

Evaluation of test results

In all but a cases the testing proved that my code did what it was meant to first time around. In all the cases where it failed it was fixed and retested. The problem was when a loop had been accidentally set to start at record 0. The problem with this was that the getappointments function was unable to find record 0 because it was not part of the dat file due to the fact that it is before the dat file begins. Other wise for each test it passed black box testing (it had the correct result) and it passed white box testing (it followed the correct path through the code to generate the correct answer).

Whether the solution satisfies the objectives

Objectives	How I thought I met them
Must be technically feasible, e.g. within my abilities to program	I succeeded in building the program so presumably it was
Must be in accordance to the data protection act and other legislature	This was redundant in my project due to the nature of the data.
Must be able to fit in with current work practices	I did beta testing and they felt it would do so.
Save old master files in a grandfather, father, son system.	After further talks with the user this was taken off the table and is irrelevant
Save transaction files as old as the grandfather master save	After further talks with the user this was taken off the table and is irrelevant
Each student will be assigned a unique logon username, their student number.	It was changed so they logged on just by logging onto their school network area.
Use minimalistic colours	I used the default colour scheme of visual basic which is minimalistic and the same as that of windows it self
Use a house style	I used the default colour scheme of visual basic which is minimalistic and the same as that of windows it self
Not to use slang	Every thing that was written in my program that was able to be seen by users is grammatically correct
Use clear terms	There are no long words used or jargon
Label buttons clearly	Every button has a short piece of text that sums it up and in beta is was considered clear
Create user interface in a generic manner	By using the colour of windows and basing my design ideas form other forms I have used in the past I have replicated most of the key parts of

	generic interfaces
Put in hot keys as well as buttons	This was not done as the user later decided that they did not feel it was necessary.
Make sure every input box is fully validated so only inputs in the correct form are processed.	There are no input boxes available to users everything is done via combo box where the user has to pick from a selection of valid values.
Keep the total size below 20 mb	The total size of the program including practice data is 390 kb
Make system load within 10 seconds	Its slowest loading time for students at the end of the file is 6 seconds
Make sure the areas where the passwords and confidential information is saved encrypted	It was later agreed that security was not my concern and was taken off the table so is irrelevant.
Require all passwords to be alphanumeric of at least 6 characters and for admin it must be 10 characters alphanumeric and involve symbols	There are no passwords related directly to the system so its irrelevant.
Make there facilities for the customisation of the forms	After further talks with the user this was taken off the table and is irrelevant
Make facilities for the admin to change the quantities of days the parents evenings are to be spread over	The staff before an open day can be made ready for students and staff to put in their availability must have the number of days set. This is done via the day settings form accessible via the admin form by admin. Once on the form the admin just has to select the number desired on a combo box.
Make facilities for the admin to change the times that the appointments can take place in	The staff before an open day can be made ready for students and staff to put in their availability must have the start and finish times selected. This is done via the day settings form accessible via the admin form by admin. Once on the form the admin just has to select the start and finish times for each day by selecting an item in a combo box
Make facilities for the admin to be able to change the duration of the appointments	The staff before an open day can be made ready for students and staff to put in their availability must have an appointment length selected. This is done via the day settings form accessible via the admin form by admin. Once on the form the admin just has to select the appointment length by

	selecting a radio button
Enable the program to be able to transfer data from spread sheets of certain formats into appropriate variables	The csv's for students, staff and the two about lessons are all successfully converted and manipulated to make the student staff and lesson dat files.
Make it so that if a student logs on to the appointment computer it fills in their password and username	This is sort of done except instead of filling in the details I have cut that part out and it just opens
For it to be able to have multiple users using at the same time only have the files where data is saved open for fractions of a second	The format of files and file access is that access takes only a spit second so there is very low a probability of there being any multi-access errors.
Make the algorithm result in every one getting a time or with it reporting that there is not enough time allocated to parents evening	This I failed to do it does not report back when a student does not get an appointment.
Must allow the merging brothers and sisters together	After further talks with the user this was taken off the table and is irrelevant
if someone logs on ask them if they are siblings with any other user with the same last name and if they want to merge	After further talks with the user this was taken off the table and is irrelevant
Must not allow an appointment slot to be booked by two or more people	As soon as an appointment is booked its availability is changed to false for both the student and the staff member precluding this event
Ensure that no one has appointments at less than 5 minutes apart to account for travel time.	The program after assigning an appointment immediately sets appointments either side to unavailable meaning it is met.
Make sure the project is completed before Easter	The date required changed to the start of june and I have met it.
Make sure that the project dose not cost anything as there is no budget.	Baring the cost of the electric the total cost of the program was nothing.
Make sure that the program runs on the school network	It was beta tested on the network and it worked fine. It is saved as an executable and therefore works on most windows operating systems.
Make it so that once the program has finished setting the times it e-mails the college emails of the students with the times	There is a subroutine linked to the admin form which generates emails for each student and staff member that sends vial gmail a email with there appointmetns on it.
Make it so that with on click a user can print out their appointment times in a	The email that every one receives is well structured and emails them selves

professional format	are in this day and age simple to print out using your mail application
Compile a document showing the steps to complete certain actions	I have created a user documentation file that describes how to use the program.

Whether the solution satisfies evaluation criteria.

Evaluation criteria	How I felt I met it
Produce an easily printable list of appointments for each student and teacher	The email that every one receives is well structured and emails them selves are in this day and age simple to print out using your mail application
Must score a unanimous vote as simple to use in the beta test.	In each of my beta tests I was told that the user did not once have to use the user manual to work out what they were doing.
Must never generate two consecutive appointments for a student.	The program after assigning an appointment immediately sets appointments either side to unavailable meaning it is met.
Must handle multiple lessons with multiple teachers	It does to a degree it allows them to be booked with both which was the users clients request as they felt that both teachers would have things to say.
Must be multi user multi access	The format of files and file access is that access takes only a spit second so there is very low a probability of there being any multi-access errors.
Must allow users to log on just by their network area	The when the program opens it finds the users network area name and uses that as the way of accessing the system as it is their student ID or staffID
Must keep the appointments for each student within a reasonable distance of each other	Appointment for 5 minuet length are only able to be within an hour of each other and for 10 mins it is an hour and a half to keep it close and
Loads within 10 seconds	Loads in 6 at most if the user is the last student on the list.
Must be less than 10 mb	The program is 390 kb with my example data in it.
There is a consistent house style that keeps colour to a minimum	The program uses the basic unchanged vb house style which is minimum and clean coloured

Text boxes and buttons are clearly labelled	In all the beta tests I was told that the user did not once have to use the user manual to work what they were doing which implies that there was no problem with the labeling of buttons or textboxes
All inputs must be validated so that errors don't often arise	There is no place where a user is able to input data themselves except when admin imports student and staff data. At this point the data is then validated so the program doesn't break and when an error is found it reports this and tells the user to fix it.
Must not cost more than £100	The totality of all expenses involved not counting electricity costs was £0 there for I passed that piece of criteria.
Must not be in breach of the data protection act	Data is lawfully collected and relevant. It is accurate and is not kept longer than necessary and so on and so forth
Must import student, staff and lesson information from csv to dat	The csv's for students, staff and the two about lessons are all successfully converted and manipulated to make the student staff and lesson dat files.
Students must be able to Input when they are available	The students input their availability on the availability form they all (if they are on the system) have access to by checking boxes to symbolize availability at certain times.
Students must be able to Change their availability settings	At any point a student can set their availability again and it will change the data to be what they set it to.
Staff must be able to input when they are available	The staff input their availability on the availability form they all (if they are on the system) have access to by checking boxes to symbolize availability at certain times.
Staff must be able to Change when they are available	At any point a member of staff can set their availability again and it will change the data to be what they set it to.
Admin must be able to Decide set the number of days	The staff before an open day can be made ready for students and staff to put in their availability must have the number of days set. This is done via the day settings form accessible via the admin form by admin. Once on the form the admin just has to select the number desired on a combo box.

Admin must be able to Be able to view the appointments for each student	This was not done unless they look at the appointment dat file(which they wont understand). In this I failed.
admin must be able to Set the start and finish times for the consultation evenings	The staff before an open day can be made ready for students and staff to put in there availability must have the start and finish times slected. This is done via the day settings form accesable vai the admin form by admin. Once on the form the admin just has to select the start and finish times for each day by selecting a item in a combo box
Admin must be able to Must be able to email students and teachers their appointments	There is a subroutine linked to the admin form which generates emails for each student and staff member that sends vial gmail a email with there appointmetns on it.
Admin must be able to Must be able to reset the dat files	There is a subroutine linked to the admin form which replaces the data in the dat files with nothing.
must satisfy the customer	When presented to the client he was happy. He did not like that the admin couldn't see the appointments before they send the emails but otherwise was content.

Future improvements

For it to be web enabled / smart phone enabled.

This would be a good improvement as not all students may have easy access to computer resources during the school day and may feel it to be easier to do it from home or quickly via phone on their commute home. The reason why it is an improvement is that it will maximize the probability that students would book their availability on time.

For it to define what kind of error there was with the csv's while importing

Currently when importing is there is an error with the informationt that would cause the program to fail it just tells the user there is an error. What is proposed is that it would tell the user where in the csv the error is and what should be changed thus helping the user remedy the issue making it easier to use.

For it to have more flexible blocks.

Currently the program meets the objective of keeping appointments close together by constraining them to blocks starting every half hour. I propose that they should be able to do it with blocks starting at any time optimizing the chances of the users to get appointments.

Could be modified to allow parents to book with staff

The system could also store staff availability at other times and parents could book to see staff using it at other times. Meaning it would have more usability increasing its value.

Allow some manual alteration

Depending on the effectiveness of the sorter there will be cases where judgment can be exercised to make changes that don't fit the programming but are viable and are better for all parties involved.

Handle staff that are the most needed first

The program should use a priority rating to designate appointments to the staff that have the most students vying for their time because it would maximize the staff member potential to see all their students.

Allow admin to see appointments.

Allow admin to view the appointments before they email them to the users thus making sure they aren't sending out a particularly unsuccessful try where only 1 in 10 appointments are actually booked.

Attach additional information to the system

ie put in the date for the days instead of day numbers. Or to put in the room where staff will be. The benefit would be that people would have a better idea of what is happening.