

“Files, files, files”

There are sooooooooooooo many files in our computers

and it is bound to increase in the near future....

We are going to have

Larger hard disks

Internet, local network connectivity,

File sharing

**We are going to store large numbers of files on
the networks and local disks**

Maintenance and retrieval become tougher.

Alternates to file management system for window

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June 2004
IDC IITBombay

Presentation Plan

-Process	Objectives	Premise
-User study /methods.	Initial Concepts	Final concept
-Common sightings		
-Observations/Findings		

Scenario of use

-Current system:

File management for project 3

-New system usage scenario

Explain/ illustrate separate components

Objectives.

To come up with alternatives / improvisation / add-ons
for windows Explorer.

Better control, screen real-estate, Extra functionality, Consistent
conceptual models

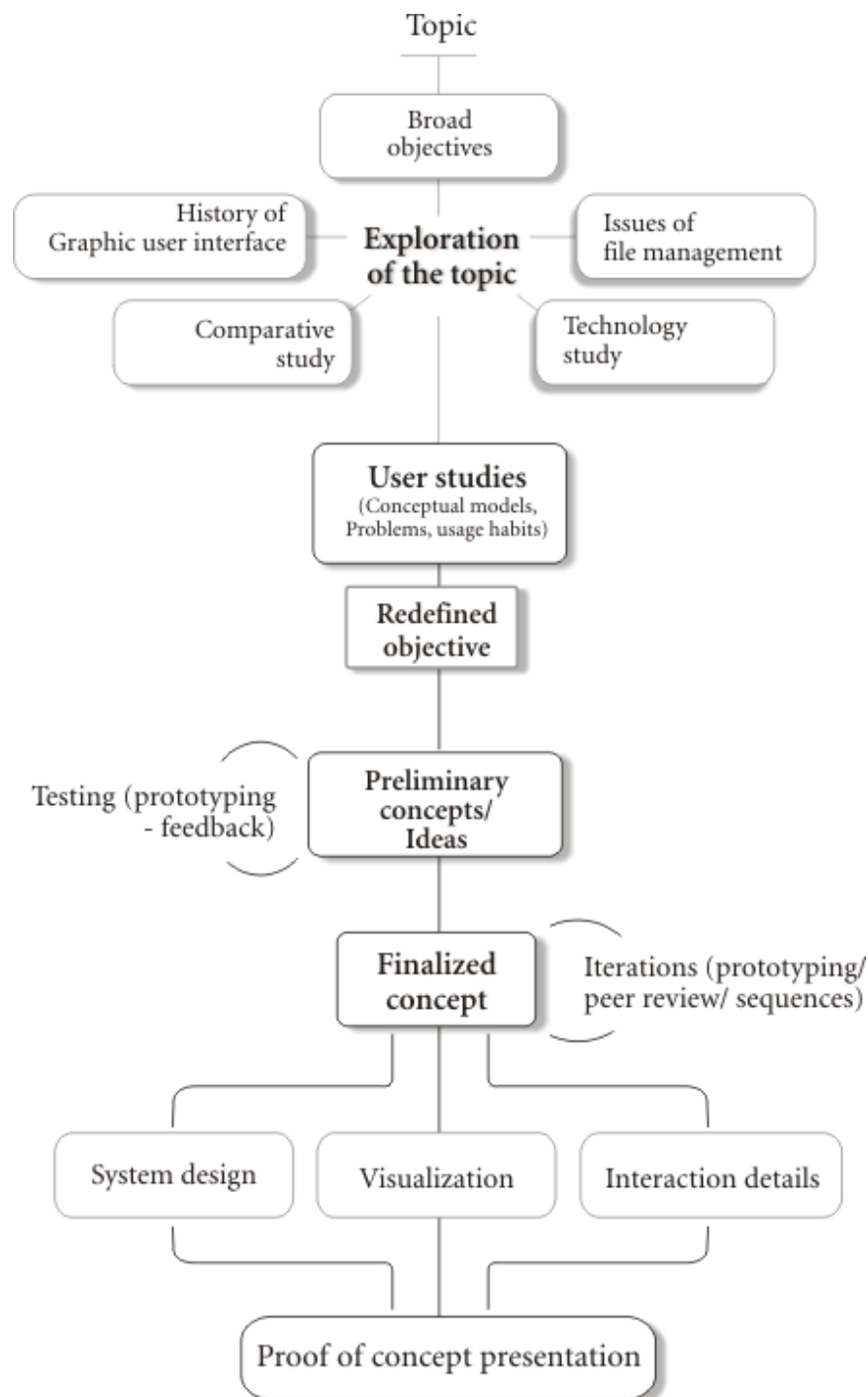
Support natural / intuitive ways

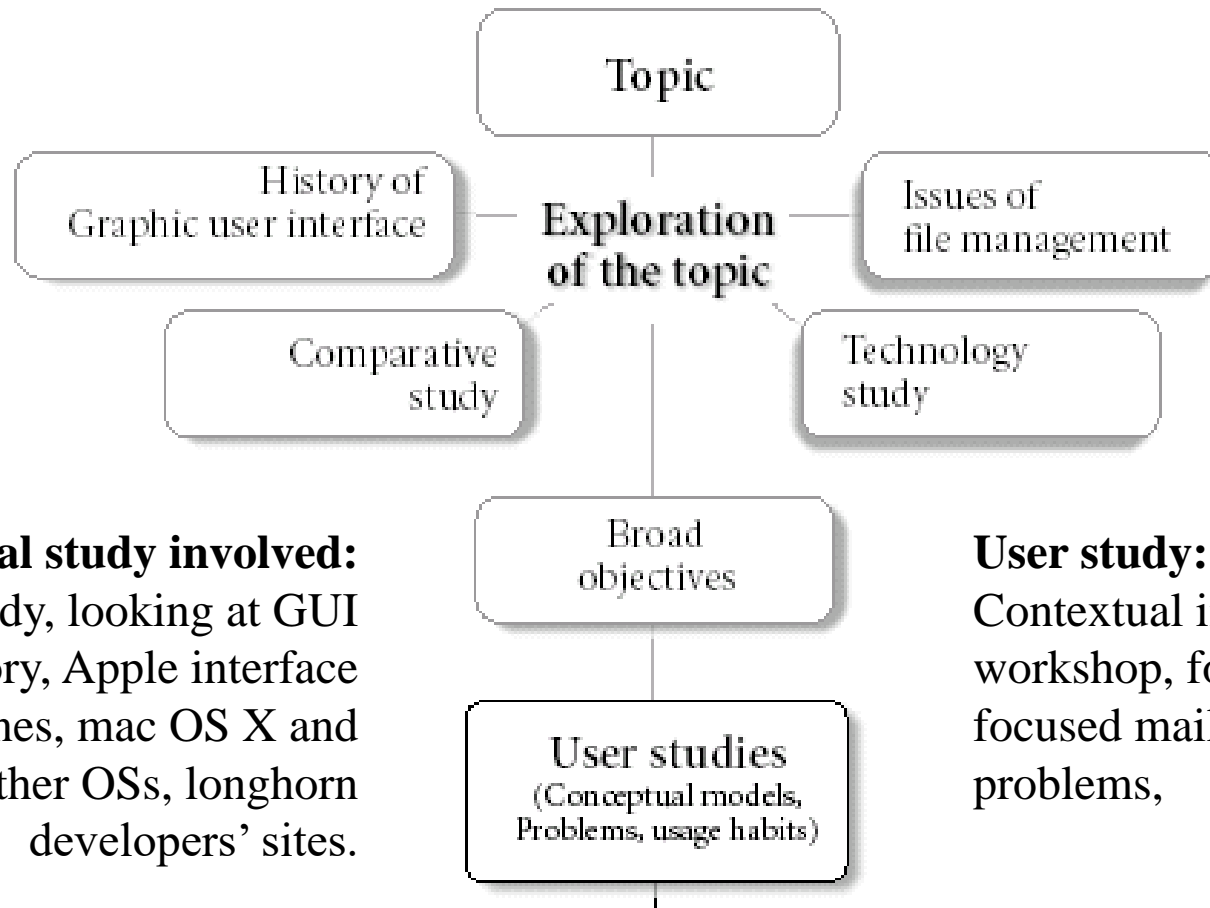
Fetching required files without knowing file name.

To explore alternate visualizations,

Leverage on system intelligence

Establish a two way link: where the computer understands the user





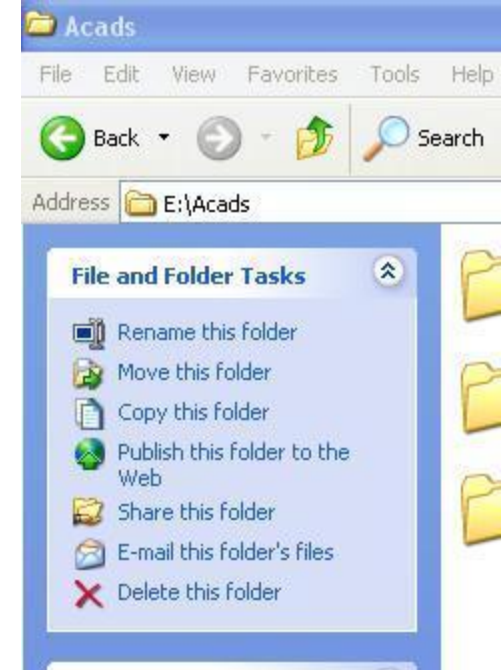
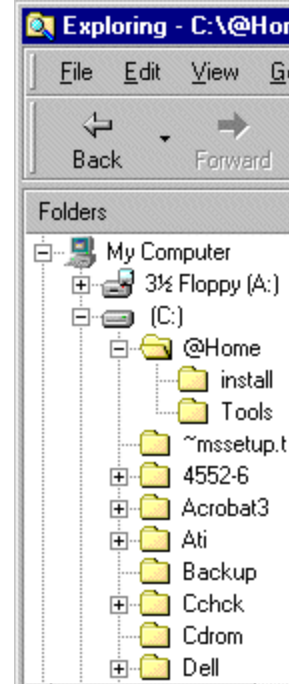
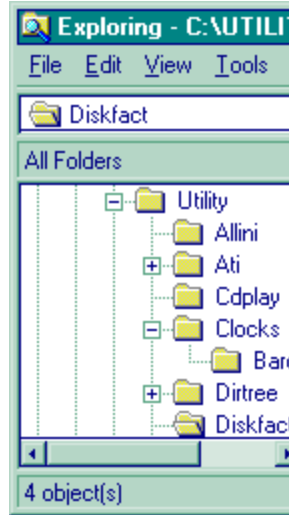
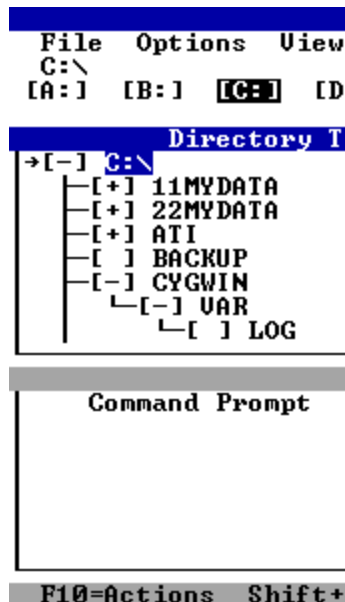
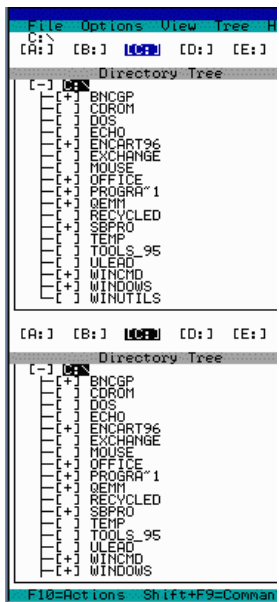
Initial study involved:
Web study, looking at GUI history, Apple interface guidelines, mac OS X and other OSs, longhorn developers' sites.

User study:
Contextual inquiry, HCI workshop, forum posting, focused mails, asking for problems,

Initial study

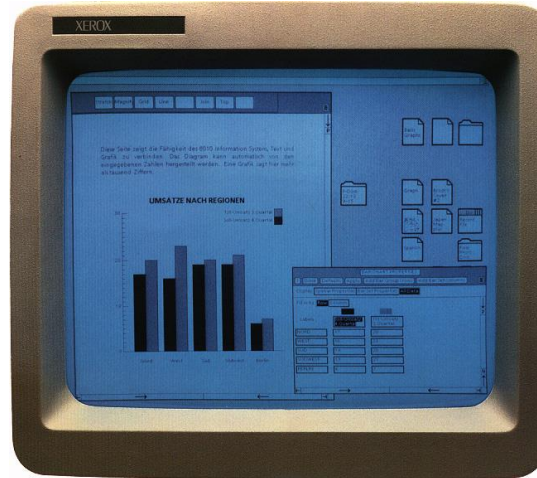
Systems related issues:

Our needs have increased, MS has not changed
Interface/interaction-Paradigms have shifted.



Systems related issues:

Our needs have increased, MS has not changed
Paradigms have shifted by WIMP stays.



Intelligent technologies for rescue & Emerging new category of users.

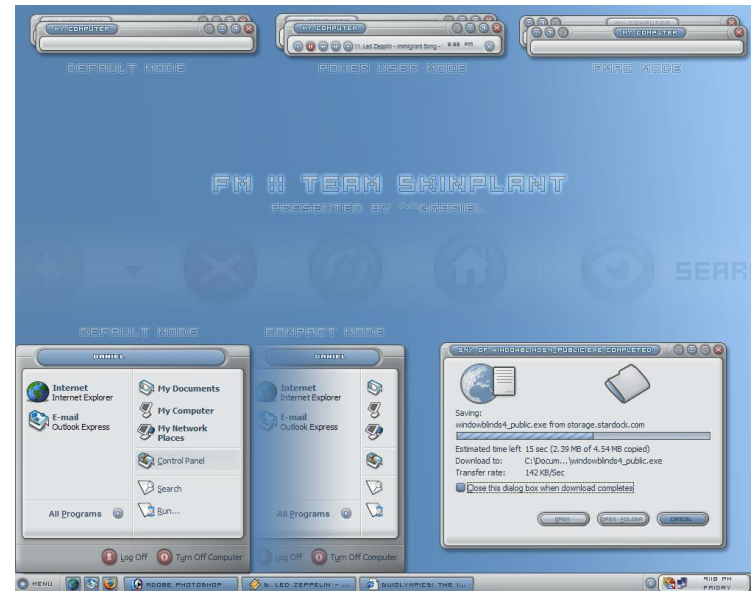
Google™
India

OPERA
software



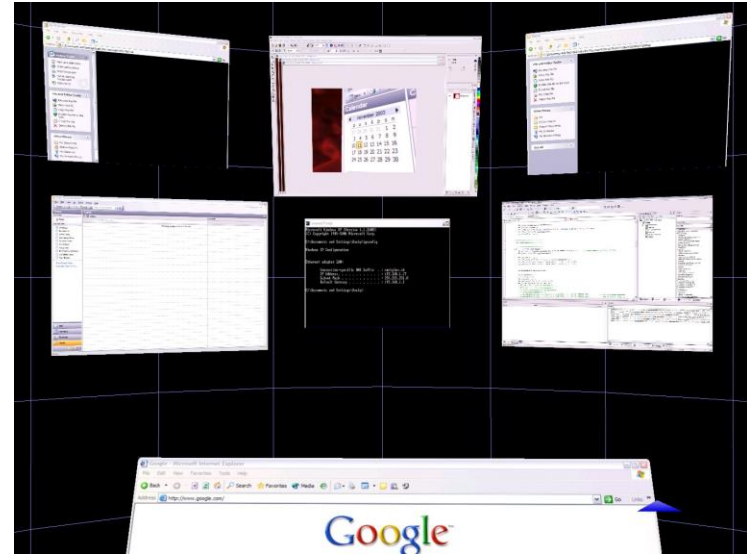
Attempts to make a difference..

Desktop enhancements



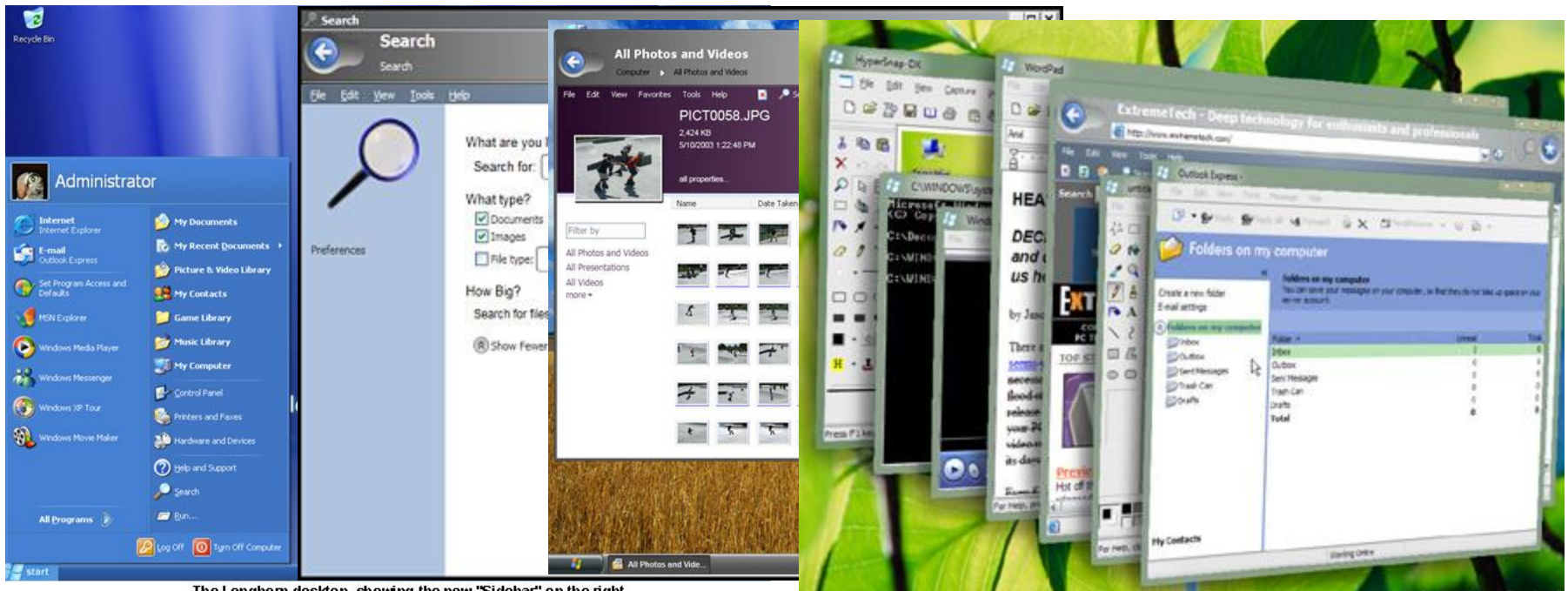
Attempts to make a difference..

3d environments



Attempts to make a difference..

Windows longhorn



“Issues, **issues**, issues”-

user study

To identify the problems and the rationale behind the user actions



user study

Contextual Inquiry (CI) workshop

Human-Computer Interaction (HCI) workshop

Posting in forums

Focused Mails

Common sightings

Cluttered desktops

Many many cds without even knowing what's inside in the cd.

Documents titled '*dear sir.doc*', '*untitled.doc*', '*p28-marcus.pdf*'

Same folders in multiple drives

Both compressed files and uncompressed file in same folder

People not able to find files from local disk and resorting to google.

By nature most electronic information are..

-difficult to organize.

-difficult to find.

The matter of file managements problems are 2 fold.

Problems **centered on people.**

Problems **centered on the system.**

But...Why we don't organize our files:

1. We find such tasks exceedingly boring.
2. We consider “**working**” as only time spend on project
3. Some times things get too complex that we just don't know how to do.

In addition, we have these tendencies.

*Retaining everything ... make sure, noting
important is deleted*

Work for the moment, just get the job done...

Make temporary logics for storage,

Misuse the freedom given for storage.

We can't ask people to change, **they wouldn't.**

What we can do is that

We can **build systems which support their habits**, which accommodates their shortcomings and get their job done.

Unnatural vs Natural

- | | |
|---|--|
| 1. Keeping track of the file names, logical file names. | 1. Group related things together, tagging, 'Chunking' |
| 2. Keeping track of precise paths, locations, file types. | 2. Keep things in a particular location, as per priority |
| 3. Creating logical deep folder structures. | 3. Annotate, put marks, tag, colour coding |
| 4. Keeping multiple copies in different locations | 4. Personalize things to suit our needs |

Current usage scenario

Some breakups

- not able to find the last worked file in a particular folder
- not sure which folders where updated.
- don't know what the subfolders and contents from are outside.
- when saving file, don't know where it's saved
(in a cluttered desktop)
- Reached unmanageable limits 3-4 many times.
- lots of repetitions at various places
- Lack of supporting file management tools.
- Resetting of the context--auto arrange

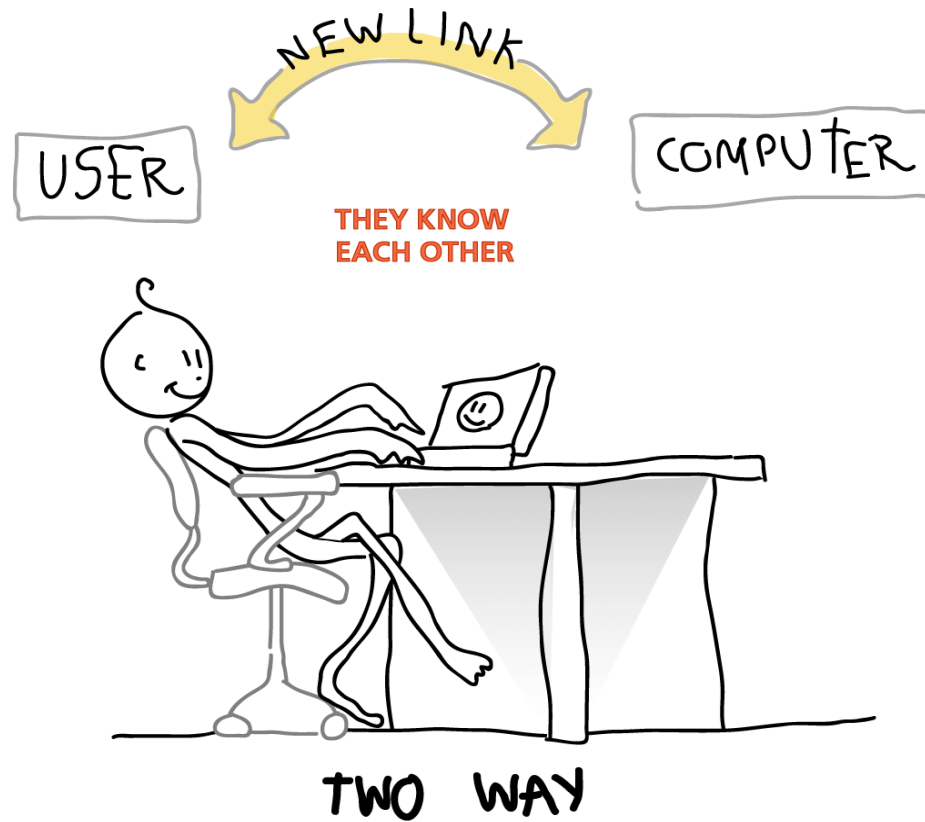


Then:

U had to type everything

Remember file names.—memory load

Make rigid structural hierarchy



NOW

You choose & pick

Less dependency on filenames.

Rick relationships

Humans better at:

Detect stimuli in noise

Recognize patterns / abstracting it

Generalize from observations

Remember principles and strategies

Draw on experience and adapt decisions

Recollect past with **small clues** are provided.

Computer/ Machines better at:

Count or measure physical quantities

Process quantitative data

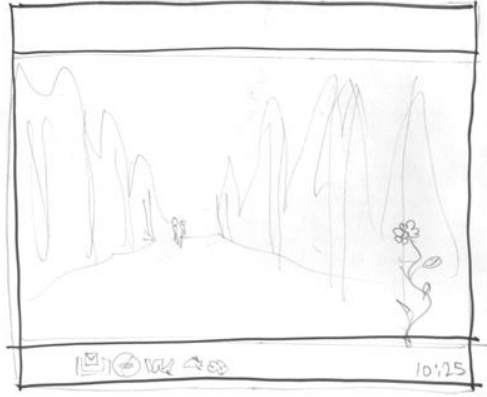
Monitor specified events

Recall quantities of information accurately

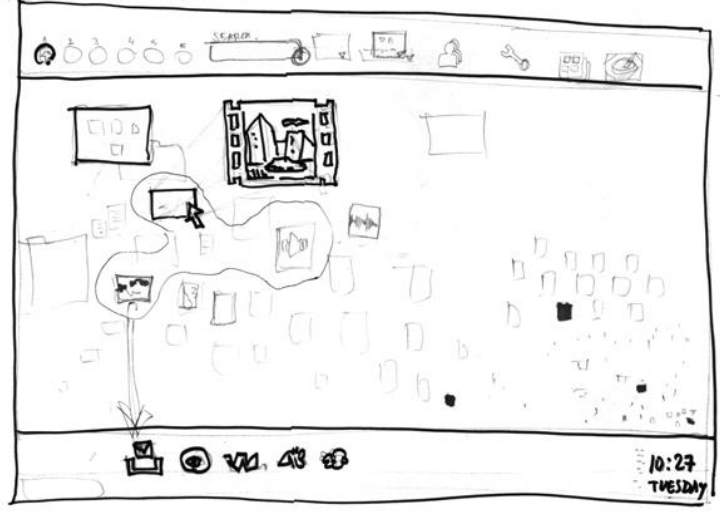
Maintain performance

Findland.com

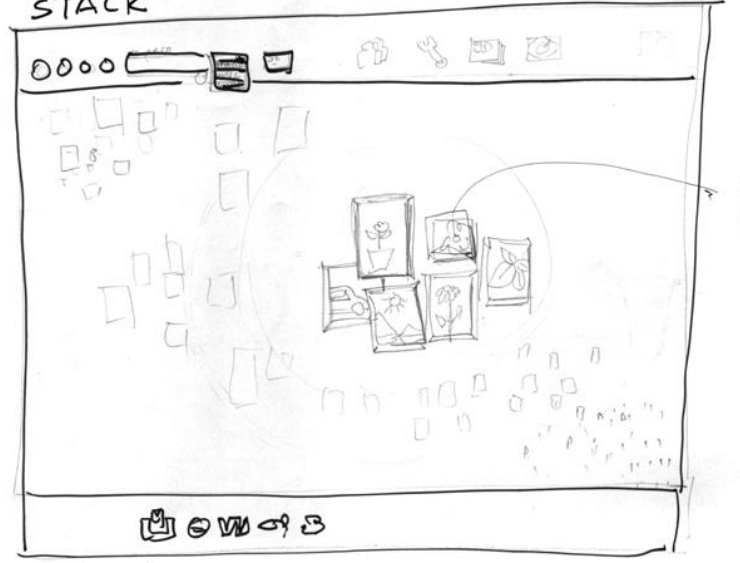
DEFAULT DESKTOP ①



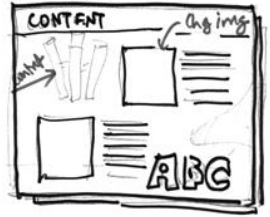
DEFAULT VIEW (FILE VIEW) ②



STACK



ANNOTATION



Final concepts premises

- 1. Wish I can get back the context of work.*
- 2. Can't the computer learn to utilize the traces I leave behind, when I am at work?*
- 3. Wish I had a unique place for my work related files.*

Final concepts
premises

Spatial metaphor
Zooming paradigm
Recognition based
Task orientation
Affective computing

Usage scenario

Easy navigation

Tracking

visual cues

Suggestions

Options

Multiple views

Relationships



“View port” is a recognition based file system; supporting informal ways to manage files. The new visualization allows for a better control and allows for quick, efficient ways to find a required file.

We were talking about

Spatial metaphor
Zooming paradigm
Recognition based
Task orientation
Affective computing

TRACKING

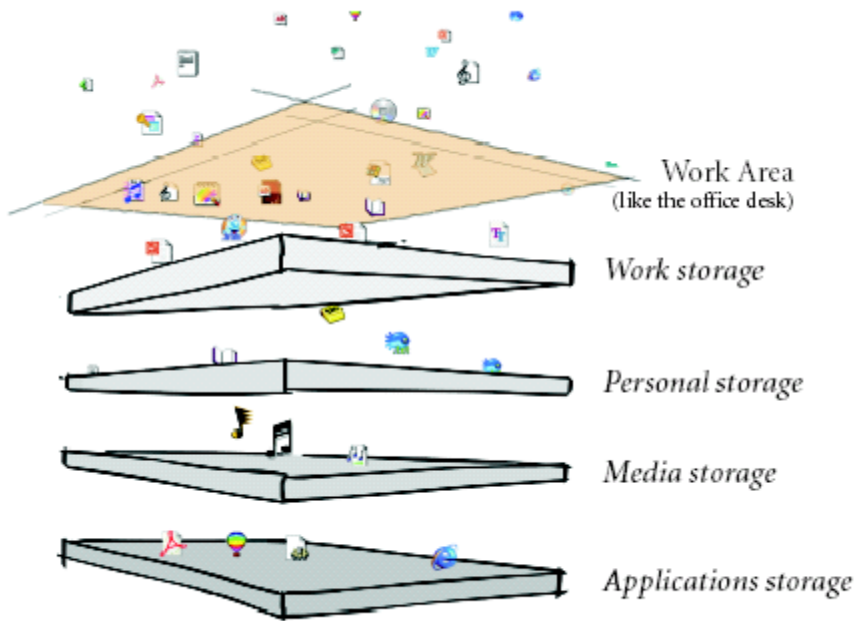
CLUES
SUGGESTION

OPTIONS

MULTIPLE VIEWS

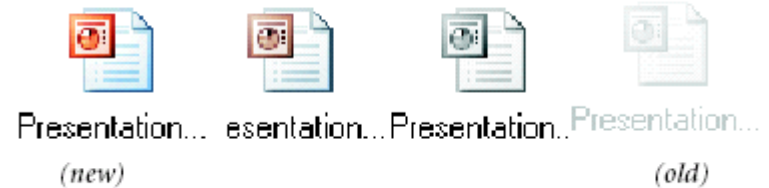
RELATIONSHIPS

System Overview



Visual cues:

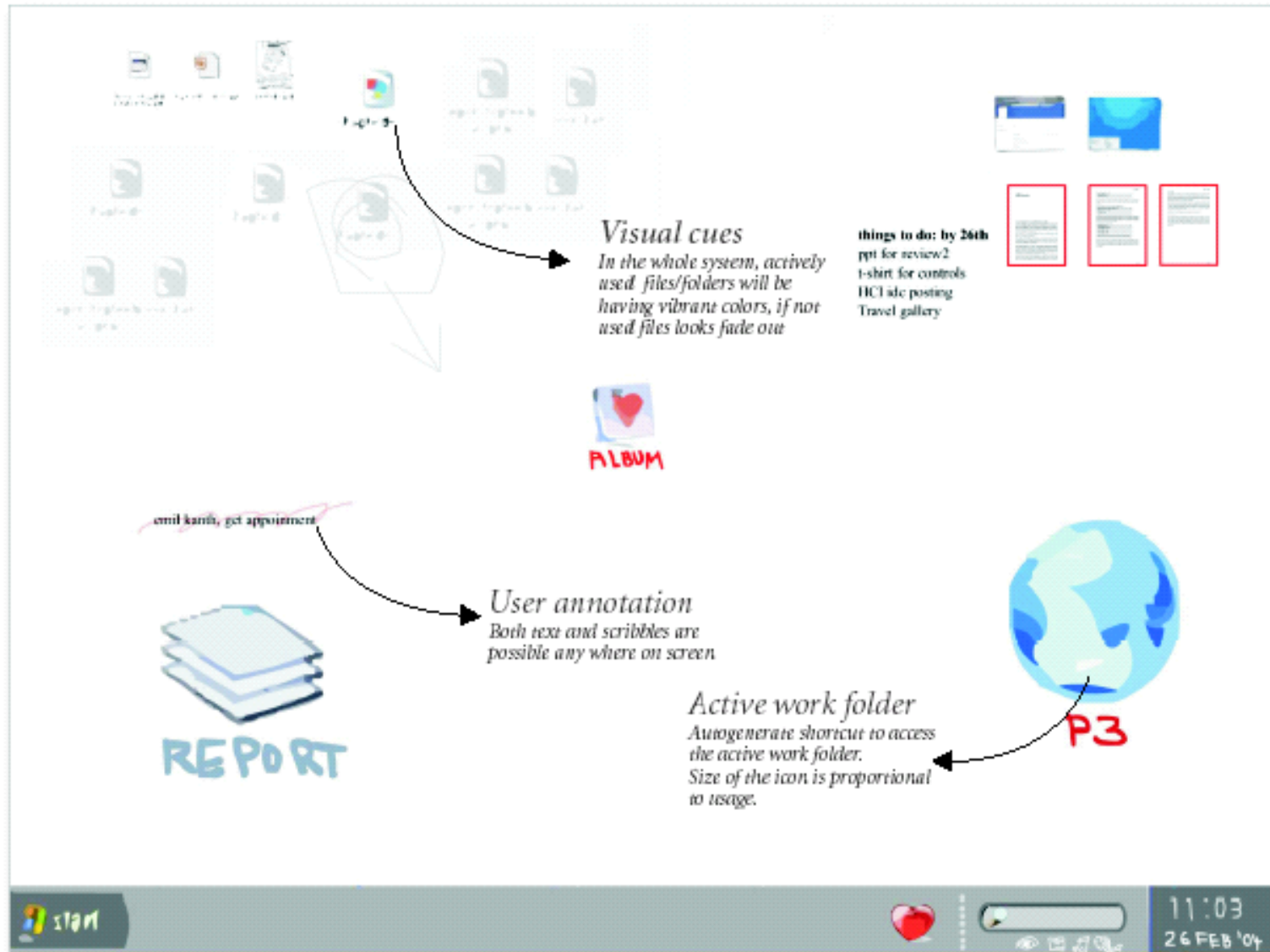
Actively used file → *not accessed for a long time*



Files principles:

- Html files represented as a single file
- Program files will be represented as one icon only
- All files extensions to provide for multiple resolution thumbnails previews.
- Documents will support versions, single file will contain the various versions

Work Area:



















Spatial metaphor

1.Ease to learn:

Things in space adhere to certain physical laws that we are familiar with and always behave predictably.

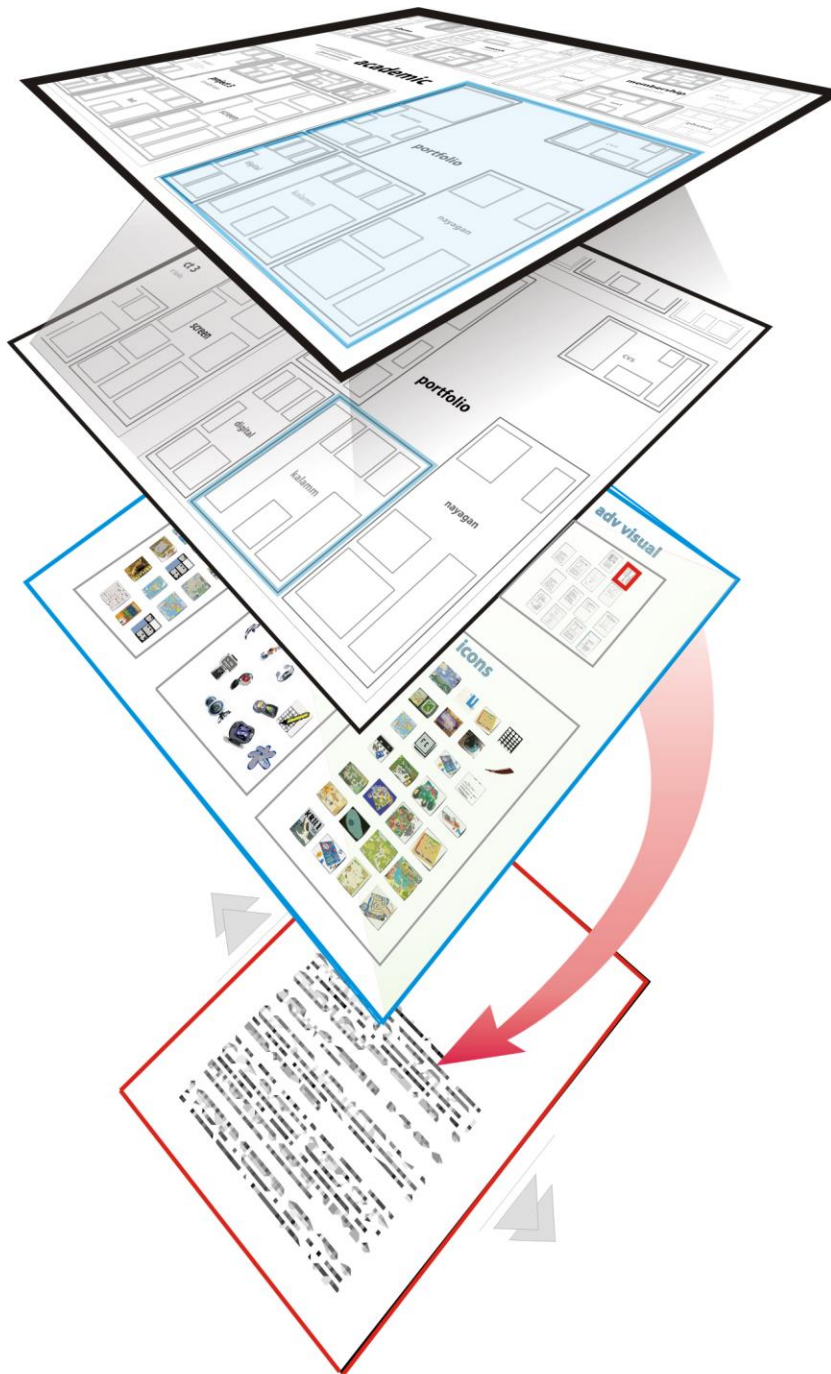
2.Memorable:

Objects in space do not move or change on their own and since we tend to form relations

3.Efficient:

Since they are easy to learn, remember and distinguish, they are naturally highly efficient.

4.Satisfying:



Focus + Context

automatically, expanding and shrinking
Using the full screen real estate.

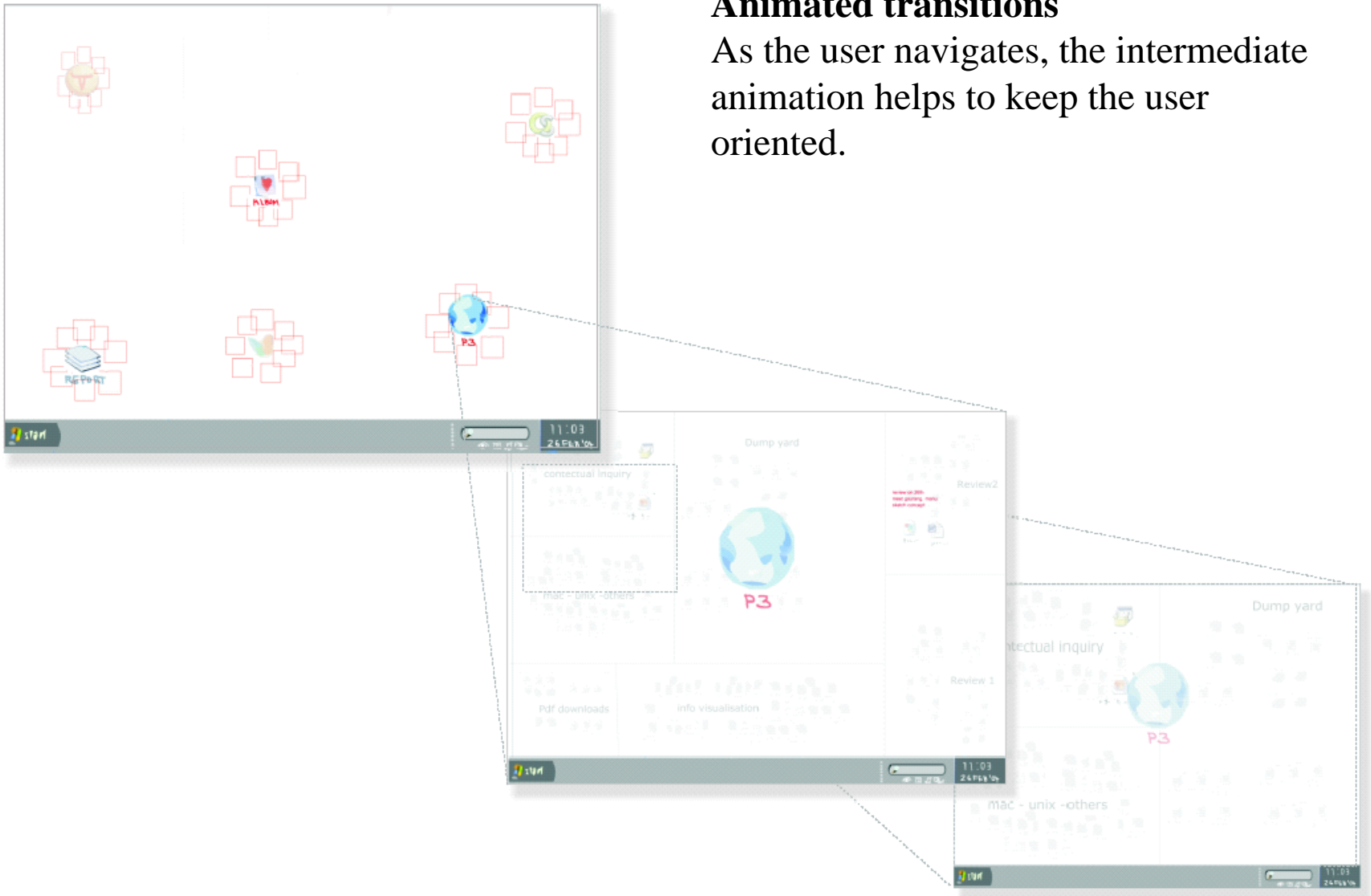
Thus, the user focuses on information
itself, rather than opening and closing

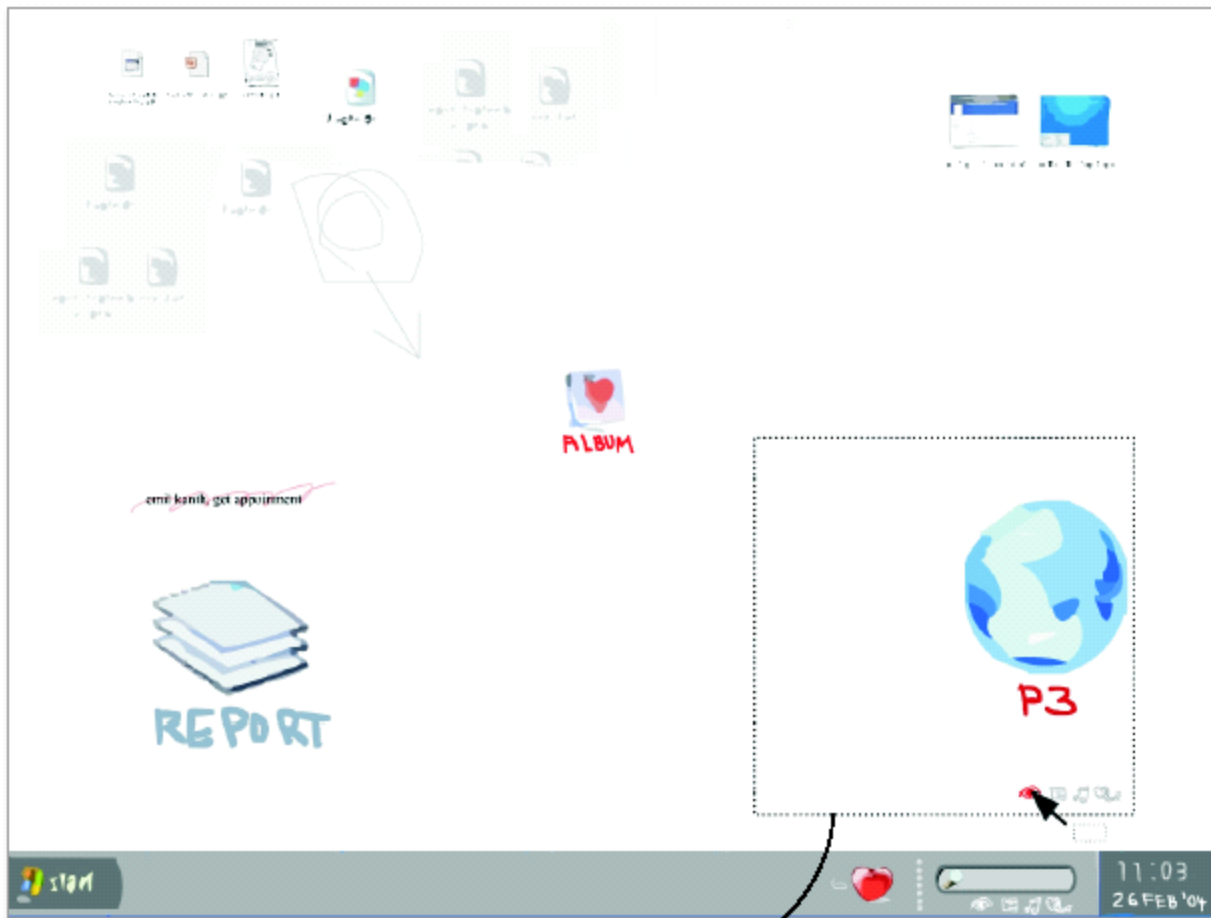
- > It provide focus+context all the time
- > Shows more info on demand,

Birds eye view to worm's eye view

Animated transitions

As the user navigates, the intermediate animation helps to keep the user oriented.





*Spatial search:
mark a portion of the screen,
choose a delimiter to get files*

Spatial search:

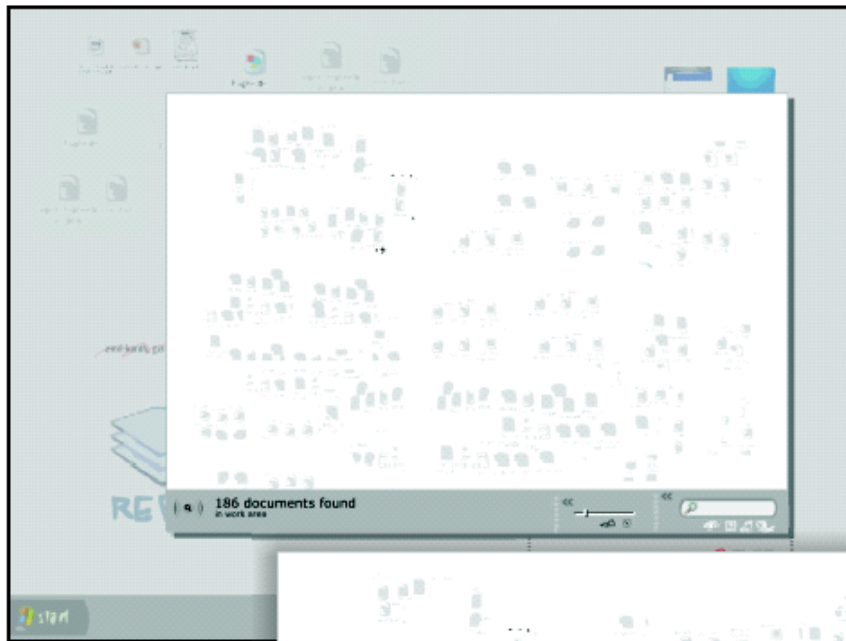


Keywords based search



*time slider search bar
with delimiters*

Continues filtering



Slider and the search bar will be available in all windows

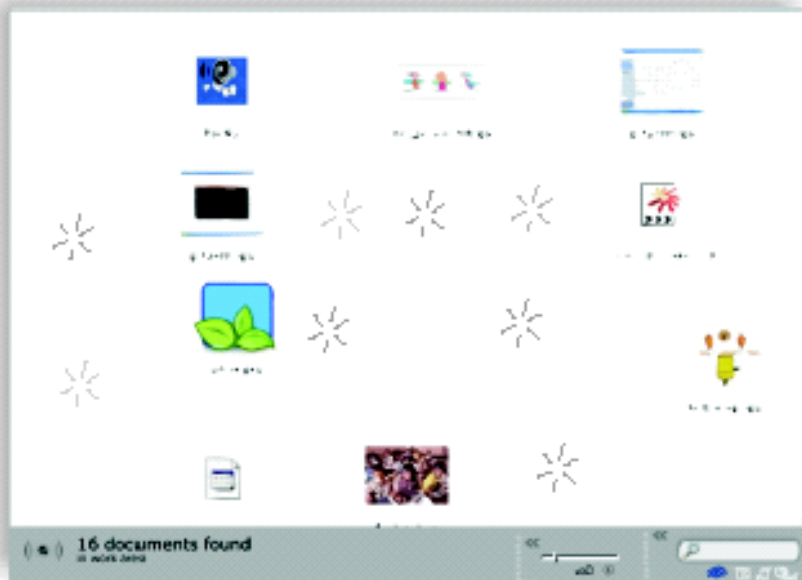
Time slider

Before



Current position

After



Slide back to a earlier date

Clustering



The image displays a software interface with a grid of thumbnails and a taskbar at the bottom. The thumbnails are organized into several sections:

- from cd**: A grid of thumbnails in the top-left corner.
- DC works**: A grid of thumbnails in the top-middle section.
- DC works**: A grid of thumbnails in the middle-left section.
- DC works**: A grid of thumbnails in the middle-middle section.
- report**: A grid of thumbnails in the middle-right section.
- DC works**: A grid of thumbnails in the bottom-middle section.
- ret PPT**: A grid of thumbnails in the bottom-left section.
- vc2001 batch**: A grid of thumbnails in the bottom-right section.
- Data collected**: A grid of thumbnails in the bottom-left section.
- history**: A grid of thumbnails in the bottom-middle section.

A red arrow points from the **vc2001 batch** section to the taskbar. The taskbar, labeled **Dump** on the left, contains five document icons with the following labels:

- nancy16.doc
- nancy17.doc
- nancy18.doc
- nancy19.doc
- offusbt1.doc

Some file management components

Contextual menu



Moving Files, Copying Files or Folders



Copy folder structure
and replicate it

Santa's mouse

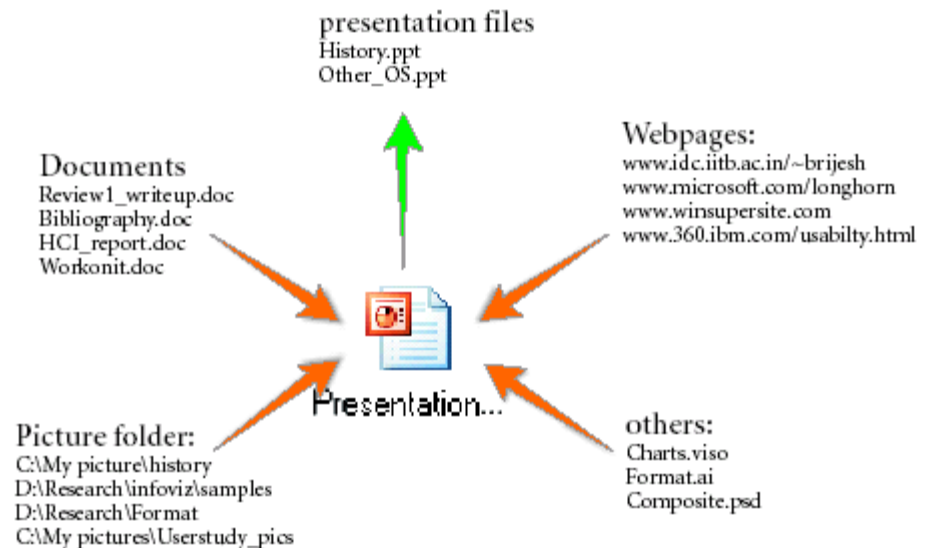
File retrieval component

File history log:

```
-----  
07 March 2004, 07:07:00 - sir.doc  
07 March 2004, 07:06:00 - resume.doc  
07 March 2004, 07:11:01 - official.doc  
07 March 2004, 07:06:01 - refereal.doc  
07 March 2004, 07:06:01 - nancy19.doc  
07 March 2004, 07:06:01 - untitles.doc  
27 March 2004, 07:16:00 - workdir.doc  
27 March 2004, 07:26:00 - pdc.doc  
27 March 2004, 07:22:00 - plsgodsaveme.doc  
27 March 2004, 07:46:00 - report2333.doc  
27 March 2004, 08:56:00 - eagles.doc  
27 March 2004, 09:56:00 - viscube.doc  
27 March 2004, 10:06:01 - patterns.doc  
12 April 2004, 11:06:00 - patternssuppoert  
12 April 2004, 12:06:00 - jenfertidwell mi  
27 April 2004, 17:06:01 - shartshine.doc  
08 May 2004, 10:58:35 - official11.doc  
08 May 2004, 10:58:35 - official12.doc
```

When every attempt to retrieve has failed...

Relational view:



thanks