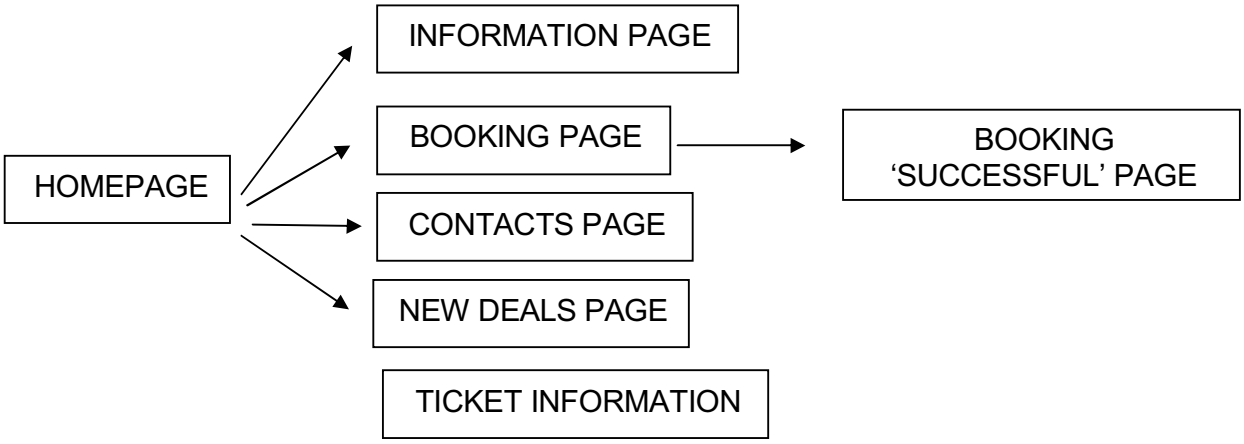
DESIGN

Structure diagram



Gantt chart – Implementation

	29/10	19/11	26/11	03/12	10/12	17/12
Logo – design						
Logo – export						
Template page						
Navigation bar - buttons						
Editable regions (each page) - information						
diary						

Input Data

Input data is data which is put into the computer. This data is then also split into two sections, data needed for the creation and data needed for it to run.

First of all the data needed for the creation of the sys tem would include the logo, photographs/pictures which are image inputs and there are three devices available to input an image. However, none of this input data can be put through if there is no hardware to do it; therefore hardware is needed to transfer this information into the computer.

First of all, you have the choice of a scanner for an image input. The scanner is very good when it comes to things such as transferring images from paper to computer but doesn't help with other things. The scanner can also take up a lot of space in the office and is quite mechanical and may be hard to get used to. The scanner however gives many options for size and quality of the images and can be very useful in many other ways.

There is also the choice of the digita l camera, which is always very handy. The digital camera is very quick and easy to use, as all you need to do is take a photo of the desired object and then plug it into your computer and copy the file. It is a simple way of getting images up quickly. This is very different from the scanner because you can actually take the photos whereas the scanner you could only scan in images which were already printed. The digital camera is very easy to carry around and does not take up a lot of space either, the price is also quite low and affordable, and this is why I recommend the company use the digital camera and this is why I will be using a digital camera in setting up the images for the website.

Other inputs are the company details, contact details, ticket pri ces which are text input and there are two recommended devices and one additional one. These are all input data that will be needed for the basic creation of the system and they are needed for it to be set it up.

First of all there is the QWERTY keyboard. It is cheap which is very useful because the company is quite low on budget and it means that you can easily replace it if it breaks. It's 20 cm x 20 cm which is efficient for the company as they don't have much space and is easy to use. A lot of people h ave this keyboard, so you don't have to spend time to get used to it and many people know how to use it. However it tends to cause RSI if used for too long which can possibly apply to staff in the company as they would be constantly on the computer. The QWERTY keyboard also has a lot of different options and types of texts to put in so it has a very wide range available.

You can also use a voice recognition microphone to input text data, which saves up a lot of time as you don't have to type anything. You simply speak into the microphone, and it automatically inserts it into the computer for you. It is easy, fast and hands free. The cost ranges from £5 and over as it depends on the quality of the sound you require. The microphone would be the only cost you would have to pay if the computer system is Windows XP or higher. Furthermore, if new staff joins the company and they do not have high technical skills, the voice recognition microphone will be very useful as there is nothing to learn other than speaking into a microphone, and it reduces the risk of RSI. However, the microphone might have not have great results because there might be background noise interference and the computer may not understand what they are saying or there may be many words the computer does not know and therefore can be a problem.

For the company I recommend the QWERTY keyboard as it is very common, easily handled and can be used for a wide range of different things.

Next there is the data needed for the system to keep on running, this means it needs to be easily changeable and edited and it also has to be easily accessible. Input data needed for the system to keep running is changes and updates for information on website and also data inputted by customers on booking page need to be able to change while the system is running. There are also buttons and hyperlinks which are inputs that need to be able to change when the system is running as they are constantly used and buttons have to be able to edit when the website does as well. For moving around the site there are also three devices available.

First of all there is the mouse, it allows you to move around the computer, and click on different types of things. The mouse is very small so it takes up less space, however the mouse can get a bit untidy with the wire. There are two different types of mice:

Roller ball (this can come wireless too) and optical. The fact that it has a wire limits the amount of movement; however it is connected to a continuous power supply so it doesn't need batteries. However it requires the ball to be cleaned frequently so dust isn't collected on it.

Another type is the optical mouse (which isn't wireless). This doesn't require any batteries (similar to the roller ball mouse) however it's cheaper. It uses camera technology and digital processing to track the positioning of the mouse. It is so much more efficient because it requires a LED light which sees where the mouse should be on the screen. It is unlikely to break which is very useful, and it doesn't need a mouse pad or a smooth surface to work.

For the company I recommend the optical mouse as it is very efficient and is the most popularly used around the world and for the new staff being hired it would be easy for them to use as they will probably be used to it. To create this website I will also be using the optical mouse as recommended for the company because of its manoeuvrability and efficiency.

Output Data

The output data is the information that will be coming out of the website and what it produces or what you can see from it.
The output data consists of things like the actual website and what that produces, print outs like ticket receipts and company details.

For the visual effect which is outputted from the website (can consist of pictures and text) there are the following hardware devices which you can use to view these output data.

A CRT monitor is very heavy, and the screen flickers because you have to keep on refreshing the images on the screen, and this is not very convenient. However it is very cheap, so this is good as if it does break you can replace it easily.

A monitor is a LCD/TFT, these monitors can cost between £110 and £180 which is a fairly reasonable price if you think how much better it will be for the working environment. The cheaper ones, priced at £110 are normally a 17 inch screen and it doesn't flicker because only the crystals which need changing are changed. This means it is easier on the eyes and another advantage is that it will last longer. This is very good be cause it costs a fair amount of money, so as long as it works for a long time it'll be goo d.
There is also a Plasma monitor, which works much like CRT monitors, but instead they use a flat, lightweight s urface covered with tiny glass bubbles containing plasma. However, plasma monitors cost very much and are very expensive, but they do take up the least amount of space and would look neat and tidy in an office.

For the company and for myself I recommend using an LCD/TFT monitor as these are high quality for the least amount of money you can get, and they will look suitable and it is very commonly used in offices.

In your website you could also have sound outputted which means you would need a hardware device that allows it to emit sound. The following are good options for sound output.

First of all, there is the option of speakers. Speakers are very good to use if trying to get the sound out to a wide audience but it can be very distracting for those who don't need to listen and therefore may cause a nois y environment. Also speakers are quite expensive for high quality ones which are the only appropriate ones to buy as other low costing speakers will not have good quality sound and will not last a long time. Also speakers may take up a lot of space in the office.

There is also the choice of headphones/earphones; these are very practical and easy to use. All you have to do is plug them into the monitor and you get the sound wanted. Also earphones mean that only the people who wanted tp hear the sound would hear it leaving other people to do their own work while you still get to do yours. However earphones cannot always be trusted to last a long while because of its vulnerability as it is so small and flimsy. Also earphones are quite cheap and affordable in b ig amounts; therefore you can buy many of them to supply all the workers. Earphones and headphones are very reliable and therefore I recommend using these for the company as there are many people working there so it is easier to buy many earphones, however I will be using speakers as is easier to listen to and I am the only person working so it will not distract others and also the sound will come out better.

Another output data was printouts such as ticket receipts and booking times. The hardware devices needed for this is a printer, however there are many types: colour laser, black and white laser, inkjet and a Dot Matrix.
The two printouts needed for this company are webpages/booking times and ticket receipts.

Firstly, the webpages/booking times need to have a printer which is able to print colour, affordable, fast and efficient. Therefore, for this printout, there are two choices for printers. One being the colour laser printer and the other is the Inkjet.

A colour laser is quite large because it consists of lots of technology and it costs £199 and is the second most expensive one between the four mentioned. Furthermore, it needs 4 toners (£80 each, so £320 in total) - which is a huge amount of money. It also has a reasonably low medium quality photos, medium resolution, and the toners last 2000 pages.
Next there was Inkjet (A4). It is small in size, and only costs £40. It needs 4 cartridges and it lasts 620 pages. It produces high quality photographs all with high resolution. It can print 16 (B+W) or 12 (Colour) pages per minutes. As mentioned previously the staff will need a printer to print out a confirmation page and receipts.
Therefore I think that the Inkjet printer is better for webpage/booking time printouts because it is cheaper and more money saving and also, the colour printer won't be needed as often so we do not need to spend as much money on it.

The second printout is the ticket receipts. The ticket receipts printer is better in black and white because no colour will be needed printing out text, therefore it would be wiser and more money saving to but a black and white printer. The choice for the ticket receipt printers is between the dot matrix and the black and white laser printer (not laser jet).

The black and white laser printer is also quite big like the colour laser, and costs around the same price: £198. However the price for the toner is cheaper by £10 when comparing it to the colour laser and it prints out 500 more pages, which means the toner is more practical.
The Dot Matrix is quite small however costs £231 and only lasts 800,000 characters which is ridiculous. It has a low resolution and only prints out 12 lines per second, which is 1200 lines per minute.
Out of these two printers the black and white printer is probably better for this company because it is faster and more efficient and even thought the dot matrix takes up less space in the office it is worth it to buy the black and white printer as it also costs much less and because we will be using the printer which prints out ticket receipts often, it is better to use a printer which can print quicker with higher quality and is cheaper and as mentioned previously the staff will need a good printer to print out a confirmation page and receipts

Processing Data

Processing data, this is what the system has to do for it self and what you would expect it to do. This includes submitting information from the order form; validate the information, going to a page that says it has been submitted and to upload pages and to be able to process data you need a RAM and a processor otherwise the computer can't work. They each have specific things to do within the computer to allow it to work.

At the moment, "Chalk and Cheese" use a Pentium 300MHz system. However, this isn't very good as proved in the interviews, it is very slow and isn't very efficient. As the system analyser, I am making a new system for the company it is likely that this processor will not be able to cope. Therefore there are the following options for different process ors which can be used.

A 3GHz processor is recommended; it is ten times faster than the current processor. This is useful because it takes less time to uploading data onto the computer, or even pictures. Its £100, which is a fairly reasonable price as it lasts for a long time.

You would also need a RAM (Random access memory) - this is a type of temporary memory storage. For example when you're loading a program such as Dreamweaver it is loaded into the RAM. However it loses everything when the power is turned off. The RAM doubles; the higher it is the better the more storage.

Also available is the dual core processor which is a device with two different processors in one machine and this will enable multiple tasks to happen at one time and therefore more work can be done and the system is highly unlikely to crash. However the price of a dual core processor is very expensive and it may take up a lot of space in the office.

The processor that I will be using to create this website is the 3GHz processor because of its efficiency and it is very quick and this saves a lot of time and effort.

Integrity Methods

There are two types of integrity methods: validation and verification, they are very vital when creating a website.

Validation:
This is an automatic computer check to ensure that the data entered is appropriate. For example, if you wanted someone to put in their age of birth to subscribe for something, you might have to be over 18. So you would want the age to be for example, between 18 and 70. This specific type of validation is known as a range check.
These are the types of validation needed for specific fields:

Input	Is validation needed?	Validation type	Specific validation
First name	Yes	Length check	<15
Surname	Yes	Length check	<20
Gender	Yes	Allowable entry	M or F
Age	Yes	Range check and number	>18 and <110
Contact number	Yes	Range check and number check	>10 and <12
Email	Yes	Email	Check it has (@)
Departure from	Yes	Allowable entry	Dover or Calais
Season ticket?	Yes	Allowable entry	Yes or No (if yes do not fill in any further)
Time	Yes	Allowable entry	List of departure times
Date	Yes	Allowable entry	1. Day 2. Month 3. Year
Number of tickets	Yes	Range check and number check	>0 and <49
Number in party	Yes	Number check	>0 and <30
Departure from	Yes	Allowable entry	Dover or Calais
Time	Yes	Allowable entry	List of departure times
Date	Yes	Allowable entry	4. Day 5. Month 6. Year
Share a hovercraft?	Yes	Allowable entry	Yes or No
Food/drink	Yes	Allowable entry	Yes or No

Verification:
Verification is a check to ensure that the data entered exactly matches the original one. It is important for this system because there is a ticket booking page and therefore if people inpu t incorrect data they need to be given the ability to check it before it goes throughout the system and this will mean less errors occurring and no time wasting is happening.

There are two main methods of verification:

- Double entry (typing the data in t wice and comparing the two) - This can take much more time.
- Proofreading data - This is when somebody is checking what is on the screen, and if it is the same as on the input document. Again, this is time consuming and costly.

Logo software comparison

To design a new logo for the chalk 'n' cheese company there are a variety of software programmes that you can use. The three software programmes we can use for the creation of the logo are Fireworks, Drawplus and Microsoft Word. All 3 programmes provide good and bad properties and in many ways each is individual to its programme and there are many similarities and differences between them all.

Firstly the general creation of the three programmes must be analysed. Microsoft Word has a very basic easy general creation because of its simple tools and methods. However there are a few things that are hard to do, things such as being more imaginative and broadening ideas so you have more extravagant products which you can do more inventive things with. It is especially hard with the variety and there is a limited amount of accessibility. Also on Word you cannot make things 3D unless you go through many tedious processes. The general creation of word is easy but simple and you can not be too creative as there are many restrictions. This affects my logo design because I am restricted to what I can use and my ideas are not going to be put to the maximum it can display.
However, Drawplus is very efficient to use and generally very professional and you could be very imaginative on it as well because the programme is designed for graphic artists. On Drawplus there are many tools which help when creating logos, there is a wide variety of Autoshapes and many different tools specific to creating complicated pictures. This affects the logo quite a lot because it means that I can be creative with the logo and can overall produce a better image.
On the other hand, Fireworks has a very easy theme to it and you have to know what you are doing and you have to know the programme very well before attempting anything, otherwise creating a logo will be very difficult on this programme as there are too many complicated procedures. This may be quite hard for the logo as if you don't know how to use the programme you won't be able to design the logo and it will take time to learn the unique system of Fireworks.

Another thing that has to be taken into consideration when choosing a programme to create a website on would be the text options. In the logo that I wish to create, the words "Chalk 'n' Cheese," in bold, striking letters for the title and "Simple travel for the world," in concise but simple font as the slogan will be used. Therefore, taking this into consideration, we have to analyse the text for each programme.
Microsoft Word has many different fonts to choose from and there is a wide variety. However there aren't many different styles of fonts, just a lot of fonts in that style. Also you can do the writing in Word Art; however there aren't many to choose from and it is very limited. However for the font you can choose what the fill colour and line colour are going to be. Also is you did not choose Word Art to do the writing then it is hard to move around and the flexibility of the writing is hard to control. So creating the words for the logo in Microsoft word will be easy but moving the words around freely to put in the

right places will be difficult and the flexibility of the words will be hard to control.
In Drawplus there is also a wide variety of fonts available but once again th ere are many styles but not much range and variety in those styles. Also it is easy to resize the text because it is treated like a picture and there is a box with drag handles around it so you could just drag the handles and size the font to the one you prefer. Also it is very easy to change the colour as there is a HSL wheel to change the colour of font for fill and line. Also the size of the line can be chosen easily to your preference. Also the effects on your writing can be changed efficiently by clicking on the brushes button. There are many effects on the writing to choose from. Therefore Drawplus would be perfect for the font in the logo as it has a wide variety of font types and also it can move a lot and it is resizable, however the colours for the fonts are not websafe therefore it cannot be viewed on every monitor.
Fireworks also have a wide variety of fonts and when you scroll down to look through them their preview comes up on the right which is very handy. Also the font sizing is easy because there is the drag box around the writing which means that I can resize by dragging the handles in or out. You can also just move the writing by clicking, dragging and dropping. This programme would also be very good for the logo creation as it has many font sizes to choose from and can be moved around easily.

When creating a logo you also have to think about the different colour options available for each different programme. On the logo there will be the compulsory red, blue and white as they are the compa ny colours but there will also be black and brown. We also have to think about websafe colours when choosing colours for the logo.
Word has many different colours which are available to use. Some of these colours were websafe which means that they a re easily accessible anywhere however there are many other colours which are not websafe and it i s hard to get the exact same colour again without using the colour selector tool. Also if you want to edit the websafe colours, for example make it darker or lighter this doesn't make them websafe anymore so you have to be careful on what colour to use. Therefore this programme is good for the logo because it has all the different colours needed to use for the logo and a lso the colours are all websafe which means it can be available on any computer.
Microsoft Word may have had websafe colours but using Drawplus is very efficient when it comes to the colours which are not websafe. There are many ways the colours can be shown. There i s a drop down menu to choose how you would like each to be shown. There i s the choice of HSL wheel, HSL square, RGB sliders, CMYK sliders and tinting. However all of the colours on this programme are not websafe which means that not all monitors will be able to display them and this is bad bec ause the logo will be going on the website, which will be viewed by customers and if their monitor cant show the logo there is a problem and again it would be hard to find the exact same colour without using the colour selector tool. However there are very many different colours to choose from on Drawplus for the logo.
Also there is the option of Fireworks, which has a very big variety of colours where some are websafe and some are not. The colours can be viewed in different ways on this programme as well a nd there is also a choice on fill

colours and line colour on this programme. This programme is quite appropriate for the logo as there are options on whether the logo colours are websafe or not and assign tot his there is a wide variety of colours.

Shapes are also an important aspect to take into consideration when creating a logo. In the logo there is a brown coloured helm and two flags (British and French).
There are shapes which are available in Microsoft Word in a group called Auto shapes. It offers a wide variety of shapes and the shapes are easy to resize because they have drag handles.
Drawplus and Fireworks also had the option of Autoshapes which was very similar to Microsoft Word but they had a wider variety and range of shapes. Also on Drawplus and Fireworks there were more things you could do with the shapes, for example, there was the choice of making a shape 3D in Drawplus and this can be very useful.

Using Microsoft word would be hard to create the helm as it has many autoshapes which fit the description of the steering wheel but do not join up neatly enough to make it look professional. The helm is very complicated and too curvy to design in Microsoft word and you cannot use a picture as this is copyright.
The creation of the helm will probab ly be the easiest on Drawplus because it has a lot of variety of tools which allow you to be creative. There are also a variety of different shapes which you can choose from and you can also overlap and make layers and you can also use the line tool.
Using fireworks for the helm would be reasonable as well but may be complicated as there are a lot of steps to go through and you have to know the programme quite well. Also fireworks doesn't offer that many different shapes but once you have a basic structure it is easy to work on and you can be very creative.

The flags are very easy to do on Microsoft word as they only consist of rectangles but the layering and filling of the shapes may be quite hard and fiddly to do on Microsoft Word, however to get the exac t same shape you can use the cut and paste tool which is very handy.
On Drawplus the flags are very easy to do as they have autoshape and also the cut and past tool. Also the layering of the shapes is easy to do and therefore it is easy to get the desired look.
The flags are quite simple to do on fireworks and it takes a lot of steps to do them though. There is also the cut and paste tool for this programme as well so the two flags will look similar in size.

When you create a logo you also have to think ab out how you are going to export or save an image once it has been created. Exporting an image is easy to do when concerning Drawplus and Fireworks, however with Microsoft Word you can only copy and paste it into paint, which decreases the resolution and ruins the logo meaning the colour isn't great either.

Using all this information on different software, I would recommend Drawplus as the programme used to create the website as because of its specification

as it was designed to be used in creating complica ted designs and therefore would be perfect for the creation of the logo.

WEBSITE SOFTWARE COMPARISON

There are many different types of software which can be used in the creation of the website including: MS Word, Dreamweaver, Pageplus a nd Notepad.

First of all the type of editor ms word and flash are both visual but Dream weaver is visual and coded. Visual means that what you see is what you get whereas coded means that you have to use the HTML code to do anything.

Also the prices of these are varying . The least expensive is Microsoft word where you get Microsoft office for £231, then £279 for dream weaver and then the most expensive is Macromedia Flash for £360.

There is also the consistency that you have to think about when designing web pages. Are the pages going to be all consistent or are they going to be different and disorganised. First of all for dream weaver you can use templates which allow you to lock down the pieces which appear on every page making them the same but also have editable regi ons to edit the bits that you want to differ on each page. For Microsoft word there isn't a specific consistency way but there is copy and pasting and there is also the fact that you can save pages and open it after and with Flash you have the freedom of choice whether you want to make it consistent or not but with flash you rarely need to make it consistent as flash is generally used for designing graphics.

Another thing you have to think about when designing webs are accessible fonts, images and web safe colours. When using dream weaver there is the option of family fonts, which is good for when you don't have a specific font on your computer but you have a different font which is in the same family you can use that one. For dream weaver there are also im ages which can be sized by percentage so if you are using Internet on your phone or on a wide screen computer then it will still be a good size in comparison to your screen. Images on dream weaver also have alternative tags which means that if the picture doesn't load up then you still have an idea of what the picture was.

Also the palette on dream weaver is web safe and the colours all have codes which can be used on every computer so it is very practical and there are 216 of these colours so you have a wide variety of colours as well as good accessibility. However on Microsoft word there are no web safe colours and the palette is full of many different colours that you can change percentage of colours in. Microsoft word also has font sizes in points and they aren't relative.

The images on Microsoft word also have alternative tags but the images are defined in pixels so it may take time to load up and the pictures may get distorted. On the other hand for Flash the image is all one and the font is

stored as an image as well so it is very different to other web design. However the palette for Flash is also web safe so this is good.

There is also file sizes and download times that you have to consider when creating web pages. In this case Flash's file size is unknown but out of dream weaver and Microsoft word, dream weaver is 4kb and Microsoft word is 12.3kb this means that dream weaver is faster to download and has a smaller file size. This is because Microsoft word has a lot of codes behind all the appearance this means the file size grows.

The layout of web designing is also very important in the process of designing. For example dream weaver has a choice of tables and layers, layers for a more creative look and tables for a neat and tidy look. For Microsoft word there are only tables and for Flash there is once again the freedom of choice.

The final thing that you have to think very carefully about is the final appearance of the whole web design when finished. Dream weaver will give you a professional, well laid out, neat and tidy. Microsoft word will give you a neat tidy piece. However it is fitted to the size a4 dimensions so there will be large white gaps at the end. However for Flash there is once again the creative side and it can be full of choice a nd new ideas.

Overall there are a wide variety of choices and a range but in the end they are all very different and unique in their own ways and they are all very good pieces of professional web designing programmes.