

Models of Information Retrieval using HyperCard

Special Project Report

Submitted by

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Indian Institute of Technology, Bombay 400 076

Project Report submitted in partial fulfilment of the Master
of Design in Visual Communications

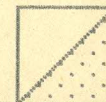
By Deepak G. Patil
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Guided by
Prof. Ravi Poovaiah

Industrial Design Centre

Indian Institute of Technology Powai Bombay 400 076

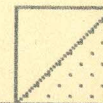
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Ravi Poovaiah
14/4/88

Acknowledgement

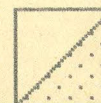
I
would like to
thank
Prof. Ravi Poovaiah
for
his guidance
and
all those
who
helped me from time to time
in completion of this project





Introduction

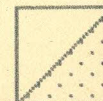
The project deals with HyperCard program of Apple Macintosh; to explore various information retrieval methods which would be useful for Designers.



Approach

The project is done as stacks on the HyperCard which shows various models in which the information can be retrieved. The information can be Static (as in the book) or Dynamic (video) or User Dependent or Interactive (games).

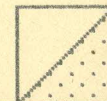
This report itself is a stack on HyperCard which also has an access to these models.



The Work

The models are stored in the "Models Stack" ;
The stack "Structure" facilitates the user in
knowing the technicalities involved in making
the Models Stack and allows him an easy
understanding of the overall information flow
in the stack.

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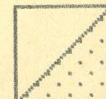


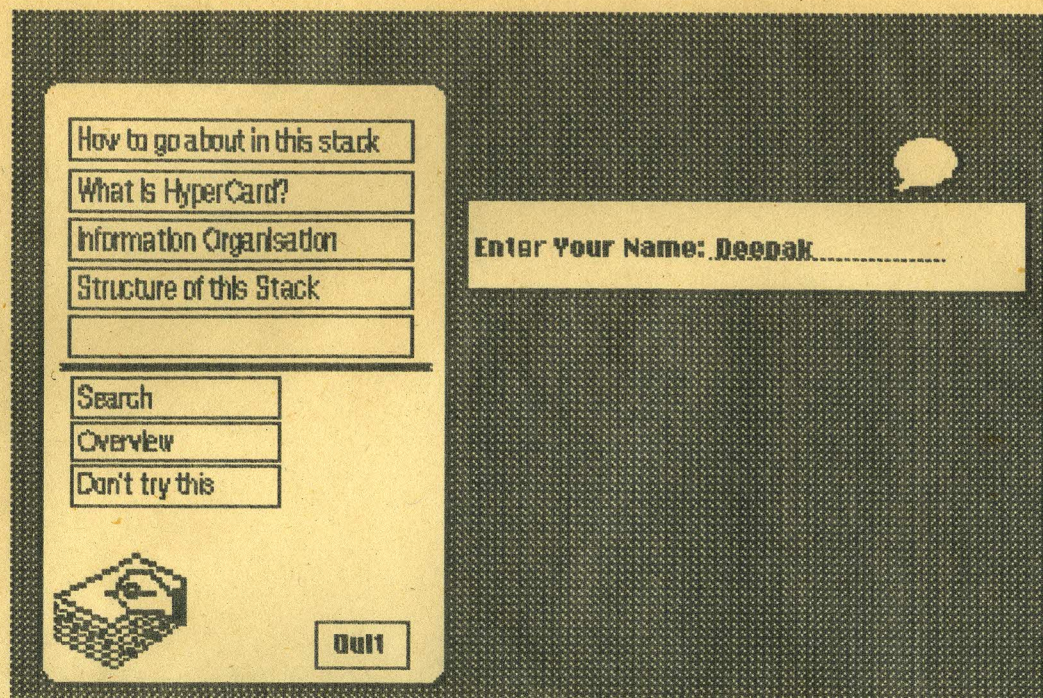
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The Work.....

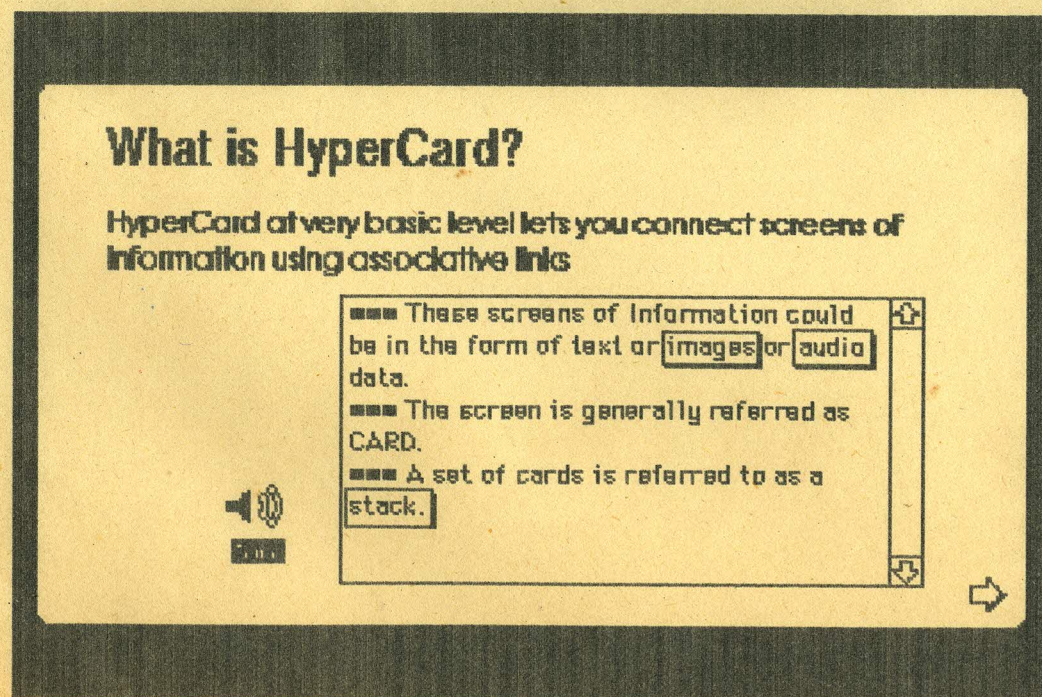
The Models Stack is different from "Help" stack provided by the HyperCard, in a way that Help talks about the physical use of the commands / operators / scripts. Where as "Models Stack" shows the conceptual use of them.

Deepak's
Models
Stack





This and the following pages show the screen dump of the stack made to explore the Information Retrieval structures.



What is HyperCard?

It provides editors to create cards or LINKS

- ■ ■ A text editor which is in the form of 'FIELDS'.
- ■ ■ A Graphic editor which has a tool box and is in the form of 'Back Ground' or 'Foreground'. has
- ■ ■ For links it provides a 'Link Editor' which is invoked thro' Buttons.
(Links can also be made thro' SCRIPT)



What is HyperCard?

HyperCard at a relatively advanced level

- ■ ■ It provides you with collaborative work Environment (Large number of Individuals working on one project).
- ■ ■ It makes communication Links possible.
- eg. It can make telephone call for you !
(and send and receive messages as well !!)

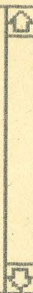


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What is HyperCard?

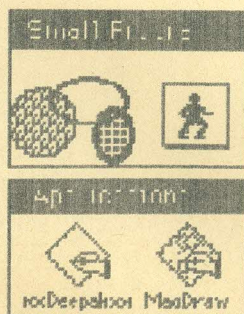
When you use a HyperCard application, what you see is the 'User Interface'

■■■ The HyperCard has two distinct sides, one is 'Front End' or the User Interface and other is the 'Back End' or the programming for the application.
■■■ The 'Smartness' of the Interface depends upon the sophistication of the Program. The communicability of the Program depends upon the 'Design' of the Interface.



What is HyperCard?

The Back End is the Script



■■■ The script at a basic level is the Linking Process.
■■■ At advanced Level the script itself has its own programming Language 'HyperTalk' and can develop not only into smart links but into complex programs.
■■■ The Back End also could be a external small Program (as Find File in the apple menu) or Large application which run



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- The script at a basic level is the Linking Process.
 - At advanced Level the script itself has its own programming Language 'HyperTalk' and can develop not only into smart links but into complex programs.
 - The Back End also could be a external small Program (as Find File in the apple menu) or Large application which run from the operating system. (as MacPaint)
 - eg. Here is an example of "small program" which draws random number of circles on the screen and provides means to clean the screen. (Control being in HyperCard)
- The second example "xxDeepakxx" is an external program which operates similarly but from the operating system, here the control is passed outside the HyperCard and the application is run.

What is HyperCard?

Compared to other programming Languages

●●● The general Programming language doesn't provide anything more than the Back End. The program itself should be written so as to provide communicable Front End. But then this Front End is very much limited because to have a well designed Front End, you need a lot of programming.

●●● HyperCard, on the other hand,



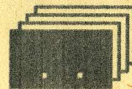
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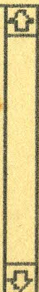
●●● HyperCard, on the other hand, provides very easy means to design sophisticated Front End.

Information Organisation

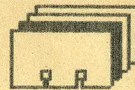
Stacks of Cards



●●● The information which is contained by a card is stored in the stacks.
●●● The stack as the name implies, is a set of cards. Depending upon the authoring concepts these cards are linked together.



Information Organisation



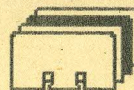
The simple Linkages:



●●● Linear structure is the simplest form of the linkage in the HyperCard.
●●● The cards are linked one after the other and may appear on the screen one by one, waiting to be invoked by the mouse or appear like a animation. When the information can be categorised in different sections / units / subunits there of, the structure well suited could



Information Organisation



The links are not every thing there could be sub-paths



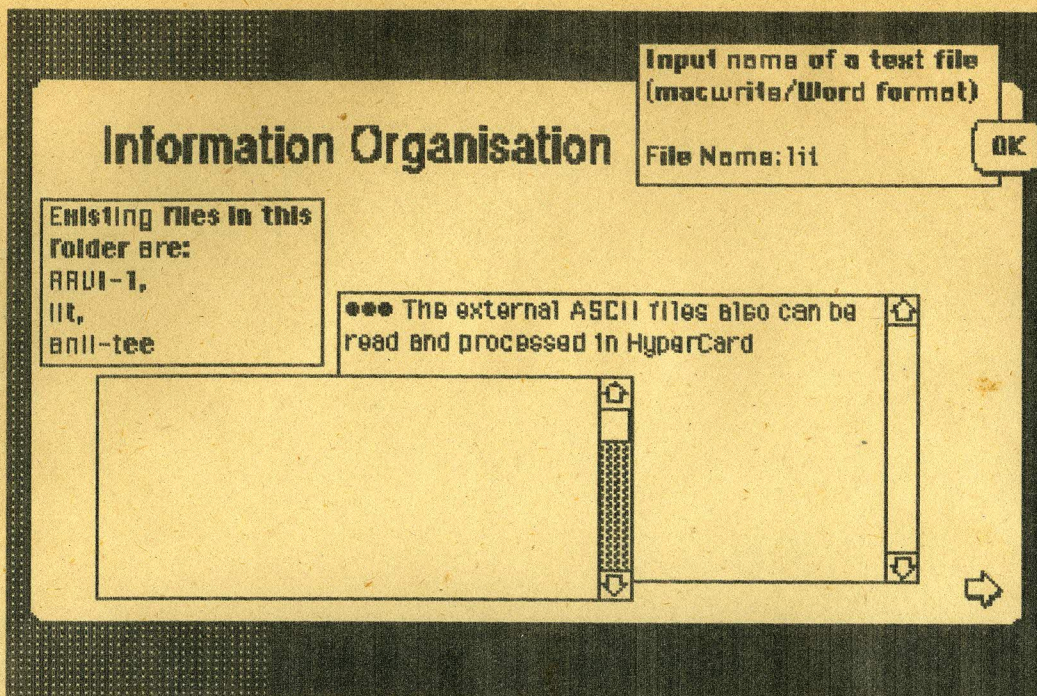
●●● Though grossly HyperCard follows simple structures like linear or tree or combinations of them, within them it can have different sub-paths.
● For eg. It can pick up text from 6th card, add it to the first cards some part of text and present it to you on the 10th card, but though this is one of the features provided by the HyperCard, it may not be



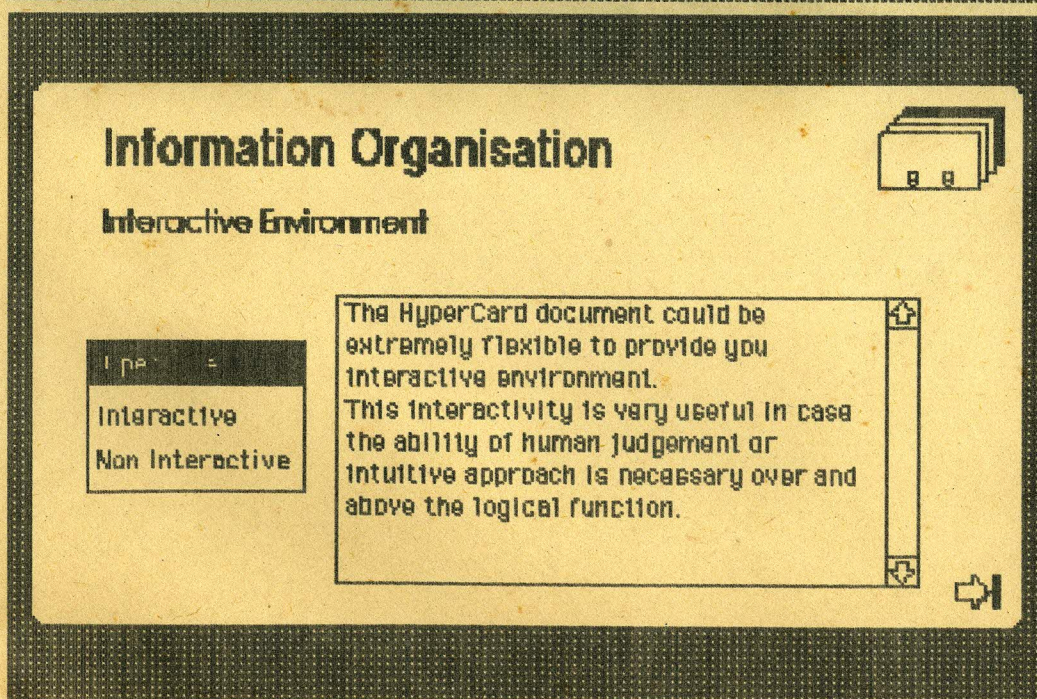
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- Linear structure is the simplest form of the linkage in the HyperCard.
- The cards are linked one after the other and may appear on the screen one by one, waiting to be invoked by the mouse or appear like a animation. When the information can be categorised in different sections / units / subunits there of, the structure well suited could be a tree structure. Where a card also acts as a node having one or more branches; These branches could be further branched or may follow linear structure.

- Though grossly HyperCard follows simple structures like linear or tree or combinations of them, within them it can have different sub-paths.
- For eg. It can pick up text from 6th card, add it to the first cards some part of text and present it to you on the 10th card, but though this is one of the features provided by the HyperCard; it may not be used so crudely!
- This compatibility with data processing is possible not only inside a stack but across stacks and outside HyperCard environment also.



This and the following pages show the screen dump of the stack made to explore the Information Retrieval structures.



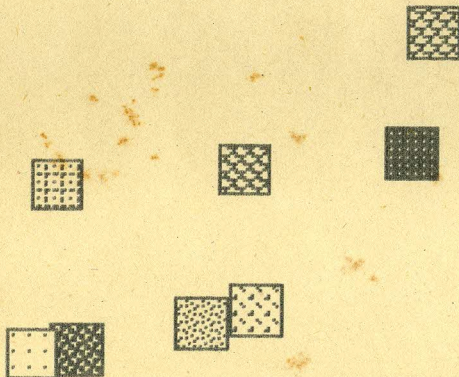
Clicking on any square either
multiplies it or destroys it,

You have to make 19 squares
on the screen.

=====
Here you go !
=====



In case of ERROR: Hold Command Key and press Tab



Click here
when over



In case of ERROR: Hold Command Key and press Tab



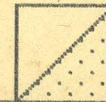
Click here
when over

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