# Program information

## How the program fits together

The program is laid out into three main modules with two side ones. The first main module is the patient module which is split into six procedures AddPatient, ListPatients, EditPatient, RemovePatient, ViewPatient and PatientScreen. The last of those procedures is a the patient screen that links to the other procedures. The first five of these procedures are called the functional procedures because they perform all the functions needed for the patient module such as adding patients, editing patients, listing all registered patients, viewing patients and removing patients.

The second main module is the doctor module which consists of three procedures. The first two procedures are the AddDoctor and EditDoctor which are the functional procedures allowing the user to create and edit doctors. The third procedure is the GP screen and serves as a link between the main menu and the functional procedures.

The third main module is the appointment module and consists of three procedures. The first two are AddAppointment and ViewAppointment and are the functional procedures for this module, they allow appointments to be created and viewed. The third procedure is the appointment screen and servers as a link between the main menu and the functional procedures.

The fourth module is the print daily appointment list module and is a sort of extension to the appointment module and servers to print out a list of all currently booked appointments.

The fifth module is the admin module and simply serves to provide a couple of functions that automate processes necessary for cleaning the program up.

A main menu procedure provides links to the five different modules and is what initially loads up after the splash screen.

## Variables

### Integers:

* Choice: This variable is used in various menus to see what the user wants to do
* ID: This variable is used to assign and track what Ids have been used by which patients
* Counter and Counter2: These variables are used as counters in various parts of the program in order to keep track of what the program has already done.
* Index: This is used with a T String List to allow deletion of specific terms from a file
* KeyInteger: This variable stores what key a user has pressed as an integer for use in a case

### Texts:

* PatientFile: This file is used to store patient details
* IDFile: This file stores what ID was last used
* FilenameFile: This file stores the filenames of the patients registered in the system
* DoctorFile: This file stores the details of the doctors in the system
* AvApps: This file stores what appointment times are still available
* Appointment: This file stores the details of an appointment
* BookedApps: This file stores what times have been booked out for appointments

### Strings:

* Filename: This variable stores the filename of the various files used in the program
* Patient strings: This collection of strings store the various details of a patient
* Doctor strings: This collection of strings store the various details of a doctor
* Log in details: This collection of strings are used in the log in system to verify that the user is allowed into the admin menu
* Time: This variable is used to see what time the user wants to book an appointment for

### Arrays:

* Filearray: This array is used with the filename file to keep track of all the filenames and write them to the console and then write them back to the file.

### T String Lists:

* Filelist: This list is used to modify the filenamefile by removing a specific filename when removing a patient before writing the modified list back to the file
* Applist: This list reads all the appointments from the specified file and writes them to the terminal for viewing by the user.