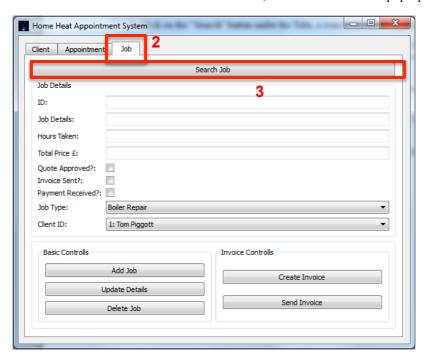
- 5. The pop-up window will automatically close and return to the "Manage System" window.
- 6. A notification will be displayed verifying the deletion of the appointment.

3.3.11 Searching for a Job

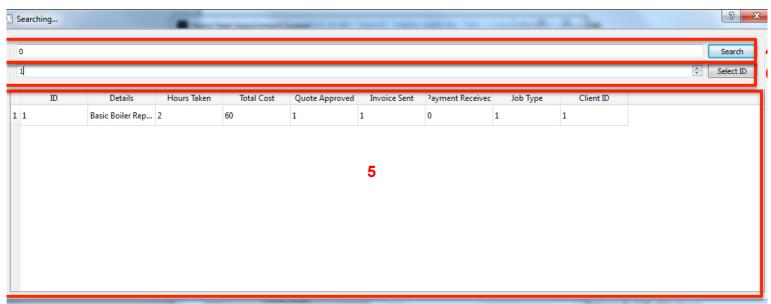
Question: "How do I find a Job already in the database?"

Answer:

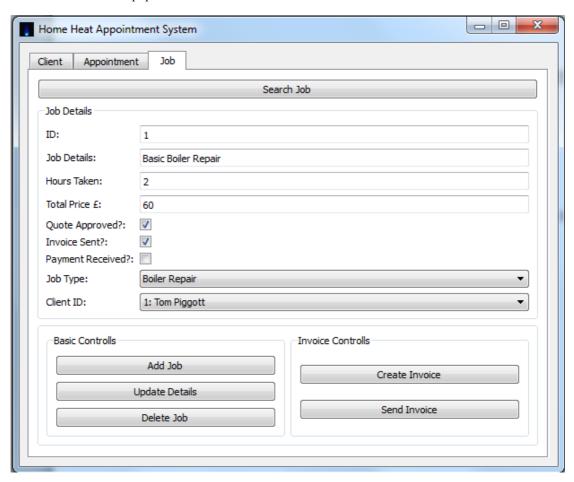
- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Click on the "Job" tab at the top of the window (It should be on this tab by default).
- 3. Click on the "Search" button under the Tabs, a search window will pop-up.



- 4. In the criteria input box input the Number 0 and click on the "Search" button to the left of the box to search the database, the number 0 indicates all of the jobs that do not have the "Paid" variable set to True.
- 5. Results will appear in the table at the lower half of the window, look through these results to find the required Job and note their ID on the far left of the table (First column).
- 6. Enter the Job ID into the ID spin box above the table and click on the "Select ID" button to verify the selection.



7. The Search window will automatically close and return to the System Management window with the Job information fields populated.

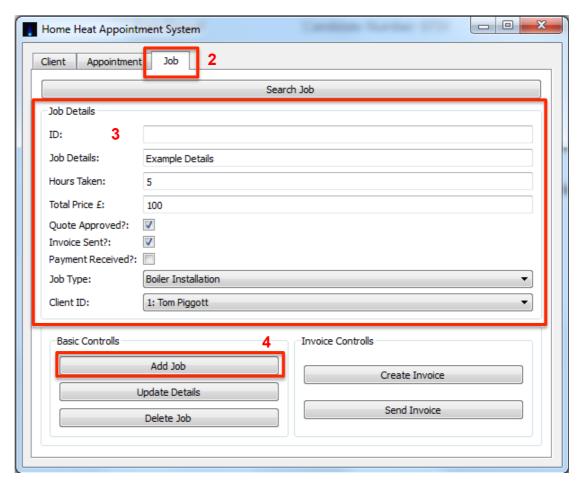


3.3.12 Adding a Job

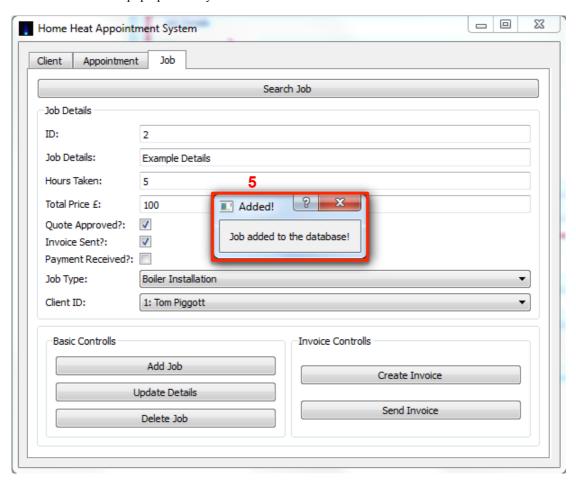
Question: "How do I add a Job without creating a Booking?"

Answer

- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Click on the "Job" tab at the top of the window (It should be on this tab by default).
- 3. Enter information for the Job into the "Job Details" input form.
- 4. Click on the "Add Job" button at the bottom of the window to add the Job.



5. A notification will pop up to verify the Job has been added.

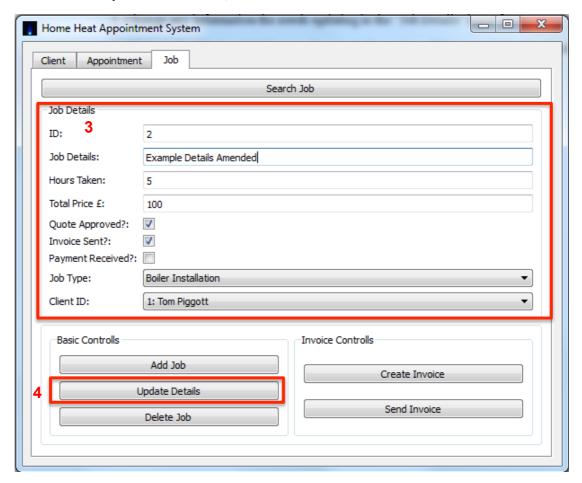


3.3.13 Amending a Job

Question: "How do I update a Job details once they are already in the database?"

Answer

- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Follow the section "3.11 Searching for a Client" to find the required Job.
- 3. Change any information the needs updating in the "Job Details" input form.
- 4. Click on the "Update Details" button, the new information will be amended to the database.



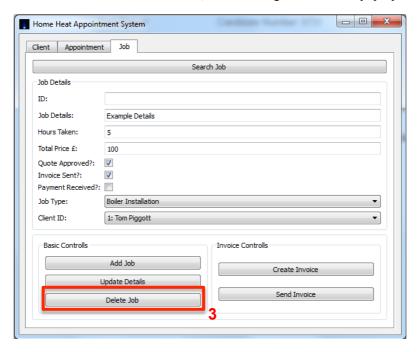
Centre Number: 22151

3.3.14 Deleting a Job

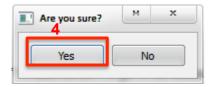
Question: "How do I delete a Job from the System?"

Answer:

- *Deletion of a Job CANNOT be undone*
- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Follow the section "3.11 Searching for a Job" to find the required Job.
- 3. Click on the "Delete Job" button, second change window will pop-up.

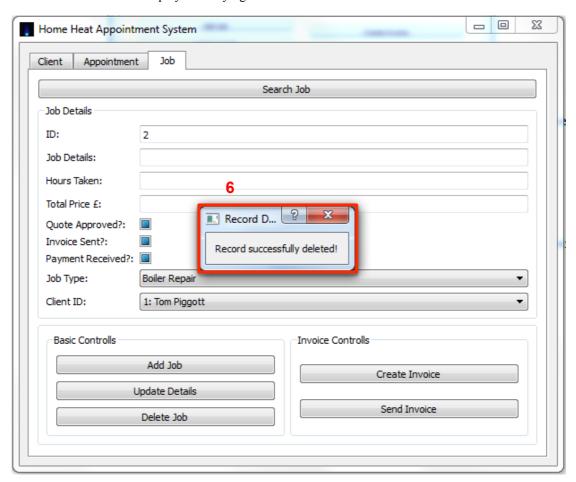


4. Click on the "Yes" button to verify the deletion of the Job, clicking "No" will cancel the deletion.



5. The pop-up window will automatically close and return to the "Manage System" window.

6. A notification will be displayed verifying the deletion of the Job.

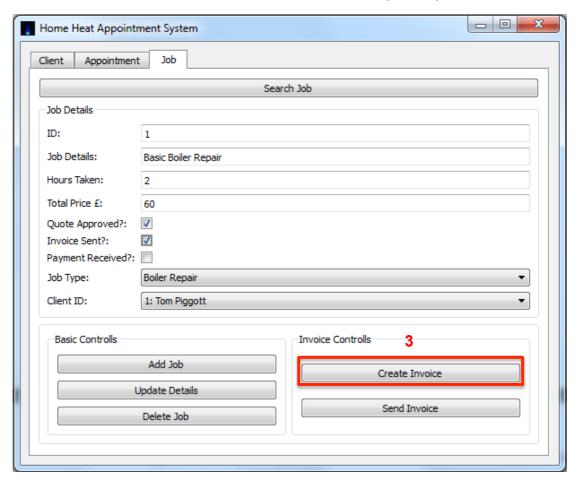


3.3.15 Create an Invoice

Question: "How do I create an Invoice ready to be sent to a customer?"

Answer:

- 1. Follow the section "3.2 Managing the System" to find out how to get to the management section of the system.
- 2. Follow the section "3.11 Searching for a Job" to find the required Job.
- 3. Click on the "Create Invoice" button to generate the invoice, no notification will be displayed but the file can be found in the "Invoice Files" folder inside the same directory of the system executable.

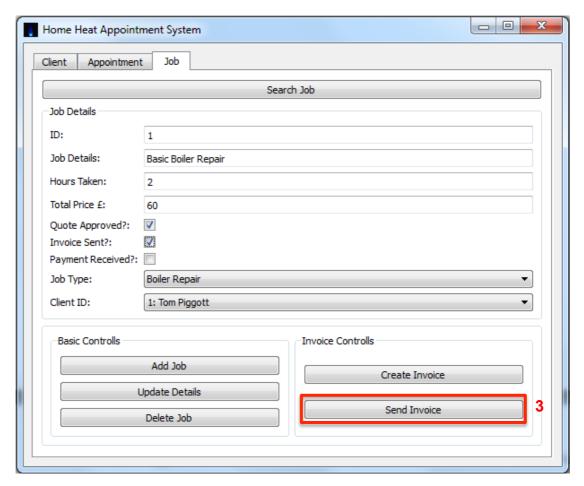


3.3.16 Sending an Invoice

Question: "How do I send an Invoice to a customer?"

Answer*:

- 1. Follow section "3.15 Generating an Invoice" to create the invoice.
- 2. Click on the "Send Invoice" button to send the Invoice to the Client.



^{*}Invoices can only be sent if an email address has been provided for the relevant Client.

3.2 Saving the System

All saving of files is done internally and handled completely by the system automatically; this includes the database used by the system and the generated invoice files, therefore no manual saving is required on the users behalf. This means that even with the program running all of the files should already be saved due to the database being saved after each use to avoid data loss from program crashes or other errors, although before backing up data it would always be best to close the program first to ensure all saves are made.

4. Errors

Certain sections of the system may raise an error in certain circumstances, each of these are described below with a tutorial on recovering from said error.

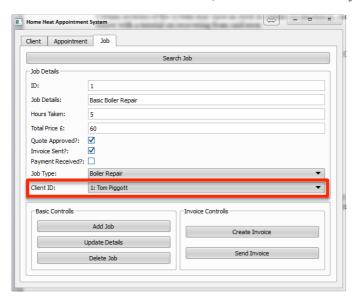
4.1 Sending Invoices

If a Client does not have an email address in their record inside the database then the email will fail to send but no error will be shown, this is due to how the system is compiled.

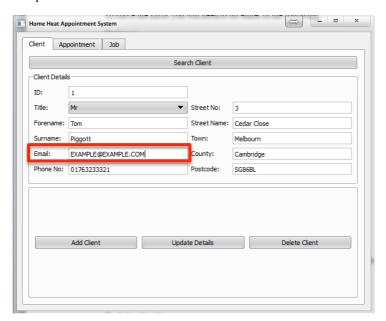
To solve the Error you will need to do either of the following:

Option 1:

1. Find which client the invoice is for, this can be found on the job tab.



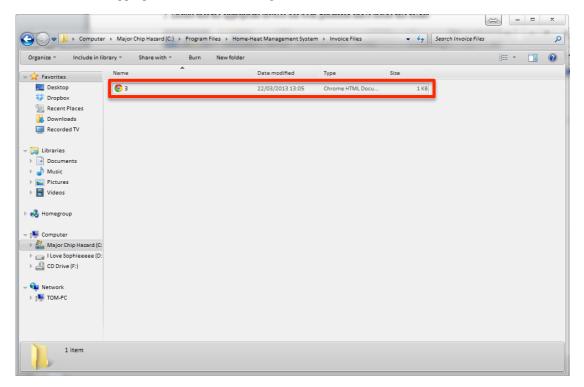
2. Open the client tab and load the needed client and enter their email address.



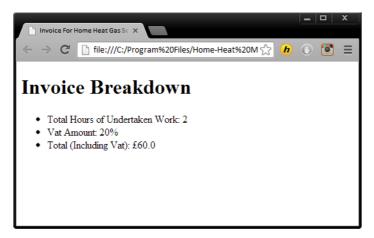
- 3. Amend the client and try to send the invoice again from the job tab.
- 4. The error should now be solved!

Option 2:

- 1. Navigate to the installation Directory of the system and open the folder named "Invoice Files"
- 2. Ensure that the appropriate invoice has been generated and is inside this folder.



3. Double Click the relevant invoice file to open it inside your computers default web browser.



- 4. Hold down the CTRL key on the keyboard and press P, this will pop-up a window to print the document.
- 5. Print the Invoice off and deliver it to the Client manually.

5. Limitations

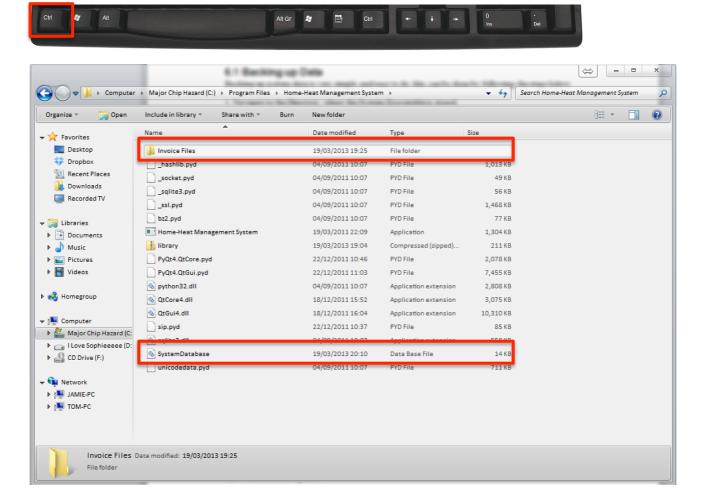
Currently the system does everything it was proposed to do in the design and analysis sections, although if a Client does not have an Email address then an invoice file would need to be printed manually by the User instead of emailing the Invoice.

6. System Recovery

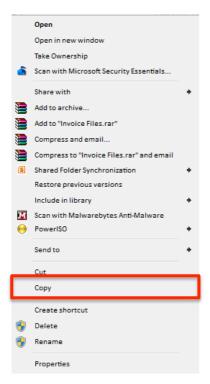
6.1 Backing up Data

Backing up system data is very simple and easy to do; this can be done by following the steps below:

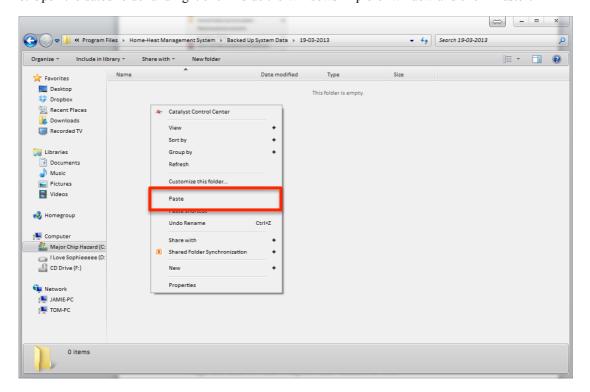
- 1. Navigate to the Directory where the System Executable is stored.
- 2. Now save changes you have made in the System and close it if it is running.
- 3. Hold down the "Ctrl" button on the keyboard and left click on the "Invoice Files" folder, now without letting go of the Ctrl button left click on the "SystemDatabase.db" file.



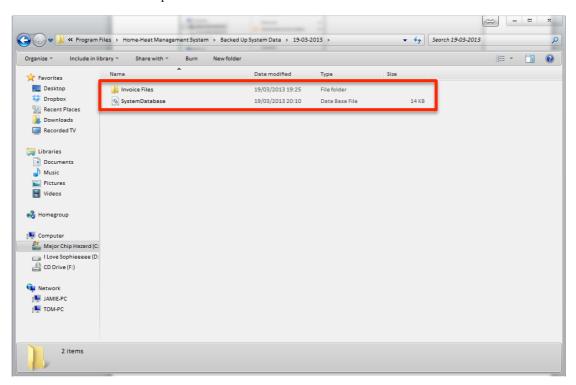
4. With both the folder and file selected right click on one of them and click "Copy".



- 5. *Optional* Navigate to a different Directory to save the Backed-Up too such as a different HDD or a USB stick.
- 6. Once you have chosen where you want to save the Data to create a new folder and name it "Backed Up System Data" or something similar so you know what is inside the folder.
- 7. Open the newly created folder and create another folder and name it todays date, for example I used "19-03-2013", this makes it a lot easier to know when backups were taken.
- 8. Open the dated folder and right click inside the Windows Explorer window and click "Paste".



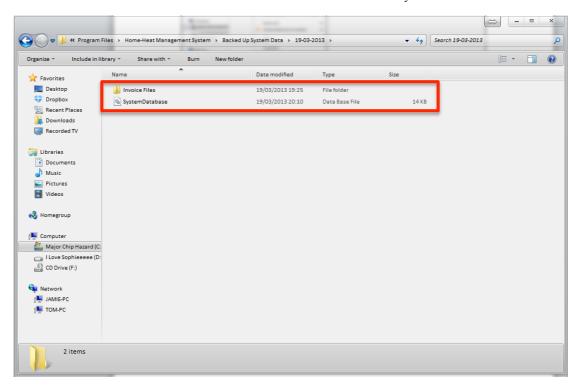
9. The data is now backed up and can be restored if needed!



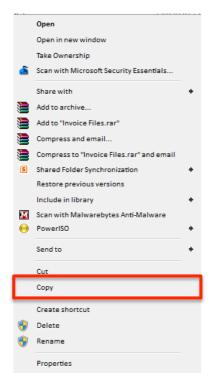
6.2 Restoring Data

In the event of data needing to be restored you must do the following:

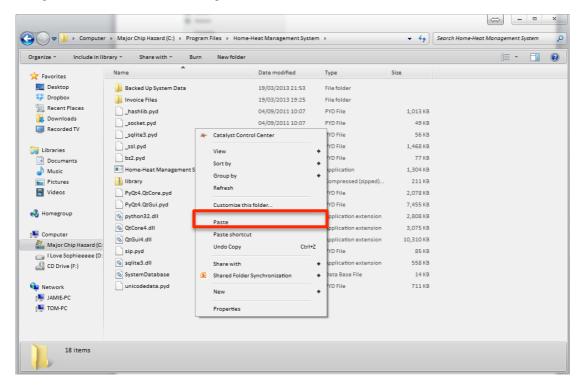
- 1. Navigate to the Directory where backups were stored in section "5.1 Backing up Data".
- 2. Open the desired dated Back-Up folder.
- 3. Hold down "Ctrl" and select both the "Invoice Files" folder and the "SystemDatabase.db" file.



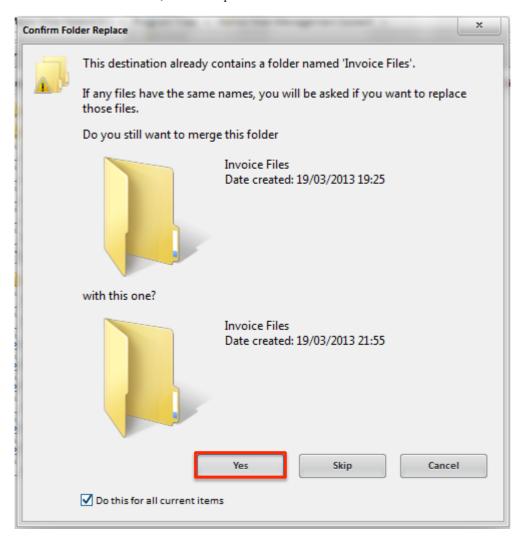
4. Right click one of them and click on "Copy"



- 5. Navigate to the Directory of the installed System.
- 6. Right click inside the Windows Explorer window and click on "Paste".



7. When prompted check the "Do this for all current items" tick box at the bottom of the window and then click the "Yes" button, this will replace all of the new files with the new ones.



8. Back-Up complete! The system will now use the replaced files instead of the old ones.