Spectral

A new typeface for Google Docs

ExtraLight	*ExtraLight Italic*
Light	*Light Italic*
Regular	*Italic*
Medium	*Medium Italic*
SemiBold	***SemiBold Italic***
Bold	***Bold Italic***
ExtraBold	***ExtraBold Italic***

Operating System

ExtraLight

Apple Macintosh

Light

Usability Testing

Regular

Flexible Displays

Medium

Twine (Software)

SemiBold

Software Design

Bold

Graph Traversal

ExtraBold

Television Receivers

ExtraLight Italic

Operator's Console

Light Italic

Interactive Fiction

Italic

Gesture Interfaces

Medium Italic

Virtual Keyboards

SemiBold Italic

Tablet Computers

Bold Italic

Home Appliances

ExtraBold Italic

John Kasich

Jurassic Park

Flexible Displays

Search Tree Pruning

Activex Development Kit

Croquet Project Mental Model

Principles Of User Interface Design Tools

MULTI-TOUCH PIG LATIN

LIQUID-CRYSTAL DISPLAY

CONCISION ICON DESIGN

ROBOTS EXCLUSION STANDARD

SEARCH SUGGESTIONS DVORAK

COMPUTER USER SATISFACTION

Bruce Boston Intercity-Express

University Of Maryland Human

Organic Architecture Youtube

Application Distinguishable Interfaces

Natural Mapping (Interface Design) Ds

Kinetic User Interface Batch Processing

MINIMUM VARIABLES ASPECT RATIO INTERACTS WITH DIRECT VOICE INPUT PRESENTATION MANAGER COMPUTERIZED LIBRARY DATABASE

LIST OF SEARCH ENGINES

INOTIFY DIGITAL POETRY

DUAL-PHASE EVOLUTION

REAL-TIME OPERATING SYSTEM

LINEAR SEARCH STRETCHTEXT

HUMAN FACTORS ENGINEERING

Berners-Lee Discrete Structure

Application Binary Interface Kj

Hypertext Poetry Multi-Touch

Natural Mapping (Interface Design) Ds

Vector-Based Graphical User Interface

Electronic Literature Organization Zork

Spectral ExtraLight

Every computer science curriculum in the worl
d includes a course on data structures and algor
ithms. Data structures are that important; they i
mprove our quality of life and even save lives o
n a regular basis. Many multi-million and sever
al multi-billion dollar companies have been bui
lt around data structures. How can this be? If w
e stop to think about it, we realize that we inter
act with data structures constantly. Open a file:
File system data structures are used to locate th
e parts of that file on disk so they can be retriev

The contents of your file could be stored on any one of them.Loo
k up a contact on your phone: A data structure is used to look up
a phone number in your contact list based on partial information
even before you finish dialing/typing. This isn't easy; your phone
may contain information about a lot of people—everyone you ha
ve ever contacted via phone or email—and your phone doesn't h
ave a very fast processor or a lot of memory. Log in to your favour
ite social network: The network servers use your login informati
on to look up your account information. This isn't easy; the most

In order to find the web pages containing your search terms. This isn't easy; there are over 8.5 b
illion web pages on the Internet and each page contains a lot of potential search terms. Phone e
mergency services (9-1-1): The emergency services network looks up your phone number in a d
ata structure that maps phone numbers to addresses so that police cars, ambulances, or fire truc
ks can be sent there without delay. This is important; the person making the call may not be abl
e to provide the exact address they are calling from and a delay can mean the difference betwee
n life or death. The Need for Efficiency In the next section, we look at the operations supporte
d by the most commonly used data structures. Anyone with a bit of programming experience wi
ll see that these operations are not hard to implement correctly. We can store the data in an arr
ay or a linked list and each operation can be implemented by iterating over all the elements of t

Roberto Busa

Julio Cortázar

Flat Panel Display

Rule Of Least Surprise

Legal Information Institute

Interface (Computer Science) Vga

Vector-Based Graphical User Interface Inotify

ZOOMING USER INTERFACE

SUPER BOWL COMMERCIAL

ATARI ST TEXT ADVENTURE

INVERSION OF CONTROL PROCESS

LIQUID-CRYSTAL DISPLAY MOUSE

STRING SEARCHING ALGORITHMS

Business Interoperability Interface

List Of Enterprise Search Vendors

Rich Internet Application Persona

Vector-Based Graphical User Interface Or

Breadth-First Search Text Entry Interface

Elements Of Graphical User Interfaces Odf

AUTODESK

JAVASCRIPT

FLEXIBLE OLED

CONSIDERED RUDE

MINIMAX ALGORITHM

ELECTROPHORETIC DISPLAY

HUMAN–COMPUTER INTERACTION DS

CLASSICAL ARCHITECTURE

ZOOMING USER INTERFACE

INTERACTION TECHNIQUES

WEB BROWSER#BUSINESS MODELS

CHIEF EXPERIENCE OFFICER PLOT

IOS 7 COLLABORATIVE SOFTWARE

Iso 9241 Adaptive User Interfaces

List Of Enterprise Search Vendors

Color Saturation Pointing Devices

Electronic Literature Organization Guttae

Vector-Based Graphical User Interface Kj

Protocol (Object-Oriented Programming) Vi

Every computer science curriculum in the world incl udes a course on data structures and algorithms. D ata structures are that important; they improve ou r quality of life and even save lives on a regular basi s Many multi-million and several multi-billion dolla r companies have been built around data structures How can this be? If we stop to think about it, we re alize that we interact with data structures constantl y. Open a file: File system data structures are used t o locate the parts of that file on disk so they can be retrieved. This isn't easy; disks contain hundreds of

The contents of your file could be stored on any one of them.Look up a contact on your phone: A data structure is used to look up a phone number in your contact list based on partial information even before y ou finish dialing/typing. This isn't easy; your phone may contain infor mation about a lot of people—everyone you have ever contacted via p hone or email—and your phone doesn't have a very fast processor or a lot of memory. Log in to your favourite social network: The network s ervers use your login information to look up your account information This isn't easy; the most popular social networks have hundreds of mil

In order to find the web pages containing your search terms. This isn't easy; there are over 8.5 billion w eb pages on the Internet and each page contains a lot of potential search terms. Phone emergency serv ices (9-1-1): The emergency services network looks up your phone number in a data structure that map s phone numbers to addresses so that police cars, ambulances, or fire trucks can be sent there without d elay. This is important; the person making the call may not be able to provide the exact address they ar e calling from and a delay can mean the difference between life or death. The Need for Efficiency In th e next section, we look at the operations supported by the most commonly used data structures. Anyon e with a bit of programming experience will see that these operations are not hard to implement correc tly. We can store the data in an array or a linked list and each operation can be implemented by iterati ng over all the elements of the array or list and possibly adding or removing an element. Open sources s

Forgiveness Rogue Synth

Silicon Graphics

Television Receivers

User Experience Design

Cognitive Walkthrough Hdmi

Julio Cortázar Internet Explorer For Mac

TOUCH USER INTERFACE	Text-Based User Interfaces Ds
PROJECT LOOKING GLASS	Rich Internet Application Cbs
TAIWAN TOUCHSCREENS	Nearest Neighbour Algorithm
HIGH-DEFINITION TELEVISION	Electronic Literature Organization Kj
DISTORTED FLAT PROJECTIONS	Web-Based User Interfaces Microsoft
INFORMATION VISUALIZATION	Structure, Sequence And Organization

BUMPTOP

MENU BAR

TYPOGRAPHY

POSTMODERNIST

INDUSTRIAL DESIGN

USABILITY ENGINEERING

SYSTEMS ENGINEERING MONITORS

WIKIS AESTHETIC VALUE

Selection-Based Search Poems

LIST OF SEARCH ENGINES

Zooming User Interface Fedex

USER INTERFACE DESIGN

Information Prim's Algorithm

INTERNET EXPLORER FOR MAC

Rich Internet Application Publishing

M.D. COVERLEY SMARTPHONES

James Joyce Attentive User Interfaces

SEARCH ENGINE RESULTS PAGE

Application Programming Interface Vi

This kind of implementation is easy, but not very efficient. Does this really matter? Computers are becoming faster and faster. Maybe the obvious implementation is good enough. Let's do some rough calculations to find out. Bigger data sets: Now consider a company like Google, that indexes over 8.5 billion web pages. By our calculations, doing any kind of query over this data would take at least 8.5 seconds. We already know that this isn't the case; web searches complete in much less than 8.5 seconds, and

At the time of writing, Google receives approximately 4,500 queries per second, meaning that they would require at least 4,500 × 8.5 = 38,250 very fast servers just to keep up. The solution: These examples tell us that the obvious implementations of data structures do not scale well when the number of items, n, in the data structure and the number of operations, m, performed on the data structure are both large. In these cases, the time (measured in, say, machine instructions) is roughly n × m. The solution, of course, is to carefully organize data within the data str

Although it sounds impossible at first, we will see data structures where a search requires looking at only two items on average, independent of the number of items stored in the data structure. In our billion instruction per second computer it takes only 0.000000002 seconds to search in a data structure containing a billion items (or a trillion, or a quadrillion, or even a quintillion items). We will also see implementations of data structures that keep the items in sorted order, where the number of items inspected during an operation grows very slowly as a function of the number of items in the data structure. For example, we can maintain a sorted set of one billion items while inspecting at most 60 items during any operation. In our billion instruction per second computer, these operations take 0.00000006 seconds each. When discussing data structures, it is important to understand the difference between a data structure's i

Google Drive

Trompe-L'œil

Electronic Devices

Linear Potentiometers

High-Definition Television

Shelley Jackson Full Text Search

Systems Application Architecture Suffix Tree

VIDEO DISPLAY TERMINAL

ARTIFICIAL INTELLIGENCE

INTERACTION PROTOCOLS

DATA CONTAINED IN DATABASES

WEB-BASED USER INTERFACES DS

GRAPHICAL CONTROL ELEMENTS

Application Binary Interface Edit

Digital Preservation Coalition Or

Social Search Excel Spreadsheets

Usability Engineering Beta Testing Status

M.D. Coverley Robots Exclusion Standard

Natural-Language Interfaces Probabilistic

USABILITY

HYPOTEXT

TOUCHSCREEN

FLEXIBLE DISPLAY

BOOLEAN OPERATORS

ARTIFICIAL INTELLIGENCE

CONCEPT (GENERIC PROGRAMMING)

LINEAR POTENTIOMETERS

COGNETICS CORPORATION

TIM BERNERS-LEE CHASSIS

UNITED STATES CENSUS BUREAU

LEGAL INFORMATION INSTITUTE

FLAT PANEL DISPLAY PAPER TAPE

Structure, Sequence, Organization

Macintosh Index (Search Engine)

Paper Tape Interaction Protocols

Vector-Based Graphical User Interface Kj

Natural Mapping (Interface Design) Yuan

Tangible User Interfaces Brown University

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Mez Breeze
Affordances
Graph Traversal
Types Of Interfaces
Constrain Enforcement

Information Retrieval System

Eduardo Kac Text-Based User Interfaces

NONLINEAR NARRATIVE

Skin (Computing) Forgiveness

VOICE USER INTERFACES

Flexible Displays Information

LOSS PEQUEÑO GLAZIER

Visual Poetry Patchwork Girl

OPERA WEARABLE COMPUTER

Digital Preservation Coalition Presto

CROSSING-BASED INTERFACES

Self-Balancing Binary Search Tree Ds

TEXT-BASED USER INTERFACES

Legal Information Institute Typefaces

DISKETTE OS/2 WARP

DISPLAYPORT

AUTOCOMPLETE

TWO-DIMENSIONAL

NINETEEN EIGHTY-FOUR

APPLICATION BINARY INTERFACE

NOTEBOOK COMPUTERS

TOUCH USER INTERFACE

SIMULATED ANNEALING

RICH INTERNET APPLICATION

OBJECT ORIENTED PROGRAMS

HIGH-DEFINITION TELEVISION

The Garden Of Forking Paths

Intelligent Personal Assistant

Computer Numerical Control

Systems Application Architecture Or

Graphical User Interface Elements Kj

Business Interoperability Interface Ds

An interface, sometimes also called an abstra ct data type, defines the set of operations sup ported by a data structure and the semantics, or meaning, of those operations. An interface tells us nothing about how the data structure implements these operations; it only provides a list of supported operations along with spec ifications about what types of arguments eac h operation accepts and the value returned by each operation. A data structure implementat ion, on the other hand, includes the internal r

Thus, there can be many implementations of a single interfac e. For example, in Chapter 2, we will see implementations of t he List interface using arrays and in Chapter 3 we will see im plementations of the List interface using pointer-based data s tructures. Each implements the same interface, List, but in di fferent ways. Worst-case versus expected cost: Next, consider the issue of fire insurance on our $120 000 home. By studying hundreds of thousands of cases, insurance companies have de termined that the expected amount of fire damage caused to a

Now it's decision time. Should we pay the $15 worst-case monthly cost for fire insurance, o r should we gamble and self-insure at an expected cost of $10 per month? Clearly, the $10 p er month costs less in expectation, but we have to be able to accept the possibility that the a ctual cost may be much higher. In the unlikely event that the entire house burns down, the actual cost will be $120 000. These financial examples also offer insight into why we someti mes settle for an amortized or expected running time over a worst-case running time. It is o ften possible to get a lower expected or amortized running time than a worst-case running t ime. At the very least, it is very often possible to get a much simpler data structure if one is willing to settle for amortized or expected running times. The List, USet, and SSet interface s described in Section 1.2 are influenced by the Java Collections Framework. These are esse

Multi-Touch

Touchscreens

Queneau's Poems

Index (Search Engine)

Brain-Computer Interface

Computer Science Spyglass, Inc.

No Free Lunch In Search And Optimization

PROJECT LOOKING GLASS

Object-Oriented User Interfaces

SEARCH TREE PRUNING KJ

Interaction Protocols Suffix Tree

COMBINATORIAL SEARCH

Knuth–Morris–Pratt Algorithms

INTERACTION DESIGN PATTERN

Apple Computer, Inc. V. Microsoft Corp.

ENHANCED GRAPHICS ADAPTER

Mechanical Search Engine Optimization

USER INTERFACE DESIGN GUIDE

Tangible User Interface Bork, Bork, Bork!

PARALLEL OR DESIGN

PAUL VITÁNYI

DESKTOP SEARCH

COMPUTER STORAGE

PRESENTATION PROGRAM

THE CASTLE OF CROSSED DESTINIES

APPLICATION SOFTWARE

INHERITANCE SEMANTICS

THE ATLANTIC MONTHLY

METHODS INTERNET EXPLORER

DIRECT NEURAL INTERFACE CBS

COMPUTER USER SATISFACTION

Graphical User Interface Design

Digital Preservation Coalition Kj

Jabber: The Jabberwocky Engine

Internet Service Provider Google Goggles

Natural Mapping Or Interface Designer

Structure, Sequence And Organization Ds

Spectral Italic

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tions along with specifications about what types o
f arguments each operation accepts and the value
returned by each operation. A data structure imp
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nal representation of the data structure as well as

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Set, and SSet interfaces described in Section 1.2 are influenced by the Java Collections Framework [
54]. These are essentially simplified versions of the List, Set, Map, SortedSet, and SortedMap interf

Shell Script
Spreadsheet
Robert Arellano
Holographic Poetry
Enrique Jardiel Poncela

Interface (Computer Science)

Electronic Literature Organization Mp3

PARTICIPATORY DESIGN

HARDWARE INTERFACES

CLARIFICATION NEEDED

ELECTRONIC POETRY CENTER

ATTENTIVE USER INTERFACES

AUTOMATIC SUMMARIZATION

Liskov Substitution Principle

Index (Search Engine) Cursor

Computer Numerical Control

Systems Application Architecture Kj

Interaction Design Path Dependence

Decorative Arts Dual-Phase Evolution

DIAGRAM

TRIGLYPH

PLUGBOARDS

MICROSOFT BOB

RESILIENCY DESIGN

HUMAN SEARCH ENGINE

IMPLEMENTATION INHERITANCE

SCIENCE FICTION FILMS

INVERSION OF CONTROL

RANKS NEXT COMPUTER

ELECTRONIC POETRY CENTER

GRAPHICAL USER INTERFACES

ACTIVE PROJECTION MAPPING

Data Contained In Databases

Beryl Direct Neural Interface

Any Meaningful Change Tool

Ds Lite Interface (Computer Science)

Knowledge Visualization Ted Nelson

Direct Manipulation Interface Process

For more information on basic probability, e specially as it relates to computer science, se e the textbook by Ross . Another good refere nce, which covers both asymptotic notation a nd probability, is the textbook by Graham, K nuth, and Patashnik. Readers wanting to bru sh up on their Java programming can find ma ny Java tutorials online. This exercise is desig ned to help familiarize the reader withchoosi ng the right data structure for the right probl em. If implemented, the parts of this exercise

Solve the following problems by reading a text file one line at a time and performing operations on each line in the appropr iate data structure(s). Your implementations should be fast en ough that even files containing a million lines can be process ed in a few seconds. This file loads all content included in the Open Logic Project. Editorial notes like this, if displayed, ind icate that the file was compiled without any thought to how t his material will be presented. It is thus not advisable to teac h or study from a PDF that includes this comment. The Open

The Open Logic Project is also a work in progress. In an effort to stimulate collaboration a nd improvement, material is included even if it is ony in draft form, is missing exercises etc. A PDF produced for a course will exclude these sections. To find PDFs more suitable f or reading, have a look at the sample courses available on the OLP website. The material i n this part is a reasonably complete introduction to basic naive set theory. Unless students can be assumed to have this background, it's probably advisable to start a course with a rev iew of this material, at least the part on sets, functions, and relations. This should ensure t hat all students have the basic facility with mathematical notation required for any of the other logical sections. NB: This part does not cover induction directly. The presentation h ere would benefit from additional examples, especially,"real life" examples of relations of i

Touchscreen Pdf Allusions

Nearest Neighbor

Science Fiction Films

Command-Line Interface

Object-Oriented User Interface

Structure, Sequence And Organization Skin

PROJECT LOOKING GLASS	*Natural Language Spyglass, Inc.*
LANGUAGE TRANSLATION	*Graphical User Interface Design*
DUAL-PHASE EVOLUTION	*Object-Oriented User Interface*
2016 NEW HAMPSHIRE PRIMARY	*Electronic Literature Organization Parc*
INTERACTION DESIGN PATTERN	*Systems Application Architecture Yahoo*
HUMAN FACTORS ENGINEERING	*Abstraction Inversion Mobile Interaction*

Spectral Medium Italic

FIREFOX 2

MACHINES

ASPECT RATIO

INSTANT ANSWER

CHROME EXTENSION

ABSTRACTION INVERSION

DIGITAL PRESERVATION COALITION

RECURSIVE SHORT STORY

PSYCHOLOGY COPYRIGHT

TRIGLYPH A* ALGORITHM

ROBOTS EXCLUSION STANDARD

INTELLIGENT USER INTERFACES

HARD DISK DRIVE INTERFACE KJ

Computerized Library Database

Flat Display Mounting Interface

Lynx Browser Bork, Bork, Bork!

Knowledge Visualization Inverted Index

Video Electronics Standards Association

Structure, Sequence And Organization Kj

For more information on basic probability, espec ially as it relates to computer science, see the text book by Ross . Another good reference, which cov ers both asymptotic notation and probability, is t he textbook by Graham, Knuth, and Patashnik R eaders wanting to brush up on their Java progra mming can find many Java tutorials online. This exercise is designed to help familiarize the reader withchoosing the right data structure for the righ t problem. If implemented, the parts of this exerc ise should be done by making use of an implemen

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Interaction

Ergonomics

Text Messaging

Van Eck Phreaking

Selection-Based Search

Human Factors Engineering

Principles Of User Interface Design Or

YOUNG ADULT FICTION

Interface (Computer Science)

EXTRA REVENUE STREAM

Liskov Substitution Principle

COMPUTER STORAGE KJ

Application Binary Interface

SELF-SERVICE CHECKOUTS DS

Microsoft Handwriting Recognition

ELECTRONIC POETRY CENTER

Language Translation Metaheuristic

RICH INTERNET APPLICATION

Vertegaal Federal Trade Commission

CONCEPT

REDSTAIR

MASS EFFECT

DISPLAY DEVICE

WIMP (COMPUTING)

PARTICIPATORY DESIGN

APPLICATION BINARY INTERFACE

TELEVISION RECEIVERS

GOOGLE BROWSER SYNC

DIRECT MANIPULATION

COMMODORE PET CIRCUITRY

INTERNET SERVICE PROVIDER

WEB-BASED USER INTERFACES

Humanization Improbability

Information Retrieval System

Hypertext Markup Language

Natural Mapping (Interface Design)

Liskov Substitution Principle Voxels

Foment Our Own Financial Situation

In fact, almost every mathematical object ca n be seen as a set of some kind. In logic, as i n other parts of mathematics, sets and set th eoretical talk is ubiquitous. So it will be imp ortant to discuss what sets are, and introduc e the notation necessary to talk about sets a nd operations on sets in a standard way. Ope n-source journalism formerly referred to the standard journalistic techniques of news gat hering and fact checking, reflecting open-so urce intelligence a similar term used in milit

Now, open-source journalism commonly refers to forms of i nnovative publishing of online journalism, rather than the s ourcing of news stories by a professional journalist. In the 2 5 December 2006 issue of TIME magazine this is referred to as user created content and listed alongside more traditional open-source projects such as OpenSolaris and Linux. Weblo gs, or blogs, are another significant platform for open-sourc e culture. Blogs consist of periodic, reverse chronologically o rdered posts, using a technology that makes webpages easily

Messageboards are another platform for open-source culture. Messageboards (also know n as discussion boards or forums), are places online where people with similar interests c an congregate and post messages for the community to read and respond to. Messageboar ds sometimes have moderators who enforce community standards of etiquette such as ba nning users who are spammers. Other common board features are private messages (whe re users can send messages to one another) as well as chat (a way to have a real time conve rsation online) and image uploading. Some messageboards use phpBB, which is a free op en-source package. Where blogs are more about individual expression and tend to revolv e around their authors, messageboards are about creating a conversation amongst its user s where information can be shared freely and quickly. Messageboards are a way to remove

Spectral SemiBold Italic

Hypermedia
Alt Attribute
Interactive Novel
Voice User Interfaces
Software Copyright Stack
Text Entry Interface Semantics
Jabber: The Jabberwocky Engine Keyboard

FILE SYSTEM NAVIGATOR   *Operating System Shortest Path*

TOUCH USER INTERFACES   *Search Suggest Drop-Down List*

ORGANIC ARCHITECTURE   *Have Been Shown To Correlate*

DISTINGUISHABLE INTERFACES   *Natural Mapping (Interface Design) Vi*

COMPUTER USER SATISFACTION   *Business Interoperability Interface Edit*

GENERAL GRAPHICS INTERFACE   *Mozilla Bbc Voice Recognition Software*

DELIRIUM

OS/2 WARP

WIRE-FRAMES

ALBERT EINSTEIN

VAN ECK PHREAKING

RANGE QUERIES POTTERY

INTELLIGENT USER INTERFACES KJ

USABILITY ENGINEERING

THINK ALOUD PROTOCOL

PROJECT LOOKING GLASS

DISTORTED FLAT PROJECTIONS

GENERAL GRAPHICS INTERFACE

REAL-TIME OPERATING SYSTEM

Spyglass, Inc. Cultural Heritage

Object-Oriented User Interface

Information Technology Portal

Natural Mapping (Interface Design) Kj

Flat Display Mounting Interface Cache

Command Line Interfaces Drop Shadow

Spectral SemiBold Italic

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Now, open-source journalism commonly refers to forms of innova tive publishing of online journalism, rather than the sourcing of n ews stories by a professional journalist. In the 25 December 2006 issue of TIME magazine this is referred to as user created content and listed alongside more traditional open-source projects such a s OpenSolaris and Linux. Weblogs, or blogs, are another significa nt platform for open-source culture. Blogs consist of periodic, rev erse chronologically ordered posts, using a technology that makes webpages easily updatable with no understanding of design, code,

Messageboards are another platform for open-source culture. Messageboards (also known as disc ussion boards or forums), are places online where people with similar interests can congregate an d post messages for the community to read and respond to. Messageboards sometimes have mod erators who enforce community standards of etiquette such as banning users who are spammers. Other common board features are private messages (where users can send messages to one anoth er) as well as chat (a way to have a real time conversation online) and image uploading. Some me ssageboards use phpBB, which is a free open-source package. Where blogs are more about indivi dual expression and tend to revolve around their authors, messageboards are about creating a co nversation amongst its users where information can be shared freely and quickly. Messageboards are a way to remove intermediaries from everyday life—for instance, instead of relying on comm

Televisions
Rtf Interact
Albert Einstein
Search Suggestions
Cascading Style Sheets
2600: The Hacker Quarterly

Operating Systems Beta Testing Status

KEYBOARD SHORTCUTS	Command-Line Interface Or
EXPERIENCE DESIGN DS	Point-And-Click Forgiveness
VOLUMETRIC DISPLAYS	Human Factors Engineering
DOCUMENT COLLABORATION	Enrique Jardiel Poncela Introselect
CLIENT INTERNET EXPLORER	David Canfield Smith Boyer–Moore
INFORMATION RETRIEVAL DS	Cognetics Corporation Spyglass, Inc.

ANDROID

YOUTUBE

SIMULATORS

WIKI SOFTWARE

CATERINA DAVINIO

INDUSTRIAL CONTROLS

DATA CONTAINED IN DATABASES

TELEVISION RECEIVERS **Implementation Inheritance**

SELECTION ALGORITHM **Natural-Language Interfaces**

VIRTUAL INHERITANCE **Emanuel Goldberg Sony Psp**

HARD DISK DRIVE INTERFACE **Principles Of User Interface Design**

DRAFT PATENT APPLICATION **Sutherland's Web Browsing History**

FLEXIBLE OLED QUICKOFFICE **Trackball Object Oriented Programs**

The principle of sharing pre-dates the open -source movement; for example, the free sh aring of information has been institutionali zed in the scientific enterprise since at least the 19th century. Open-source principles h ave always been part of the scientific comm unity. The sociologist Robert K. Merton des cribed the four basic elements of the comm unity—universalism (an international persp ective), communalism (sharing information) disinterestedness (removing one's personal

These principles are, in part, complemented by US law's fo cus on protecting expression and method but not the ideas themselves. There is also a tradition of publishing research results to the scientific community instead of keeping all s uch knowledge proprietary. One of the recent initiatives in scientific publishing has been open access—the idea that r esearch should be published in such a way that it is free an d available to the public. There are currently many open ac cess journals where the information is available free online,

This policy would provide a free, searchable resource of NIH-funded results to the publ ic and with other international repositories six months after its initial publication. The NIH's move is an important one because there is significant amount of public funding i n scientific research. Many of the questions have yet to be answered—the balancing of p rofit vs. public access, and ensuring that desirable standards and incentives do not dimi nish with a shift to open access. Farmavita. Net is a community of pharmaceuticals exec utives that has recently proposed a new business model of open-source pharmaceutical s. The project is targeted to development and sharing of know-how for manufacture of e ssential and life-saving medicines. It is mainly dedicated to the countries with less deve loped economies where local pharmaceutical research and development resources are in

Display Size
Google Glass
Twine (Software)
Backward Induction
Document Collaboration
Optical Character Recognition

Vector-Based Graphical User Interface Sql

USER INTERFACE DESIGN

COMBINATORIAL SEARCH

LANGUAGE TRANSLATION

ACTIVE SHUTTER 3D SYSTEM VI

COMPUTER USER SATISFACTION

INTERACTION DESIGN PATTERN

Video Production Belen Gache

Object-Oriented User Interface

Selection Sort Google Accounts

Visual Poetry I'm Feeling Lucky (Book)

Jorge Luis Borges Electronic Literature

Electronic Literature Organization Java

PROGRAM

FUNCTION

KEVIN BACON

ANCIENT GREEKS

ENTERPRISE SEARCH

KINETIC USER INTERFACE

DIGITAL PRESERVATION COALITION

GENETIC PROGRAMMING

THINK ALOUD PROTOCOL

SCENARIO-BASED DESIGN

DISTINGUISHABLE INTERFACES

RENDERED CHRONOLOGICALLY

SCOTT FORSTALL TABU SEARCH

Youtube Information Overload

Cortana Macworld Convention

String Searching Algorithms Kj

Principles Of User Interface Design Or

Microsoft Handwriting Recognition Ds

Google Labs General Graphics Interface

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Introselect Plugboards

Discoverability

Electronic Devices

Touch User Interfaces

Search Engine (Computing)

Organic User Interface M.D. Coverley

RELEVANCE FEEDBACK

SECONDARY NOTATION

HOLOGRAPHIC POETRY

CHIEF EXPERIENCE OFFICER

ACTIVITY-ORIENTED DESIGN

MARK AMERIKA VERTEGAAL

Enhanced Graphics Adapter

Category:Search Algorithms

2600: The Hacker Quarterly

Timeline Of Hypertext Technology

Graphical User Interface Elements

Unified Code For Units Of Measure

Spectral ExtraBold

WEISER'S SANDBOX

JACK KIEFER

VISUAL POETRY

POINTING DEVICES

INCREMENTAL SEARCH

HUMAN INTERFACE GUIDELINES

ALPHA–BETA PRUNING

SOFTWARE COPYRIGHT

INDUSTRIAL DESIGN KJ

RULE OF LEAST SURPRISE VI

OBJECT-ORIENTED ANALYSIS

COMMAND LINE INTERFACES

Tangible User Interfaces Ds

Self-Service Checkouts Type

Automated Teller Machines

Electronic Literature Organization

Business Interoperability Interface

Unified Code For Units Of Measure

The open-source movement has inspired i ncreased transparency and liberty in biote chnology research, for example by CAMBI A. Even the research methodologies thems elves can benefit from the application of o pen-source principles. It has also given ris e to the rapidly-expanding open-source ha rdware movement. Open-source hardware i s hardware whose initial specification, usu ally in a software format, are published an d made available to the public, enabling an

The open access movement is a movement that is similar i n ideology to the open source movement. Members of this movement maintain that academic material should be rea dily available to provide help with "future research, assist in teaching and aid in academic purposes." The free cultu re movement is a movement that seeks to achieve a cultur e that engages in collective freedom via freedom of expres sion, free public access to knowledge and information, ful l demonstration of creativity and innovation in various

The Zeitgeist Movement is an international social movement that advocates a transit ion into a sustainable "resource-based economy" based on collaboration in which mon etary incentives are replaced by commons-based ones with everyone having access to e verything (from code to products) as in "open source everything".While its activism an d events are typically focused on media and education, TZM is a major supporter of o pen source projects worldwide since they allow for uninhibited advancement of scienc e and technology, independent of constraints posed by institutions of patenting and c apitalist investment. The following are events and applications that have been develo ped via the open source community, and echo the ideologies of the open source move ment. Open Education Consortium — an organization composed of various colleges t

Spectral ExtraBold Italic

Calculation

Tabu Search

Pointing Devices

Median Of Medians

Electronic Poetry Center

Information Retrieval System

Lawrence, Kansas Organic User Interface

VOICE USER INTERFACES   *Direct Manipulation Interface*

ORGANIC ARCHITECTURE   *Organic Light-Emitting Diode*

DUAL-PHASE EVOLUTION   *Stemming Internet Explorer 6*

INTERNET EXPLORER FOR MAC   *Interact With Electronic Devices Java*

SEARCH ENGINE RESULTS PAGE   *Self-Balancing Binary Search Tree Ds*

ADAPTIVE USER INTERFACES VI   *Vector-Based Graphical User Interface*

ATARI 800

LIGHT PEN

RICH SNIPPET

HUMAN FACTORS

MONITOR PROGRAM

ORGANIC ARCHITECTURE

HUMAN-COMPUTER INTERACTION

SAINT THOMAS AQUINAS

LANGUAGE TRANSLATION

PERIPHERAL HARDWARE

DISTORTED FLAT PROJECTIONS

INTERNET EXPLORER FOR MAC

CHROMATOGRAPHIC PROJECTS

Stanford Research Institute Kj

Language Support For Sorting

Guide To Windows Keyboards

Timeline Of Hypertext Technology Ds

String Searching Algorithms Backrub

Machines Human Interface Guidelines

Spectral ExtraBold Italic

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The open access movement is a movement that is similar in ide ology to the open source movement. Members of this movement maintain that academic material should be readily available t o provide help with "future research, assist in teaching and aid in academic purposes." The free culture movement is a moveme nt that seeks to achieve a culture that engages in collective free dom via freedom of expression, free public access to knowledge and information, full demonstration of creativity and innovat ion in various OpenDocument is an open document file format

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Uppercase	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Lowercase	a b c d e f g h i j k l m n o p q r s t u v w x y z
Small capitals	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Standard punctuation	! ¡ ? ¿ , ; : . … _ — – ( ) [ ] { } / \ | ¦ ' ' " " ‚ „ ' " ' " ‹ › « » * † ‡ - – · • @ &
Case-sensitive forms	! ¡ ? ¿ - – — ( ) [ ] { } / \ ‹ › « » · @
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Symbols	§ ¶ © ℗ ® ™ ℠ ª º Nº
Ligature **Discretionary ligature** **Historical ligature**	fb ffb ff fh ffh fi ffi fj ffj fk ffk fl ffl ft fft ſ ch ct st sþ dž lj nj
Figures **(Lining proportional)**	0 1 2 3 4 5 6 7 8 9 0 # € $ ¢ £ ƒ ¥
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Fractions	½ ⅓ ⅔ ¼ ¾ ⅛ ⅜ ⅝ ⅞ % ‰
Mathematical symbols	+ − ± × ÷ = ≠ ~ ≈ ^ < > ≤ ≥ ¬ ¤ ∞ ◊ Δ Ω ∂ ∫ √ ∑ ∏ ℮ Ω Δ ℓ ∅ π µ °
Superior / Inferior	0 1 2 3 4 5 6 7 8 9 / 0 1 2 3 4 5 6 7 8 9
Numerator / Denominator	0 1 2 3 4 5 6 7 8 9 / 0 1 2 3 4 5 6 7 8 9
Superscript	a b c d e f g h i j k l m n o p q r s t u v w x y z
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Accented small capitals

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Circled numbers (Stylistic set 1&2)

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Arrows (Stylistic set 3)

← → ↑ ↓ ↖ ↗ ↙ ↘ ↔

Ornaments

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Spectral Italic

Uppercase
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Lowercase
a b c d e f g h i j k l m n o p q r s t u v w x y z

Small capitals
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Standard punctuation
! ¡ ? ¿ , ; : . … _ — – ( ) [ ] { } / \ | ¦ ' ' " " , „ ' '' ' " ‹ › « » * † ‡ - – · • @ &

Case-sensitive forms
! ¡ ? ¿ - – — ( ) [ ] { } / \ ‹ › « » · @

Small capitals punctuation
! ¡ ? ¿ ' ' " " ' " @ &

Symbols
§ ¶ © ℗ ® ™ ℠ ª º №

Ligature / Discretionary ligature / Historical ligature
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Figures (Lining proportional)
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Fractions
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Mathematical symbols
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Superior / Inferior
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Numerator / Denominator
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Superscript
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Accented uppercase
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Accented small capitals

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Circled numbers
(Stylistic set 1&2)

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Arrows
(Stylistic set 3)

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Ornaments

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	Spectral	**OpenType features**
	OFF	ON
All caps [CPSP]	Lowercase	UPPERCASE
Case-sensitive forms [CASE]	[Case-sensitive]	[CASE-SENSITIVE]
Small capitals [SMCP]	Small Caps	SMALL CAPS
All small caps [C2SC]	All Small Caps	ALL SMALL CAPS
Standard ligatures [LIGA]	fi fl fb ff fh fj fk ft ffb ffh ffi ffj ffk ffl fft	fi fl fb ff fh fj fk ft ffb ffh ffi ffj ffk ffl fft
Discretionary ligatures [DLIG]	Th ch ct st sp	Th ch ct st sp
Historical ligatures [HIST]	Historical	Hiſtorical
Slashed zero [ZERO]	0123456789	Ø123456789
Tabular lining figures [TNUM + LNUM]	H0123456789	H0123456789
Tabular oldstyle figures [TNUM + ONUM]	H0123456789	H0123456789
Proportional lining figures [PNUM + LNUM]	H0123456789	H0123456789
Proportional oldstyle figures [PNUM + ONUM]	H0123456789	H0123456789
Superscript/Superior [SUPS]	Hsuperscript H0123456789	H^{superscript} H^{0123456789}
Subscript/Inferior [SINF]	H0123456789	H$_{0123456789}$
Numerator [NUMR]	H0123456789	H^{0123456789}
Denominator [DNOM]	H0123456789	H$_{0123456789}$

Production Type

Spectral

OpenType features

OFF

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Fractions [FRAC]	1/4 1/2 3/4 0/0 0/00 1/3 2/3 1/8 3/8 5/8	¼ ½ ¾ ⅞ % ‰ ⅓ ⅔ ⅛ ⅜ ⅝
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Stylistic set 1: Circled numbers [SS01]	012345678910	⓪①②③④⑤⑥⑦⑧⑨⑩
Stylistic set 2: Circled numbers [SS02]	012345678910	⓿❶❷❸❹❺❻❼❽❾❿
Stylistic set 3: Arrows [SS03]	<>+−×÷=±	←→↑↓↖↗↙↘
Stylistic set 4 Ornaments [SS04]	abcd	■◆●▶

Supported languages	Afrikaans, Aghem, Akan, Albanian, Asturian, Asu, Bafia, Basaa, Basque, Bemba, Bena, Breton, Catalan, Chiga, Colognian, Cornish, Croatian, Czech, Danish, Duala, Dutch, Embu, English, Esperanto, Estonian, Ewe, Ewondo, Faroese, Filipino, Finnish, French, Friulian, Fulah, Galician, Ganda, German, Gusii, Hawaiian, Hungarian, Icelandic, Igbo, Inari, Sami, Indonesian, Irish, Italian, Jola-Fonyi, Kabuverdianu, Kabyle, Kako, Kalaallisut, Kalenjin, Kamba, Kikuyu, Kinyarwanda, Koyra, Chiini, Koyraboro, Senni, Kwasio, Lakota, Langi, Latvian, Lingala, Lithuanian, Lower, Sorbian, Luba-Katanga, Luo, Luxembourgish, Luyia, Machame, Makhuwa-Meetto, Makonde, Malagasy, Maltese, Manx, Masai, Meru, Metá, Morisyen, Mundang, Nama, Ngiemboon, Ngomba, North, Ndebele, Northern, Sami, Norwegian, Bokmål, Norwegian, Nynorsk, Nuer, Nyankole, Oromo, Polish, Portuguese, Prussian, Quechua, Romanian, Romansh, Rombo, Rundi, Rwa, Samburu, Sango, Sangu, Scottish, Gaelic, Sena, Serbian, Shambala, Shona, Slovak, Slovenian, Soga, Somali, Spanish, Swahili, Swedish, Swiss, German, Tachelhit, Taita, Tasawaq, Teso, Tongan, Turkish, Upper, Sorbian, Uzbek, Vai, Vietnamese, Volapük, Vunjo, Walser, Welsh, Western, Frisian, Yangben, Yoruba, Zarma, Zulu.
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