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Indhold

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DKUUG-Nyts redaktion består af René Seindal og Søren O. Jensen (ansvarshavende).

Vi er naturligvis altid interesserede i indlæg fra folk. Det behøver ikke være lange artikler, men kan også være annonceringer, opfølgninger af tidligere artikler, eller andet. Hvis I blot har ønsker eller gode ideer til artikler, er I også meget velkomne til at kontakte os. Bidrag til bladet bør indleveres på maskinlæsbar form.

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eller, hvis man foretrækker almindelig sneglepost, til:

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    Giro: 1 37 86 00
    Email: mogens@dkuug.dk

Gratis-programmel — og hvordan man får fat i det

Af Kim Storm, Keld Simonsen og Jørgen Jensen

I DKUUG's regi er der en række muligheder for at få fat i gratis programmel. ("Gratis" skal her forstås som en modsætning til kommerciel).

Det gælder om alle mulighederne, at de af praktiske årsager i overvejende grad bygger på høflig selvbetjening.

DKUUG's båndservice

DKUUG's sekratariat er i stand til at levere bånd fra EUUG, samt bånd med al GNU-programmel. I DKUUG-Nyt trykkes der periodisk oversigter over indholdet af disse bånd.

Bestilling kan sendes til sekretariatet. Henvendelser vedrørende båndservicen kan rettes pr. elektronisk post til tape-dist@dkuug.dk.

DKnets nyhedstjeneste (news, usenet)

Et nyheds-abonnement giver mulighed for at få mængder af nyt gratis-programmel efterhånden som det frigives, idet der systematisk distribueres både kildetekster og oversatte programmer for en lang række populære systemer — ikke mindst til Unix, DOS, Macintosh, Atari og Amiga.

Nyhedsnettet kan også anvendes til at efterlyse bestemt programmel, for at etablere kontakter til brugere af en bestemt programpakke, og for at opspore adresser på "archives rundt omkring. — En del af disse archives kan nås per mail eller per anonym uucp.

DKnet's arkiv-tjeneste

DKnet driver et mail-baseret program-arkiv.

Tjenesten benyttes ved at sende post til archive@dkuug.dk med forskellige kontrolmeddelelser i brevets Subject: linie. Begynd med at

sende et brev med meddelelsen "help" i Subject:-linien. Prøv derefter "dir ." eller "dir src" i Subject:-linien for at få en liste over det tilgængelige programmel.

Status per august 1990 er at en del af det programmel der ligger i arkivet er af ældre dato. Der er tiltag igang for at finde en "arkivar" til at udbygge og vedligeholde arkivet på frivillig basis — men i øjeblikket er posten ikke besat.

Dog har netpasserne i løbet af sommeren bestræbt sig på at det mail- og news-relaterede programmel, der ligger i arkivet er nogenlunde ajour. Således er rimeligt nye udgaver af nn, smail og news tilgængelige.

Henvendelser til "arkivaren" sker til archive-request@dkuug.dk.

Som det fremgår mellem linierne ovenfor, så gælder det at DKnet's netpasser-funktion normalt ikke involveres i forespørgsler om eller fremskaffelse af programmel, ligesom netpasserne ikke kan overkomme at undersøge status for bestemte programmel-pakker eller adgang til andre arkiver.

Markedsoversigten

Så er det atter ved at være tid for udarbejdelsen af en ny oversigt over Unix-produkter på det danske marked — kort sagt DKUUGs markedsoversigt. Der vil om kort tid blive udsendt spørgeskemaer til de firmaer, der tidligere har figureret i markedsoversigten og andre interesserede.

Da markedsoversigten skal være klar til Data-messen i Bellacenteret i oktober, anmoder vi om at man så hurtigt som muligt udfylder spørgeskemaerne og returnerer dem til DKUUGs sekretariat.

Stallman får løn som forskyldt

Af *Søren Oskar Jensen*
DKUUG-Nyt

Richard M. Stallman, grundlæggeren af Free Software Foundation, manden der står bag GNU-projektet og meget meget mere, er nu blevet hædret af den amerikanske MacArthur Foundation. Han er blevet udnævnt til "MacArthur Fellow" hvilket bl.a. indebærer at han får udbetalt ca. 1.5 millioner kr.

En kort beskrivelse af hvad MacArthur Foundation'en egentlig er bringes her i en oversættelse fra The Boston Globe:

> MacArthur Fellows programmet, sponsoreret af John D. and Catherine T. MacArthur Stiftelsen, uddeler uopfordret [unsolicited — dvs. at der ikke kan søges. red.] priser til særligt talentfulde personer inden for et bredt spektrum af områder. Udvælgeskriterierne for MacArthur Fellows er de følgende tre: personens fremtidige potentiale inden for sit felt, at vedkommende vil kunne drage udbytte af prisen og sluttelig en forventning om at personens arbejde er vigtigt og til gavn for samfundet.
>
> ...
>
> En MacArthur Pris uddeles som en anerkendelse af fremragende kreativitet, priserne er på mellem 150.000 og 375.000$ og er ikke belagt med nogen betingelser. Prismodtagerne kan bruge pengene til hvad de vil, de skal ikke producere noget.

Richard Stallman har flere gange besøgt Danmark, sidste gang var ved DKUUGs årsmøde i november, hvor han fortalte om sin kontroversielle holdning til copyright-begrebet. Det var ret åbenlyst at mange ikke var enige med Stallman, men det er vel også interessant at høre holdninger man ikke nødvendigvis er enige i.

Siden vi så ham sidst er Stallman nu også gået til angreb på EFs forsøg på at lave en harmonisering af "look and feel" lovene. Her følger

en artikel som Stallman skrev d. 27/07. Artikelen er ikke oversat, men jeg håber alle kan få udbytte af den alligevel. Han har selv opfordret til at man spreder hans artikel til så mange som muligt.

Look-and-feel in the EEC

The European Commission has a proposal to legislate look-and-feel copyright throughout Europe. The results if this goes through would be a crushing rash of lawsuits like what you see now in the US.

If you don't want these new restrictions imposed on you, you need to get active now — at least for a few minutes, to write some letters.

Here is what The Economist had to say about this measure, on page 15 in the March 10 issue:

> A slip in Brussels could put European software writers in thrall to big American computer makers. The European Commission is set to make a bad mistake in pursuit of a worthy cause. It has drafted a directive to standardise the terms of software corpyright across Europe.
>
> . . .
>
> Its effect will be almost as if, in the early days of electricity, power companies had been give the right to decide what appliances could be plugged into wall sockets.

They say that the directive would grant companies rights to look and feel copyrights and would ban reverse engineering "of any kind".

The Commission's directive, if implemented, will destroy ordinary programmers' chances of writing software in Europe.

The person responsible for this proposal is:

Jean-Francois Verstrynge
DG 3/D/4
Commission of the European Communities
200 Rue de la Loi
1049 Bruxelles
Belgium

Chances are he does not have a background in software development. He probably was given a general ideological argument of the form, "More artificial incentives are always good for business", and swallowed it for lack of understanding of the trouble it will cause.

So what you need to do is (1) explain to him why this will hamper software development and provide the users with fewer useful choices, and (2) indicate your personal opposition as a member of the industry this is supposed to "protect".

A letter to your representative in the European parliament would also be a good idea. They may have to vote on this, and most of them will have no idea what to do except to follow the recommendation of Mr. Verstrynge unless you start to educate them.

rick@cstr.edinburgh.ac.uk is organizing opposition and setting up a mailing list. A European organization like the League for Programming Freedom may be created.

To help you explain more clearly, here is the position paper of the League for Programming Freedom, which discusses all the arguments against user interface copyright. *Note that writing to Mr. Verstrynge in your own words, making use of the arguments you find either here or elsewhere, will be more effective than simply sending a copy of this.* However, mailing a copy of this along with your letter to the parliamentarian might be a good idea; he is not going to receive numerous copies of the same thing, and one of them will surely help.

look-and-feel

<div align="center">

Against User Interface Copyright

The League for Programming Freedom

</div>

In the past few years, a few companies have begun to sue others for following what used to be standard practice in the computer field: implementing programs that are compatible with the competition. These plaintiffs claim to have a copyright on the user interface of a program — something unheard of before 1986.

In June 1990, Lotus won a suit against Paperback Software, a small company that implemented a spreadsheet that talks to the user in the

same terms used by 1-2-3; they immediately went on to sue Borland about Quattro, a spreadsheet whose usual interface has only a few similarities to 1-2-3, claiming that these similarities in keystroke sequences and/or the ability to customize the interface to emulate 1-2-3 are enough to infringe.

Even more ominously, Apple Computer has sued Microsoft and Hewlett Packard for implementing a window system whose displays partially resemble those of the Macintosh system. Subsequently Xerox sued Apple for implementing the Macintosh system, which derives some general concepts from the earlier Xerox Star system. The Xerox lawsuit was dismissed because of the length of time that had elapsed since the release of the Macintosh system, but a monopoly of unprecedented scope could still result from this suit if the Xerox appeal is successful.

What Is a User Interface?

The user interface of a program is the way in which you communicate with it. Other machines also have user interfaces. For example, the user interface of a typewriter is a collection of keys corresponding to letters, digits, and punctuation, and arranged in a well-known order. The user interface of a car includes a steering wheel for turning and pedals to speed up and slow down, plus a lever to signal turns, etc.

In the case of a machine which is a computer program, the interface includes that of the computer — its keyboard, screen and mouse — plus those aspects specific to the program. Those typically include the choice of commands, menus and programming language, and the way your data is presented on the screen.

User interface copyright would mean a monopoly on a user interface. In the example of the typewriter, this would mean that each manufacturer would have to arrange the keys in a different order.

The Purpose of Copyright

In any discussion of what copyright law ought to mean, we must start by noting its purpose.

In the United States, the Constitution says that the purpose is to "promote the progress of science and the useful arts." Conspicuously

absent is any hint of intention to enrich copyright holders to the detriment of the users of copyrighted works.

The Supreme Court made the reason for this absence explicit, stating in *Fox Film vs. Doyal* that "The sole interest of the United States and the primary object in conferring the [copyright] monopoly lie in the general benefits derived by the public from the labors of authors."

In other words, since copyright is a government-imposed monopoly, which interferes with the freedom of the public in a significant way, it is justified only if it helps the public more than it costs the public.

The spirit of individual freedom must, if anything, incline us even less to accept such a monopoly. So if either the Supreme Court or the principle of freedom is our guide, we have to ask: what value does user interface copyright offer the public — and what price would we have to pay for it?

According to Infoworld magazine (mid January 1989), computer users in general have considered this question and reached a consensus: they expect user interface copyright to be harmful for them. If we believe that the users should determine how their interests are to be served, the issue is already settled. But so as not to take their word for it, let's now investigate how much good and harm user interface copyright would do in various ways.

Is More Incentive Needed?

The developers of the Star, the Macintosh system, 1-2-3 and dBase claim that without interface copyright there would be insufficient incentive to develop such products. This is disproved by their own actions.

Until a few years ago, user interface copyright was unheard of. The entire development of the computer industry took place under a system where imitating a user interface was standard practice, and lawful. And it was under this system that today's plaintiffs made their decisions to develop their products. When faced with the choice in actuality, these developers decided that they did, indeed, have "enough incentive".

Everyone was free to imitate these interfaces, but this did not prevent most of them from being successful and producing a large return on the investment. In fact, they were so successful that they became

de-facto standards. (The Xerox Star was not successful, but was not imitated; users simply did not like it.)

Even supposing that interface copyright would increase the existing incentive, this does not mean that it will lead to much additional improvement in user interfaces. The existing incentive is so great that it may well suffice to motivate everyone who has an idea worth developing. Then the change would only increase the price of these improvements. Once you suck a bottle dry, more suction won't get more out of it.

"Look and Feel" Will Not Protect Small Companies

The proponents of user interface copyright claim that it would protect small companies from being wiped out by large competitors.

One problem with this idea is that it won't work. It is no coincidence that today's interface copyright plaintiffs are large, established companies. The effect of user interface copyright is crushing when the interface is widely known — an effective standard. However, a small company is vulnerable when their product is little used, and its interface is little known. In this situation, user interface copyright won't make much difference.

Thus, imagine that a small company with 10,000 customers is afraid that a large company will produce a compatible product and use their other advantages to take over the market. The large company may believe there is a potential market of a million users that the small company has not reached. Suppose that the small company tries to stop this with user interface copyright, forcing the large company to make the new product incompatible. What effect will this have?

Not much. Probably only 20,000 potential customers already know the interface used by the small company. The other 970,000 potential customers will see no disadvantage in the incompatibility with a product they have never learned to use. So they will buy from the large company anyway.

What's more, the interface copyright tactic will begin to backfire for the small company once the large company's product becomes an effective standard. Then even people who know about the small company and have some reason to prefer them will be likely to choose the

standard interface instead. Now the small company will need to offer a compatibility mode—but, due to user interface copyright, this will not be allowed.

Instead of supporting monopolistic measures, small companies would be wiser to rely on their own inherent advantages: large companies have high inertia, high overhead, and are more cautious.

What Will Interface Copyright Cost the Public?

So much for the value of interface copyright; what about the cost? Computer user interfaces will be less convenient and more incompatible.

One cost we can be sure of is that future user interfaces will be less widely used by developers, because most developers will not be allowed to use them. We will also lose much of the usefulness of the important interface concepts of the past decade. The few systems permitted to use them will be more expensive due to the lack of competition—a windfall for a few manufacturers, but bad for the public at large.

But this is not the only cost. Better interfaces may be hard to think of, but it is easy to invent interfaces which are merely different. Interface copyright will surely succeed in encouraging more of this sort of "interface development". The result will be greater incompatibility between computer systems—exactly what the user does not want.

These "improved" interfaces may be slightly better or slightly worse if considered abstractly; but for the users who have already learned to use one well-known interface, they are inevitably worse, because they require retraining.

Even an intrinsically superior interface may be unacceptable for the users due to incompatibility. For example, the Dvorak keyboard, invented several decades ago, enables a typist to type much faster and more accurately than is possible with the standard "qwerty" keyboard. Nonetheless, few people use it. Already-trained typists don't know how. New typists don't learn how, because they want to learn the standard layout they can expect to find on most keyboards.

Diversity in Interfaces is Not Desirable

Here we can see one of the implicit assumptions behind the system of copyright, and why it does not apply to user interfaces. Copyright was designed to encourage diversity; its details work toward this end. Diversity is exactly what benefits the public when it comes to novels and songs, and the other traditional domains of copyright. Readers want new, different novels to be written so that there are more different things to read. This is indeed a way to promote the art of creative writing.

But this is not the way to promote the art of programming user interfaces. Computer users regard diversity in interfaces as a price to be paid, not as a measure of progress.

Thus, when proponents of interface copyright say that this will force developers to find ways to vary the accepted interfaces, they are saying that the users will suffer.

But that is not the whole of the problem. A technology cannot fully mature without standardization of the modes of use, so that one can confidently expect to operate any piece of equipment almost in one's sleep. It is not for nothing that so much effort is devoted to the development of industrial standards, including international symbols for information that guides users of various systems including automobile control panels. Anything which impedes standardization impedes the social penetration of technology. User interface copyright operates directly against the proliferation of computer use.

Incompatibility Does Not Go Away

If there had been a 50-year interface copyright for the steering wheel, it would have expired not long ago. During the span of the copyright, we would have got cars steered with joysticks, cars steered with levers, and cars steered with pedals. Each car user would have had to choose a brand of car to learn to drive, and it would not be easy to switch.

The expiration of the copyright would have freed manufacturers ostensibly to switch to the best of the known interfaces. In practice they would still be unable to do so without forcing all their old customers

to learn to drive all over again. It would take decades for the country to converge on a single interface, perhaps into the 21st century.

Who Invests in the User Interface?

The plaintiffs like to claim that user interfaces represent large investments on their part.

In fact, designing the user interface of a computer program is usually a small part of the investment in developing the program itself. The ones who do make a large investment in the user interface are the users who train to use it. Users have spent many times more on learning to use 1-2-3 than Lotus spent to develop the entire program, let alone what Lotus spent develop the program's interface per se.

Therefore, if investment justifies owning the interface, it is the users who should be the owners. And they should be able to permit everyone to clone it, as they would prefer to do.

Discrimination Against Sharing of Software

User interface copyright discriminates against freely redistributable software, such as freeware, shareware and public domain software.

For a proprietary program it *may* be possible to license the interface, if the owner is willing. But there is no way to do this for programs that are freely redistributable — any means for collecting royalties from the users for use of the interface is incompatible with redistribution by them. Thus, in practice, licenses will not be available for freely-redistributable software. The result will be a growing body of interface techniques that are allowed in proprietary software but forbidden in non-proprietary software.

This discrimination is harmful because non-proprietary software provides several advantages to the public: users can customize it, improve it, and study it to learn programming; they can also develop habits of good citizenship by lawfully passing on copies to their friends.

Software developers who choose to encourage redistribution are choosing to serve the public fully rather than only themselves. Today such public spirit is scarcer than innovation. It does not make sense to encourage innovation by thwarting public spirit.

The Fear Factor

The scope of interface copyright is so wide and vague that it will be difficult for any programmer to be sure of being safe from lawsuits. Most programs need an interface, and there is usually no way to design an interface except based on the ideas you have seen used elsewhere. Only a great genius would be likely to envision a usable interface without a deep resemblance to current practice. It follows that most programming projects will risk an interface infringement suit.

The danger will be increased because the actual, de facto scope of interface copyright will be wider than supposedly intended. This is due to the practice of intimidation.

When offered a choice between paying royalties and being sued, most businessmen choose to pay, even if they would probably win the case. They know that customers and investors may avoid them because of the suit, so that an eventual victory will come years too late to save them from great loss or even bankruptcy. They speak of suits "putting their money in jail." They prefer the certainty of a payment they can bear, even if it is unjust.

This phenomenon is well known, and some companies take advantage of it by threatening to sue when they know they don't have a real case.

If patents are any guide, intimidation will be widespread in the area of interface copyright. G. Gervaise Davis (an attorney specializing in the field) estimates that 90/overturned in court, if anyone dared to challenge them. These patents are part of a strategy of intimidation; they were filed in order to gain a position for intimidation.

Barrier to Evolution

Despite the high and many-fold social cost of user interface copyright, the reader may still feel that it must have some beneficial effect on progress in user interfaces, however minuscule. However, interface copyright may actually retard progress, because of the evolutionary nature of interface development.

Fully fleshed-out user interfaces schemes don't often arise as tours de force from the minds of isolated masters. They result from repeated

implementations, by different groups, each learning from the successes and failures of previous attempts. For example, the Macintosh interface was based on ideas tried previously by Xerox and SRI, and before that by the Stanford Artificial Intelligence Laboratory. The Xerox Star also drew on the interface ideas that came from SRI and SAIL. 1-2-3 adapted the interface ideas of Visicalc and other spreadsheets. dBase drew on a program developed at the Jet Propulsion Laboratory.

This evolutionary process resembles the creation of folk art rather than the way symphonies, novels or films are made. The ideas that we ought to encourage are most often ideas for small, localized changes to what someone else has done. If each interface has an owner, it will be difficult to implement such ideas. Even assuming the owner will license the interface that is to be improved, the inconvenience and expense would discourage all but the most determined.

Evolution vs. Compatibility

The careful reader will now notice an apparent contradiction between the usefulness of evolutionary growth and the undesirability of incompatible changes. Why aren't the evolutionary changes rejected by users who do not want any change?

To some extent, they are rejected. For this reason, developers often try to satisfy both goals. They make changes that are upward-compatible, or change only a small portion of the well-known interface.

Thus, on computer keyboards, we now have function keys, arrow keys, a delete key and a control key, which typewriters did not have. But the layout of the letters is unchanged. This is an upward-compatible change.

When complete upward-compatibility is impossible, developers still strive for as much compatibility as is possible given the improvement to be made. This reduces the retraining cost for the given amount of benefit.

However, such partial changes as this would not be permitted by copyright law. If any significant portion of the new interface were the same as a copyrighted interface, the new interface would be illegal.

What Do Interface Designers Think?

At the 1989 ACM Conference on Computer-Human Interaction, Professor Samuelson of Emory School of Law presented a debate on the legal arguments for and against user interface copyright, and then asked the attendees — researchers and developers of user interfaces — to fill out a survey of their opinion on the subject.

The respondents overwhelmingly opposed all forms of user interface copyright, in most cases by 4 to 1. When they were asked whether user interface copyright would harm or help the field, on a scale from 1 to 5, the average answer was 1.6. For the full results, see the May 1990 issue of the Communications of the ACM.

The advocates of user interface copyright have a habit of trying to sell their scheme as a method of providing better security and income for user interface designers. However, the survey shows that these supposed beneficiaries would prefer to be let alone.

Do You Really Want a User Interface Copyright, Anyway?

Many organizations talk about aiming to have a major influence in shaping the world. The way to have this influence is to encourage others to imitate what you do: if your way of doing things is appealing enough to draw the world after you, then you can shape it.

If, on the contrary, you create obstacles to drive others away from your path, eventually they will succeed, leaving you in irrelevant isolation, no matter how inspiring your way might otherwise have been.

For a business, "locking in" customers may be profitable for a time. But, as the vendors of proprietary operating systems have found out, this generates public resentment, and eventually drives customers to try to escape. In the long run, this is not the way to succeed.

Conclusion

We have seen that monopolies on user interfaces do not serve the users and do not "promote the progress of science and the useful arts." It follows that user interfaces ought to be the common property of all, as they undisputedly were until a few years ago.
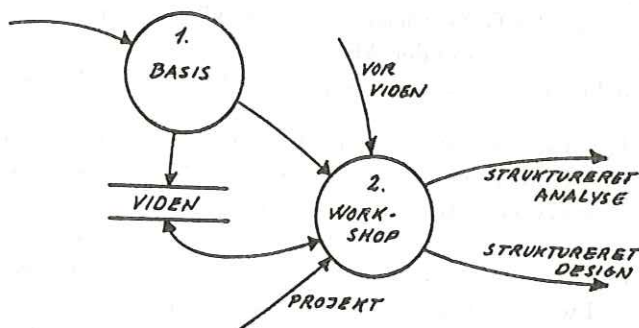
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Ring 43 63 01 55

- mere end data

Benchmarks på europæisk plan?

Af *Søren Oskar Jensen*
DKUUG-Nyt

Der foregår en ikke særlig pæn krig mellem forskellige leverandører af hardware om **hvem** der har den hurtigste maskine. For såvel udenforstående som for selve kombetanterne er det et evigt problem at alle informationer må betragtes med en solid dosis skepsis, idet objektivitet kan være svært at mønstre når der står penge på spil — og der står masser af penge på spil i kampen om købernes gunst.

Nu gøres der et forsøg på at indføre lidt objektivitet i debaten, idet en gruppe franskmænd, der med succes har lavet uvildige målinger af Unix-maskiner i AFUU (det franske modstykke til DKUUG), søger interesserede til at lave en EUUG-arbejdsgruppe, der skal udarbejde benchmarks.

Hvis der blandt dette ydmyge skrifts læsere skulle befinde sig personer med interesse i et sådant projekt, kan jeg henvise til næste nummer af EUUG Newsletter, hvor der vil være en statusrapport fra benchmark-gruppen under AFUU.

Benchmark-gruppen har bedt om at flg. bliver udspredt:

> The Benchmark group from AFUU plan to move to an EUUG Working group, and, as in Esprit projects, the preliminary condition is that there is participation from at least 3 national groups. Thus, we're looking for active fellow benchmarkers and wish to contact them at the earliest, and why not toward a preliminary meeting at Nice? Please contact us at: ssba@afuu.fr or ndoduc@framentec.fr

DKUUG vil selvfølgelig også være interesseret i at høre fra interesserede, så kontakt os, hvis I har lyst til at beskæftige jer med benchmarks.

DKUUG - Dansk UNIX-system Bruger Gruppe
Bestillingsliste vedr. medlemstilbud

Listen sendes til:

    DKUUG
    Sekretariatet
    Kabbelejevej 27 B
    2700 Brønshøj

(telefon 31 60 66 80)

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Medlemsnavn og adresse tages normalt fra vor database, men bedes angivet her (gerne stempel) af hensyn til kontrol.

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- Abonnement på PC World og/eller Computerworld (50 % af normal abonnementspris)	
DKUUG's pjece (vær ikke for tilbageholdende)	
DKUUG Nyt specialnummer Mikro Data 89 (også til PR-formål)	
DKUUG's medlemsliste (overdriv ikke)	
Medlemsinformation (vedtægter, formandsberetning, regnskab, budget) ..	
Netinformation (m. tilmeldingsblanket for login/post/nyheder)	
Magnetbåndsinformation (m. bestillingsblanket for "gratisprogrammel")	

┌ Dato: ──────┐ ┌ Underskrift: ──────────────┐   ┌ Forbeholdt DKUUG: ──┐
│   │ │   │   │ Modt. d.   │
│   │ │   │   ├─────────────────────┤
│   │ │   │   │ Eksp. d.   │
Medltilb 90-05-10   └─────────────────────┘

Oversigt over medlemsmøder i 1990

Dato	Sted	Emne
16/8	Ålborg	UNIX i den offentlige sektor
20/9 †	København	UNIX i finansverden
11/10	København	Trends og teknologi
28/11	København	Årsmøde
29/11	København	Årsmøde

De med † markerede møder er halvdagsarrangementer, som er gratis for medlemmer. De øvrige møder er heldagsarrangementer.

Tid, sted og program for hver enkelt møde vil blive annonceret i DKUUG-Nyt forud for mødets afholdelse.