

Stuttgart, October 1999

Creating a web site under project management conditions.

**Example of the web site of the “Freunde der Hebräischen
Universität Jerusalem in Baden-Württemberg e.V.”**

Agnès Rey

Diplomarbeit in the course “Multimediale Techniken”.
Written between the 9th of July and the 11th of October.

Study of Information Management at the
Fachhochschule Stuttgart – Hochschule für Bibliotheks- und
Informationswesen

First examiner: Prof. Dr. Thissen
Second examiner: Prof. Dr. Von Keitz

“ Beware of the web site you ask for – You might get it “

Secrets of successful web sites, David Siegel

Keywords and abstract

Project management, web site, web, association, target-user, scheduling, team management, screen design, line up, indexing.

This paper analyses the whole process during the creation of a web site for an association. After the evaluation of the project, the analyse of the target-users of the web site and of the needs of the association, a concept for the web site is defined. Then the organisation of time and the tasks of the project are explained with a special part about the one-person-team aspect. The choices concerning the interface and screen design for the web site are explained in a third part and the last part is about the line up of the site, the indexing and the updating.

Projektmanagement, Web-Site, Web, Verein, Zielgruppe, Zeitplanung, Teammanagement, Screen-Design, Installierung, Anmeldung.

Diese Diplomarbeit beschreibt den Prozess bei der Herstellung einer Web-Site für einen Verein. Der Projekt wird eingeschätzt, die Zielgruppe und die Bedürfnisse des Vereins werden definiert, um einen Konzept für die Web-Site herauszufinden. Dann werden die Zeitplanung, die Tätigkeitplanung und den Begriff Teammanagement im Kontext analysiert. Der dritte Teil beschreibt die getroffenen Entscheidungen bei den Screen- und Interface-Design. Im vierten findet man Information über die Installierung des Sites ins Netz, über die Anmeldungsmethoden an Suchmaschinen und über die Aktualisierung.



**able
of contents**

Introduction	4
1. Project evaluation	6
1.1 Purposes of the web site and target-users	7
1.1.1 <i>Purposes</i>	7
1.1.2 <i>Target-users</i>	8
1.2 Technical characteristics of the web site	9
1.2.1 <i>General characteristics</i>	9
1.2.2 <i>How to line up the web site</i>	10
1.2.3 <i>Documents available</i>	10
1.3 Chosen concept	11
1.3.1 <i>Technical part</i>	11
1.3.2 <i>Design</i>	12
1.3.3 <i>Contents</i>	12
2. Project management	14
2.1 Scheduling	15
2.1.1 <i>Comments on the scheduling</i>	15
2.1.2 <i>Scheduling graphic</i>	16
2.2 Organising the tasks	18
2.3 Team concept in this project	19
2.3.1 <i>Difficulties met working alone</i>	19
2.3.2 <i>Ideal team for this project</i>	20
2.4 Budget	20
3. Interface design	22
3.1 Orientation	23
3.1.1 <i>Navigation elements</i>	23
3.1.2 <i>Site map</i>	25

3.2 Layout	26
3.2.1 Colours	26
3.2.2 Graphics	27
3.2.3 Composition of the screen	28
3.3 Text	28
3.3.1 Home page	28
3.3.2 Other text features	29
3.4 Programming	31
3.4.1 Html	31
3.4.2 JavaScript	31
3.5 Scenario	32
4. Final stage	36
4.1 Site testing	37
4.1.1 Methods of testing	37
4.1.2 Results	37
4.2 To line up the site	38
4.2.1 Technical problems by the installation and changes	38
4.2.2 Indexing of the site	38
4.3 The web site in the future	39
4.3.1 Life duration of the site	39
4.3.2 Updates	39
Conclusion	40
Bibliography	42
Annexes	44
Annex n°1: Official order for the web site	45
Annex n°2: Documents given by the association and used for the layout	48
Annex n°3: CD-Rom of the web site	51



Introduction

During the winter of 1998/1999, I made an internship at the Jewish National and University Library in Jerusalem, through the help of the German association "Freunde der Hebräischen Universität Jerusalem in Baden-Württemberg e.V." which gave me a scholarship for this stay in Israel.

This association was created in July 1997 and its objectives are to develop the relationships between the Hebrew University Jerusalem and Baden-Württemberg, collecting funds, organising conferences in Baden-Württemberg about Jewish cultural aspects, organising exchanges between the Jerusalem University and Universities in Baden-Württemberg etc.

I've noticed that the association wasn't at all known by the Israelis; reasons being the lack of publicity about the association at an international level and of course, the fact that the association was only established two years ago. The problem was the same in Germany, where the association was needing more publicity to support its activities and to improve the number of its members.

That is why I proposed to the director of the association to create its web site. Its aim was to serve the development of the association and to be the basis for my these.

The purpose of this paper is to show how the creation of a web site needs to be made under project management conditions in order to respond to a certain quality level and to the needs of the customer, in this case the association. Throughout this paper, the web site of this association is going to be the central point, the basis of my analyses and conclusions.

In the first section, the evaluation of the project is going to be made, trying to define the needs of the association and which concept could respond the best to these conditions.

The second section details the project management principles, organisation of time, of the tasks and team management.

My choices concerning the interface and screen design make up the third section.

In the fourth and last section, the final stage for creating a web site, testing, installation, indexing, updating are explained.



Project evaluation

1.1 Purposes of the web site and target-users

1.1.1 Purposes

Before starting any kind of conception in multimedia projects, the exact purposes of the product, his target-users, and the needs of the client have to be defined.

As Eve Demazière explains in her document about the architecture of a web site for an association¹, the first questions to start the analyse are:

- ?? Why create this site?
- ?? Which image the association wants to show?
- ?? Who are the end-users? What are they going to find in the site? Why are they going to come and look at the site?
- ?? How often are they going to come and looking at it?
- ?? How are they technically equipped?
- ?? Which concrete results is the association waiting for?

For the "Freunde der Hebräischen Universität Jerusalem in Baden-Württemberg e.V.", a web site is going to help make their work more public in order to obtain new members and receive donations.

The purpose is also that the web site becomes a kind of forum where the professors of universities in Baden-Württemberg can present their cooperation projects with the Hebrew University in Jerusalem. In this way the association could become the intermediary between the Hebrew University and many levels of Baden-Württemberg's institutions.

And more, since the foundation of the association (2nd of July 1997), the office received an internet connection which has been used very little. The purpose is then also to use efficiently the resources of the association (cf. annex n° 1, the official order for the web site).

The "Freunde der Hebräischen Universität Jerusalem in Baden-Württemberg e.V." would like to show their presence on the web as a wide-open association, serious and reliable, and also grateful to its members. More importantly, it would like to be seen as the first partner for the relationships between the Hebrew University and Baden-Württemberg.

¹ Conception, suivi et animation d'un site web associatif, Eve Demazière

1.1.2 Target-users

The question "Who are the end-users?" is the most difficult and important analyse to make. It is the deciding factor in what kind of web site has to be created.

As said in Managing Multimedia ²

"The connection between the users and the reason they want access to certain types of information is the most important one to establish, whatever the medium. The type of user influence the structure and the level of interactivity."

The members and partners of the "Freunde der Hebräische Universität Jerusalem.." are interested in the development of the relationship between the Hebrew University and Baden-Württemberg. For all of them, Judaism, the Hebrew language and the development of Israel are important subjects. Some come from an academic level, some from a cultural level and others from a political level. It makes it hard to define which kind of language is going to suit everyone.

As said in Screen Design Handbuch³:

"Sie können unmöglich alle Menschen gleichzeitig ansprechen, sondern müssen gezielt entscheiden, für wen Ihr Produkt eingesetzt werden soll, wessen Sprache Sie sprechen wollen und mit wem Sie kommunizieren."⁴

So I've assumed that these people are not particularly keen on using the internet. I guess they feel more at ease with books than with computers, but still, because they are working in fields where the Internet has been used for a long time, they know its importance for the publication of information on an international level and for the sharing of knowledge. They may be 35 or more and may use the internet from time to time but also targeted.

But there is also another category of people who could be interested and met by this web site, namely students in any "literary" field, but with a strong interest in Israel and in the Judaism, who are keen on surfing the Internet and who could reach the web site of the association and be interested in its project of scholarships for stays at the Hebrew University.

² Managing Multimedia: Project management for interactive media, England, Finnley

³ Screen-Design-Handbuch, Frank Thissen

⁴ You can't managed to reach everyone. You have rather to choose who you want to speak to, for who is your product, which language you have to use and with who you want to communicate.

What connects these two categories? Information is the central point. Ones may try to present their work with the Hebrew University on the Internet, others may want to get information for their studies. All are not Internet specialists and want clear and simple information. They are not using the Internet for fun, but for a serious purpose.

This web site should present the work of the association, its projects and how people can get more information and one subject or another. It should also be open to new memberships.

1.2 Technical characteristics of the web site

1.2.1 *General characteristics*

It isn't very easy for a first web site to control ones creativity and to try not to add too many technical aspects which won't be understood by the end-user, as told in Managing Multimedia⁵:

"However, while new Web browsers bring new technologies and techniques to the Web designer, not all Web users keep up with the trends, and so many use of new Web features has to be made knowing that not all potential viewers will see them".

It is likely that the users won't have much of technical knowledge in the Internet field, that is why the site has to be technically simple and shouldn't bring orientation problems to any users. Seeing how the association's office is equipped (PC 486) and the Internet experience of its director, it can be assumed that the users generally won't have much more experience and better material. It could have been interesting to ask the actual members of the association about their experience in the internet field. Unfortunately, for it was difficult for them to find time, it wasn't possible to organised the "scoping questionnaire" which is recommended in Managing Multimedia⁶.

Too much JavaScript, Java or CGI script, too many heavy graphics can disturbed users which are not experienced with the creation of web pages. That is why the web site of the association will be graphically very simple and contained technical aspects which won't appear to complicated to the users.

⁵ Managing Multimedia: Project management for interactive media, England, Finnley

⁶ Managing Multimedia: Project management for interactive media, England, Finnley, p.36

Because the association is still very young, there also won't be that much contents in the site and complicated technical aspects would be useless.

The web site has to correspond to the size of the association. As said in Managing Multimedia⁷

"The small company profile, on the other hand, may mean no more than several sets of pages linked by a straightforward structure with the option for the client to come back with the material to update the pages as and when they wish. The technical and design aspects are much more straightforward in this case.(...) Hopefully the only awkward issue will be getting the right domain name."

A ten pages site will be efficient enough to present all necessary information. The following section will explain in detail the documents given by the association for the creation of the site content.

1.2.2 How to line up the web site

The association office received an internet connection through the German provider T-Online. It includes the connection to the internet, e-mail's accounts and the possibility to install a home page up to 10 MB onto the T-Online server.

As the e-mail address of the association is fhusd@t-online.de for "Freunde der Hebräische Universität in Süd-Deutschland", the address of the home page will be < <http://home.t-online.de/home/fhusd> >.

1.2.3 Documents available

After the first meeting with Ms Nicole Fritz, director of the association, I was given all documents which have been published by the association since the beginning of its activity. It included:

- ?? 3 invitation's cards for the different fund raising events, organised by the association since its establishment. (one example in the annex n°2)
- ?? One prospect presenting the association, the layout which I have to use for the web site (cf. annex n°2)
- ?? The card covering the programme of the second fund raising event (cf. annex n°2)
- ?? An example in black and white of the official poster for a conference organised by the association in November 1998

⁷Managing Multimedia: Project management for interactive media, England, Finnley

- ?? The list of the members of the managing committee and of the kuratorium of the association
- ?? A journal article from the Stuttgarter Nachrichten (copy) about the fund raising event in February 1998. The original picture of the article
- ?? The two issues of the association journal for the members. One including a journal article from the Stuttgarter Zeitung after the second fund raising event
- ?? One journal from the association in Germany which regroups every association for the relationships with the Hebrew University in various parts of Germany
- ?? The report written by Ms Fritz before she stopped working for the association (September).

Ms Fritz also gave a lot of documents from and about the Hebrew University. Among them there were:

- ?? Two bulletins published by the Hebrew University in German
- ?? A document about the Jewish National and University.

1.3. Chosen concept

1.3.1 Technical part

"It's easy to confuse a beautiful site with an appropriate site."⁸

I didn't want to make this mistake. The site should be graphically pleasant, but should be first functional.

Because of its potential users, it was necessary to build a simple site, very functional and almost educational, where they don't get lost because of illogical structure.

As said in Web Site Usability: A Designer's Guide⁹:

"Users apparently don't think about site structure at all. Instead, they continue on an exploratory path through the site until they find what they're looking for or become so frustrated that they give up."

⁸ Secrets of successful web sites, David Siegel

⁹ Web Site Usability: A Designer's Guide, Jared M. Spool

Therefore the association's web site should be made so that the user doesn't have to think a lot about the structure. It should be a linear structure, with very few ways and needs to go back.

A site where the navigational elements are always present on each page responds to this problem.

The fact that the site doesn't exceed 10 pages -it of course is different in case of heavier contents -, also allows to keep a structure with very few sub-parts; the home page, many sub-levels and very few sub-sub-levels are a good way to keep users on the right path

That is what Jared M. Spool says¹⁰:

"The usability of a site depends on what the users are trying to accomplish(...). And it also depends on the organisation's goals for creating the web site(...)."

1.3.2 Design

The documents given by the association should have responded partly to design questions (cf. official order for the web site, annex n° 1). The prospect about the association gave me the general layout for the pages.

As for the home page itself, it was more difficult because the association hasn't really got standard line for the presentation of its documents, no special slogan, symbol or logo. That's why I decided to keep the symbols of Hebrew letters.

1.3.3 Contents

As for the content, we used the available documents and discussed the structure of the site.

The sections were decided upon follows:

- ?? The presentation of the association with its relationships with the Hebrew University in Jerusalem and with the German Union of similar associations.
- ?? The planed events (conferences and fund raising events)
- ?? The past events.
- ?? The projects that the association are organising (scholarships, trips, exchanges, reports about Jewish subjects...)

¹⁰ Web Site Usability: A Designer's Guide, Jared M. Spool

- ?? The forum where people can present their projects related to the Hebrew University, projects which are not necessary official or directly connected to the association.
- ?? The way to contact the association
- ?? The way to become member of the association
- ?? Some interesting links to further understand the associations activities, and its partners links
- ?? Some information on how to understand the structure of the site (help)



Project management

"A project manager is expected to produce a product by organising and controlling resources according to planned expenditure, in a certain time frame, and to a defined quality level."¹¹

This is the purpose of project management. If done in the best way, the project management responds perfectly to the needs and wishes of the client, and prevents any kind of unplanned changes and negative consequences of it on the whole organisation of the project.

In the case of this project, such a complicated organisation of the time, tasks and stages of the project were unnecessary because only one person was implicated in the project.

But even without the difficulty of organising the tasks between several people, it was necessary to plane the whole project in order not to waste time. It can actually be quite difficult to have to organise, realise and control one project alone.

2.1 Scheduling

2.1.1 Comments on the scheduling

The first relevant meeting with the director of the association took place on the 10th of June. The purposes of the web site were decided, the kind of end-users that the site should reach and the time when the site should be launched were discussed. The director gave me the documents from which I should take the contents of the web site and ideas for its design. I received the official order for the site at this meeting (cf. annex n°1).

Because this project was part of my these and because I had to respect some time conditions, I started to work on it as of the 9th of July. Some questions appeared immediately as I started to work on the documents given by the association. I also prepared a very rough structure of the site. This is why I met again the director a few days later.

The analyse stage (definition of the needs of the association and the profile of the users, and choosing of a concept) took quite a long time. Reasons being the analyse influences the rest of the project (Scenario and realisation) and has to be done very well. But also because I intended to present a questionnaire to some of the members of the association, to evaluate their experience in the internet domain. I hoped to get a better idea of the potential end-users.

¹¹ Managing Multimedia: Project management for interactive media, England, Finnley

I partly prepared this survey but as I asked the director for modalities to present it, she unfortunately advised me against this idea. The members probably wouldn't have any time and interest in responding to this questionnaire.

This is why it took me a while to try to define the profile of this site's users.

In order to have time for potential changes at the end of the project, just before to launch the site, I also planned a few days "safety margin" before the 10th of October.

During the meeting on the 24th of August with the director of the association, I presented the detailed scenario of the site and we discussed some technical aspects, like how to install the site on the T-Online server. These aspects have to be discussed before realising anything, and are necessary agreements so that the end-product and the time conditions satisfy the client. That what is said in Managing Multimedia¹²:

"A project generally follows these stages of development:

- ?? Agreement to the overall structure and major content areas (the proposal or sometimes the outline design should stipulate these)
- ?? Agreement of platform for offline projects, the system's technical capabilities for online, and product specification for both types of project. (...)
- ?? Agreement to the detail of each component: text, navigation methods/menus, audio, graphics, video. (...)"

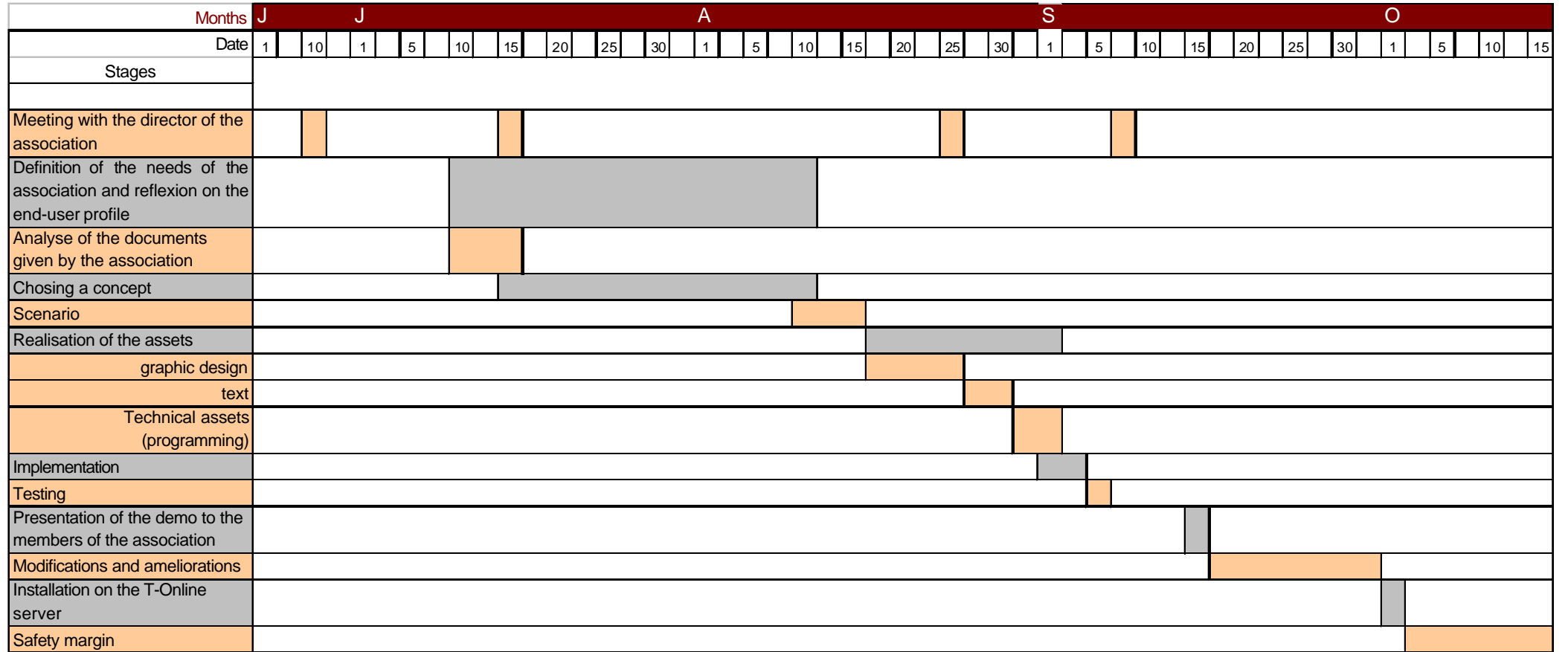
These were the particularities of this project's scheduling.

In order to get an idea of the rest of the time organisation in this project, please read the diagram on the following page.

2.1.2 Scheduling graphic

¹² Managing Multimedia: Project management for interactive media, England, Finnley

Figure 1 : Scheduling graphic



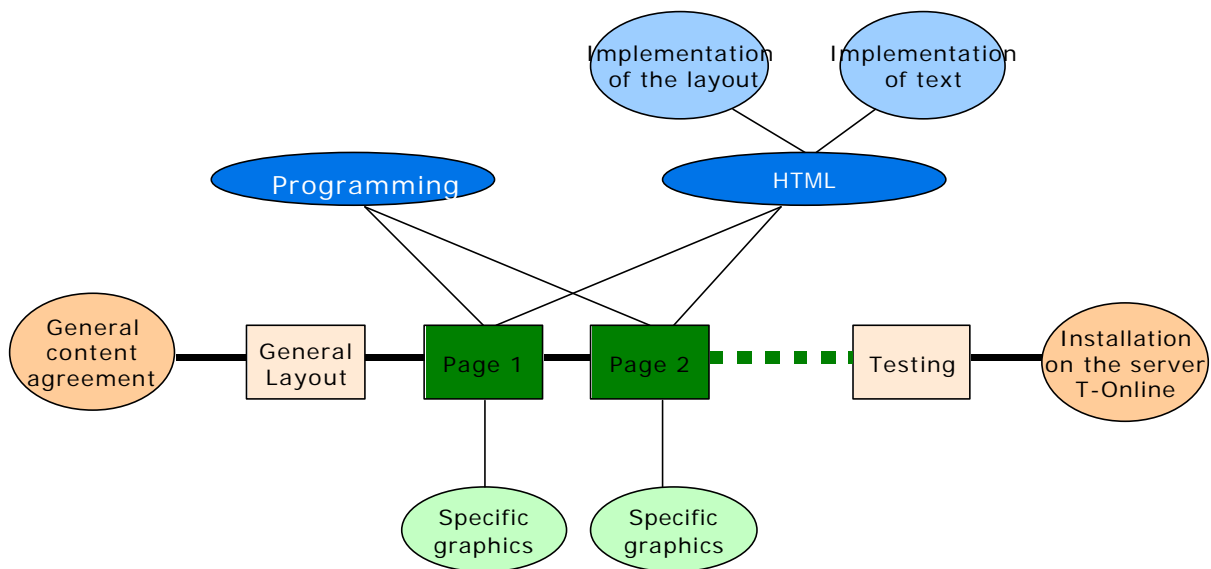
2.2 Organising the tasks

The organisation of the tasks is as important as organising the rest of the project. Indeed. In order not to waste time, steps to produce the site have to be made in a certain order , because some can't be made before other are ready.

To organise the tasks is also important when the project involves the work of several people. In the case of this project, there is no team concept (cf. part 2.3 Team concept), but still, it was necessary to plane each task in a specific way.

The following graphic shows the relationships between each task of the project. In Managing Multimedia¹³, it is called "Multimedia network analysis".

Figure 2: Tasks' relationships



¹³ Managing Multimedia: Project management for interactive media, England, Finnley, p.13

2.3 Team concept in this project management

This project is one example of what is said in Managing Multimedia¹⁴:

“There are some multimedia professionals who carry out all aspects of a project alone (...). However, the principal stages of a multimedia project are the same. Managing the project cycle and handling clients need the same skills whether you are working alone or as part of a team.”

2.3.1 Difficulties met working alone

Only one person took care of the whole project: organisation, planing, creation and controlling.

I must say that it is quite difficult to work like this, because there is no external input into the work.

First it is hard to evaluate oneself. It is easy to start with a wrong path and to go on a while before noticing that you were mistaken.

It is also not very simple to stay creative from the beginning until the end. I missed the efficient brain storming that should start any kind of project.

And more, with several people working on the same project, each one specialist in one domain, the tasks could have been managed quicker, and probably in a more efficient way. It is indeed quite difficult to be able to make a professional job in managing as well as in designing tasks, which are two very different ways of working.

But as said in Managing Multimedia again¹⁵:

“Because multimedia uses many skills, and because its people come from a variety of backgrounds, the multimedia environment does not have a single, defined way of working.”

It is possible to have personal methods when one is working alone. But the project management techniques help to keep in mind the most important objectives: quality, time and respect of the client's needs.

¹⁴ Managing Multimedia: Project management for interactive media, England, Finnley

¹⁵ Managing Multimedia: Project management for interactive media, England, Finnley

2.3.2 Ideal team for the project

Ideally (sic. Helen England in Managing Multimedia), this project should have had four people working on it:

- ?? A leader, who might have a media background and use it to help to the development of the project,
- ?? A “commercial” person, who should be the direct contact with the client and discuss the content and treatment,
- ?? Someone to produce design elements (graphics),
- ?? And someone to write the html.

2.4 Budget

The creation of this web site wasn't made under any financial conditions. But it is interesting to try to evaluate the costs for such a product.

Different sources give an idea of the costs for such a web site.

In Secrets of successful web sites¹⁶, David Siegel speaks about the average price for a small web site:

“In three weeks you can build a fast ten-pages site. It won't have much functionality, but it can serve the purpose(...). A three-person team will charge from \$15K to \$30k for such a site, depending on the quality and original content.”

In Multimedia Honorare, Leitfaden 1997/1998¹⁷, multimedia products are evaluated in detail. The following table shows the price for a site like the association's one, following the average value of the cheapest companies producing multimedia application. Because this is the first web site for a still non-professional in this domain, I think the average value between the cheapest and the most expensive service would have been too high.

¹⁶Secrets of successful web sites, David Siegel

¹⁷In multimedia Honorare, Leitfaden 1997/1998¹⁷, Text Verlag

Tasks	Time spent in hour	DM/hour	Total in DM	Total in \$
Simple presentation of the site	-	-	Fixed price 563,-	309,-
Contact and customer briefing	5	102,-	510,-	280,5
Project management	100	107,-	1070,-	588,5
Scenario	24	105,-	2520,-	1386,-
Illustration	10	88,-	880,-	484,-
Interface design	20	102,-	2040,-	1122,-
Screen design	20	102,-	2040,-	1122,-
Text redaction	8	81,-	648,-	356,4
TOTAL			10271,-	5648,4



Interface Design

"Multimedia has a chameleon-like ability to pretend to be many things. In designing an application you have the freedom to use so many disparate media types and techniques that it can be a challenge to understand which ones are relevant for a particular type of project."¹⁸

This problem can be resolved by properly analysing the purposes and meaning of the web site itself at the beginning. In the case of this project, because the main word is "simplicity", the design features of the site have to follow this concept.

3.1 Orientation

As explained in the first part of this paper (1.3) The orientation elements are very important, especially for the type of users the site is supposed to reach. As said in Screen-Design-Handbuch, there are rules for very efficient communication¹⁹:

"Die drei grundlegenden **Prinzipien** der visuellen Kommunikation nach Aaron Marcus:

1. Das Organisations-Prinzip : "Gib dem Nutzer eine einfache, klare und konsistente Struktur."
2. Das Ökonomie-Prinzip: "Maximiere die Effektivität eines minimalen Sets von Hilfsmitteln."
3. Das Kommunikations-Prinzip: "Passe Deine Präsentation an die Aufnahmekapazität des Nutzers an."²⁰

The following features try to follow this principles for clear communication.

3.1.1 Navigation elements

"Don't try to invent a new one. Instead, adapt an appropriate one for use at your site. People should not be impressed by your navigation. They should simply find it easy to get around your site."²¹

¹⁸ Managing Multimedia: Project management for interactive media, England, Finnley

¹⁹ Screen-Design-Handbuch, Frank Thissen

²⁰ The three main principles of the visual communication from Aaron Marcus:

- the organisation principle: "give the user a simple, clear and consistent structure"
- The economic principle: "maximise the effectiveness of a few number of help tools"
- The communication principle: "Make your presentation fit with the "record" capacity of the user"

²¹ Secrets of successful web sites, David Siegel

The purpose of the navigation elements in the association web site is to allow the user to know where he is at all times, and to know where he can go next. They don't have to think about what they've done before.

Because the same navigation elements exist on each page, users don't have to get used to new navigation elements each time they move in the site.

Frank Thissen advises²²:

„Die Navigationselemente sind sofort verständlich begreifbar. Ihre Bedienung muß nicht gelernt werden“

Another aspect is that the user should be able to recognise what is happening, where he is going, when he is using a navigation element.

That is why all navigation elements on this site are coupled with an "ALT" code, which makes an explanation appear about the direction of the button, when the user drives the mouse on it. That is what is said in Screen-design-Handbuch²³:

„Eine wesentliche Anforderung an Navigationselemente ist, daß für den Benutzer erkennbar sein sollte, was geschieht, wenn er das Navigationselement anklickt.“

For a similar purpose, each button in the main navigation box is highlighted when the mouse moves over it, and the button corresponding to the page where the user is, stays highlighted. So the user knows where he is.

Because a few users probably won't manage to get familiar with the navigation box, each page also has a button to go back to the home page, button with a clear text next to it, saying where it is driving to.

Another aspect: in order for the user to know if the computer "works", especially when he is sending a form, a JavaScript alert appears after clicking on the button "send". As said in Screen-Design-Handbuch²⁴:

„Und auch diese Kommunikationsform erfordert für den Benutzer Reaktionen des Computers, um zu verstehen, was der Computer tut, ob er eine Eingabe „verstanden hat“ und ob er noch ordnungsgemäß funktioniert.“

²² Screen-Design-Handbuch, Frank Thissen

The navigation elements are immediately understandable. It is not necessary to learn how to use them.

²³ Screen-Design-Handbuch, Frank Thissen

A very important requirement for navigation elements is that the user has to recognise immediately what is happening when he clicks on the navigation element.

²⁴ Screen-Design-Handbuch, Frank Thissen

This communication form also requires a reaction of the computer for the user, in order for him to understand if the computer „understood“ the command and if it is still working properly

3.1.2 Site map

As said in managing Multimedia²⁵:

“The difficulty for the developer is to decide how computer literate the audience will be, and how much guidance will be needed in the form of help explanations or aids such as route maps.”.

And in Screen-Design-Handbuch²⁶:

“Benutzer von Hypertext-Systemen haben häufig das sie verunsichernde Gefühl, Wesentliches übersehen zu haben. Hiergegen bieten Übersichten eine große Hilfe. Sie visualisieren die Struktur des Hypertextes(...).“

Because the profile of the user was defined as “no computer and Internet specialists”, a site map and some help information seemed necessary.

A Help button exists on each page, which drives to a page containing an explanation of the navigation elements and a site map in a table form which is clearly arranged.

The idea of distinguishing the terms of help and site map in two separate buttons was abandoned because of the risk that non-internet users don't understand the concept of site map.

The navigation elements on this page are the same, but are differently ordered. The purpose was not to charge the page too much with graphical elements. That why the main navigation box appears has an help feature, but is also clickable and works exactly in the same way as the navigation box on the other pages.

²⁵ Managing Multimedia: Project management for interactive media, England, Finnley

²⁶ Screen-Design-Handbuch, Frank Thissen

Users of hypertext systems have often the uncomfortable feeling that they've missed something important. Site maps offer a great help. They visualise the structure of the hypertext.

3.2 Layout

3.2.1 Colours

The colours in this web site, were defined according to the paper document given by the association at the beginning. Colours in these documents are pure colours (black, red and white, cf. annex n°2), which give an impression of seriousness and unity to the association. We've decided to use the same muster for the web site.

The colour red however was a little problematic, because of the usual meaning that people put on the colour red: activity, dynamik but also love, strength, passion and fire, danger, blood, anger (in Screen-Design-handbuch²⁷). To avoid a too strong meaning of the red in the web site, I've try to lighten it by using a special texture on it and by tring to reach a red where the dark colours (brown and black) are in minority.

I also made a test with an orange colour, because it seemed to the director of the association that it would solve the problem. But as orange also means brightness, fun and luck, and because it is very hard to find a nice orange with design's tools on computer, the idea was abandonned.

To compensate the strength of the red, I've decided to use a white background, which lightens the whole impression.

That is also what Frank Thissen advises²⁸:

"Lassen Sie den Hintergrund wirklich "in den Hintergrund" treten, beispielweise durch den Einsatz von ungesättigten Farben und dezenten Pastelltönen."

He also says:

"Der Einsatz einer begrenzten Anzahl von Farben (vier bis fünf), die zueinander passen, empfiehlt sich für normale Anwendungen."

²⁷ Screen-Design-Hanbuch, Frank Thissen

Let the background stay in the background, for example using non-saturated or pastel colours.

²⁸ Screen-Design-Hanbuch, Frank Thissen

It is recommended to use no more than four or five colours which fit together.

The other colours in the web site respect this principle. There are never more than 5 colours on each page. Only the Help page has more. The site map indeed, in order to be very clear, uses more colours

3.2.2 Graphics

The use of graphics in the association web site, were reduce to the minimum, first of all to try not to disturb slow machines with an heavy graphic design, but also because the meanings of the association activities couldn't really be illustrated with relevant graphics.

Rather than disturb the users with a lot of graphics without much meanings, it was better to create graphics helping the utilisation of the site. Despite what is said in Web Site Usability²⁹,

"But as far as we can tell, graphic design is completely unrelated to success at finding information on web sites."

some very well chosen icons are helpful for navigation in the site.

It is of course necessary to help the users interpret the icons properly. Such as is said in Managing Multimedia³⁰

"The user quite often has to learn what the symbols mean to be able to use the icons effectively."

This is why the icons in this web site are always combined with its meaning in text if necessary, like the up arrow, which has next to it the meaning "To the top", or the icon to go back to the home page.

Some icons don't have any explanations, like the Hebrew letters on the homepage, because they aren't relevant for the comprehension, but are simply esthetical and also signs which help for the recognition of the subjects.

The logo of the association didn't exist before and was created using the documents given at the beginning.

It tries to give an image of the association of seriousness, but also dynamism.

²⁹ Web Site Usability: A Designer's Guide, Jared M. Spool

³⁰ Managing Multimedia: Project management for interactive media, England, Finnley

3.2.3 Composition of the screen

The composition of the screen follows a linear model. The upper line contains the button "back to the home page", and the logo of the association.

The second contains the navigation box, the title of the page, and the main themes of the page in a kind of abstract.

Screen-Design-Handbuch³¹ advised the following, to avoid the problem of scrolling.

„Auch wenn die Akeptanz zu scrollen in den letzten Jahren zugenommen hat, ist das Scrollen nach wie vor problematisch. (...). Wenn es sich nicht vermeiden läßt, sollten Sie darauf achten, daß die wichtigsten Informationen im oberen, zunächst am Bildschirm sichtbaren Bereich unterbringen (...).“

Each page contains in this part either the clickable under titles corresponding to the different parts of the text, or an explanation of the content of the page.

The next part contains the text itself and the last line is for the copyright information and the e-mail of the webmaster.

Only the page with help subjects and the site map is composed a little differently.

3.3 Text

3.3.1 Home page

The home page is the most important to work on, because it is the first page the users will have contact with. It gives the image of the association and allows the user to know from the beginning what he will be able to find in the whole site.

³¹ Screen-Design-Hanbuch, Frank Thissen

Even if scrolling is better accepted than before, it stays problematix. If you can't avoid it, you should try to put the most important information on the top part of the screen, which is seen at first.

Eve Demazière says³²:

“Votre page d'accueil est tout à la fois votre carte de visite, votre devanture, votre “une”. Elle doit mettre à l'aise votre visiteur et lui donner envie de visiter la boutique, de feuilleter le journal, en lui donnant une idée de ce qu'il y trouvera et l'assurance...qu'il l'y trouvera.”

The home page of the site contains the logo of the association and the copyright information with the date of production of the document. With these pieces of information, the user knows who produced the site and when.

It also contains the titles of each page, as links, so that the user knows the exact contents of the site. For titles which are written with keywords in the navigation box , but which could appear unclear the first time there are seen on the home page, more explanation are written.

The home page is also important for indexing from web search engines. It starts the automatic work of these engines which go automatically to the rest of the site through the links of the first page.

As said in Managing Multimedia³³:

“The home page is all important. (...) The home page also has a secondary function when the site is indexed by a Web search engine. (...) the home page is also the starting point for a search engine working through the whole site, just as it is for a human visitor, and both need to be taken into account for the design.”

This is why the presentation of the contents on the home page had to be written and not in an image form.

3.3.2 Other text features

“The value of text tends to be overlooked by multimedia specialists, but it is an integral part of any application and needs to be thought through as carefully as the other media components. (...)Text is still a powerful way of communicate. It allows reader a lot more control than the other media components because they control their pace of reading. They decide how and when to assimilate the information.”

³² . Conception, suivi et animation d'un site web associatif, Eve Demazière

Your home page is your visiting card, your shop window and your front page. It has to make the visitor feel at ease, feel like visiting the shop, feel like opening the newspaper to know what he will find in it and be sure that he will find it

³³ Managing Multimedia: Project management for interactive media, England, Finnley

Because the web site of the association contains a lot of textual information, the text features had to be especially analysed.

The font which should have been used for the text in the web site is "Frutiger" because it is the font used for the name of the association on all paper documents. But because this font type is difficult to read on the screen, I've chosen a typical Internet font "Verdana". This font is also nice when it is bold or in italic. Only the logo of the association keeps the original font "Frutiger".

As explained in Screen-Design-handbuch³⁴, it is important to use bold or italic fonts to show of some part of the text, instead of underlined words which are traditionally considered as links in Hypertext systems.

"Für Hervorhebungen verwendet man besser kursiv oder fett. Unterstrichene Wörter sollten vermieden werden, denn sie signalisieren in Hypertextdokumenten einen *Link(...)*."

About the question "Should a web page contain a lot of white space or not?", there are different opinions.

In Web Site Usability³⁵, M. Spool says:

"Surprisingly, however, we found no indication that white-space is beneficial on the web. In fact, the more white-space there was on a site, the less successful users were at finding information."

But Mr. Thissen³⁶ advises:

„Geben Sie Ihrem Text „Luft“, lassen sie ihn atmen (...). Dadurch gewinnt Ihr text mehr aufmerksamkeit, wird leichter lesbar und wirkt bedeutsamer.“

For the web site of the association, because each page contains an abstract at the beginning, the user has the choice to scroll further or not. In this case, if the rest of the page is very long, it doesn't matter that much. And more, as an Internet user, I must say that I find light texts, with a lot of space to rest one's eyes, much easier and nicer to read.

³⁴ Screen-Design-Hanbuch, Frank Thissen

To show of part of a text it is better to use italic or bold font. The undelined words should be avoid, because they mean a link in Hypertext documents.

³⁵ Web Site Usability: A Designer's Guide, Jared M. Spool

³⁶ Screen-Design-Hanbuch, Frank Thissen

Give air to your text, let it breathe. This makes your text get more attention, be easier to read and act more efficiently.

3.4 Programming

3.4.1 *Html*

In the Html code of each pages, I've put comments to help the people who will have to update the web site later. I've tried to keep some flexibility in these comments, so that one page can serve as muster for any changes.

That's what David Siegel advises³⁷:

"User comments in your code to communicate to engineering and content people",
"Use exactly the same code on different pages to facilitate global search and replace."

I've used the Html version 3.0, with one feature of the version 4.0, the CSS Style Sheets. This feature may not work with old browsers but won't disturb the comprehension of the site if it doesn't work.

To get an idea of the Html code used, please consult the CD-Rom at the end of this paper (cf. annex n°3).

3.4.2 *JavaScript*

The use of JavaScript may be very problematic because not every browsers may be JavaScript enabled and because a lot of people may simply put the JavaScript function of their browsers off.

The problematic is explained in Managing Multimedia³⁸:

"However, while new Web browsers bring new technologies and techniques to the Web designer, not all Web users keep up with the trends, and so many use of new Web features has to be made knowing that not all potential viewers will see them"

But JavaScripts also helps to construct very clear documents and help for a clear navigation.

³⁷ Secrets of successful web sites, David Siegel

³⁸ Managing Multimedia: Project management for interactive media, England, Finnley

In the web site of the association, there are very few Java scripts. Some can't disturb the good operation of the site if the browser is JavaScript disabled. This is the case in the Navigation box, which shows a different face when the user moves the mouse onto it, helping for a clear navigation. But if the browser doesn't allow JavaScript, this function won't appear but the user will be able to use the navigation box anyway.

This is different for the internal links in the site content. In exactly five occasions, the user may click on a link, which is opened in an extra smaller window. It allows the user not to get lost while using the site. He always has a view of where he was, and can simply close this new small window to navigate further from the same page.

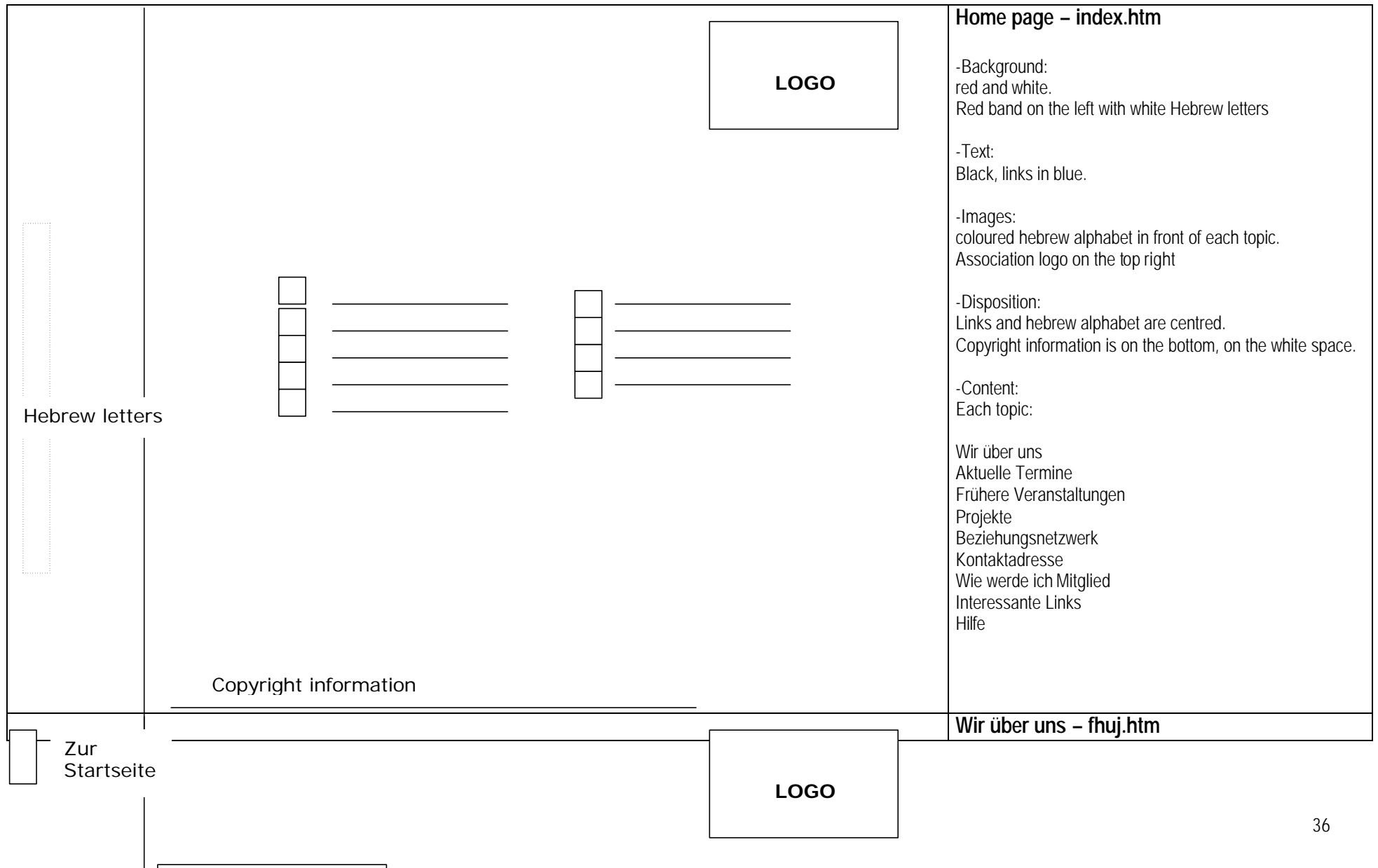
This feature is allowed by JavaScript. If the browser is JavaScript disabled, the user won't be able to open these links.

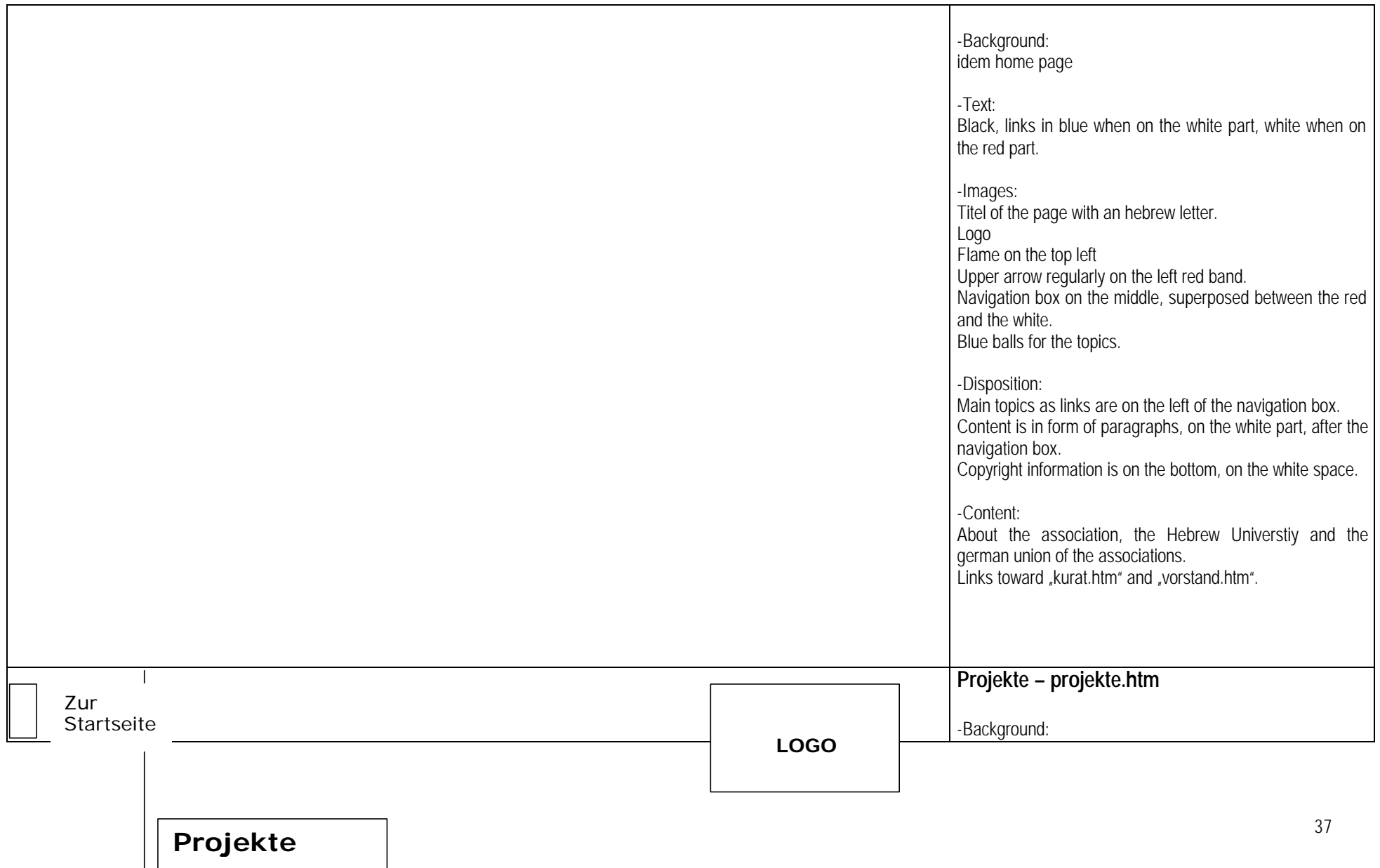
It can be problematic but fortunately, there is another way to open these 5 documents, and that, using the site map on the help page. A user who may have a problem to open this link will search in "Help" for an explanation and will be able to open the document.

Anyway, as JavaScript works as of Netscape 2.0 and Internet Explorer (Microsoft) 3.0, there is a better chance that every user's browser may accept JavaScript.

3.5 Scenario

The following pages show part of the scenario as it was written before starting the realisation of the site. As it doesn't give more information as the site itself (Cf. annex n°3: the CD-Rom), but rather shows a method, I didn't include all pages but rather included only three examples.





	<p>idem home page</p> <p>-Text: Black, links in blue when on the white part, white when on the red part.</p> <p>-Images: Titel of the page with an hebrew letter. Logo Flame on the top left Uppper arrow regularly on the left red band. Navigation box on the middle, superposed between the red and the white. Blue balls for the topics. Picture „Besucher“ from the newspaper . Pictures of the two students.</p> <p>-Disposition: Same disposition as the page fhuj.htm.</p> <p>-Content: Contents from the report written by the director about the projects of the association. Short texts from the two students about their experience in Israel.</p>
--	---



Final stage

4.1 Site testing

4.1.1 Method of testing

In order to test the site, twenty people were asked to respond to some questions concerning the contents of the site.

The questions were:

1. Which image of the association does the first page of site show?
2. What are the activities of the association?
3. How can you contact the association?
4. How much does a membership to the association cost?
5. When did the last conference take place?

People also had to give an idea of their experience with Internet.

About 30% of the people had a good experience of the Internet and the others were occasional users, knowing the basic commands of a browser (back and forward button etc.).

These people were theoretically the closest to the supposed user profile.

4.1.2 Results

To the first question, the keywords which came were sobriety, seriousness...

The other questions were found without much research.

An interesting point is that the experienced users didn't use the "help" part at all, but properly used the navigation box without having to use the back button.

For some of the non-experienced users, the site map has helped, but most of them have found their way better using first the button "back to the home page", and have chosen topics from the first page. After the second question though, 60 % of these people understood the purpose of the navigation box, used it and seemed to get a better idea of the structure of the site.

It is of course difficult to know if everyone is able to find their way around this web site, with only twenty tests. But the site has got less than 15 pages and it is likely that the majority of even non-experienced users will manage it.

4.2 To line up the site

4.2.1 *Technical problems by the installation and changes*

The installation of the web site on the T-Online server was planned for the 27th of September. What T-Online was advising was simply to use the FTP program of T-Online to transfer the data from the computer which is already connected to T-Online, to the T-Online server.

But because the computer of the association works under Windows 3.11, I had to change all data names before, which often included more than 8 letters and which were html extensions.

As said in Managing Multimedia³⁹:

“In Web site design there is more flexibility, and changes can be made efficiently without major disruption if component parts of the sites structure need changes. But many small changes quite quickly add up to days of extra work.”

These changes took quite a long time indeed, but the rest of the process worked without problem.

4.2.2 *Indexing the site*

In order to let the site be known on the international scene (so that people in Israel, who are interested in the association, can get the newest information), and in Germany, three main referencing steps have been made.

At first the site was referenced on <http://www.fritz-service.com/de/>. This tool allows you to make an automatic referencing of your site on several search engines.

You can find the list of available search engines for the indexing at http://www.fritz-promote.com/cgi-local/router.cgi?l=de&p=fritzde&s=pro_sublist.

Then, in order to expand the referencing in German search engines, the site Yahoo.de was chosen and the site Webbes.de for the area of Baden-Württemberg. In the first, the categories which have been chosen are Yahoo>Gesellschaft und Soziales>Multikultur.

In the second search engine, the category Webbes>Gesellschaft>Vereine und Verbände fitted perfectly to the subject of the association.

4.3 the web site in the future

³⁹ Managing Multimedia: Project management for interactive media, England, Finnley

4.3.1 Life duration of the site

The site of the association was constructed so that there is little need for updates. The events will have to be changed and maybe the list of members of the association. Some new projects may appear during the next years but probably not very much. That is why updates won't be necessary more than twice a year.

Because the site was constructed in a very simple way, it probably won't get old that quickly as for sites with very new technical features, which need to stay at the same level of technical quality all the time. Of course, the web will change, and in order not to appear old-fashioned, the association will probably need to improve the layout of its site within 2 or 3 years.

4.3.2 Updates

As explained in Managing Multimedia⁴⁰, the update and maintenance of a web site is a very important point to discuss with the client.

"If you are going to maintain the site, a whole set of agreements on how often, how much, and what to do about introducing new elements will be needed. Maintenance is often forgotten, but is crucial for all companies to consider."

In the case of this web site, it has been agreed with the "Hochschule für Bibliotheks- und Informationswesen Stuttgart", that each student getting a scholarship from the association for an internship or one year studies at the Hebrew University of Jerusalem, should take care of the necessary updates of the site during the year following his or her stay in Jerusalem. As each student of this school get at least a basic training about how to conceive web sites, simple updates won't be problematic.

⁴⁰ Managing Multimedia, England, Finnley



This paper showed the principles and methods of a project management for the creation of a web site. The web site of the association "Freunde der Hebräischen Universität Jerusalem in Baden-Württemberg e.V." has been created following a structured analyse of the needs and purposes connected to it, of design questions and of technical features. Actually this web site responds to all objectives.

The question is now : Will the web site last as planned?

As Eve Demazière explains in her document about a web site for an association⁴¹, a good web site is the one which changes and lives. That is why it is necessary that the association look after its evolution. There are indeed too many sites which are well done but which die because they are disconnected from the activities and the motivation of an association.

Hopefully, it will be different with the "Freunde der Hebräischen Universität", although most of the members of the association showed little interest when I presented the final product. The web site will have to be well-tryed in order to convince the members of the association and everyone who believes in the relationships between Germany and the Hebrew country.

⁴¹ Conception, suivi et animation d'un site web associatif, Eve Demazière



bibliography

Spool, Jared M. Web Site Usability: A Designer's Guide. San Francisco, California: Morgan Kaufmann Publishers, Inc. , 1999.

Siegel, David. Secrets of successful web sites: project management on the world wide web. Indianapolis: Hayden Books, 1997.

Thissen, Frank. Screen-Design-Handbuch. Heidelberg: Springer-Verlag, 1999.

England, Elaine; Finney, Andy. Managing Multimedia: project management for interactive media. 2nd edition. Harlow: Addison-Wesley, 1999.

MultiMEDIA-Honorarleitfaden 97/98. In: Multimedia Praxis, Band 9. München: HighText Verlag, 1997.

Demazière, Eve. Conception, suivi et animation d'un site web associatif, 23.09.1999.
<http://www.internatif.org/eve/serveurs/>

