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THE TREENET WEB APPLICATION

Sean Donaghy - TREENET

The web application will be central to the TREENET project, and will allow us to take the next the step toward realising the primary aim of the organisation – to improve the urban forest through information sharing and research.

When we started work on the system, we decided quite early on that it would serve two main purposes:

(a) It would provide a system to allow different stakeholders in street trees to share information and experience
(b) Provide a system to collate different types of trial site data from different organisations

Whilst providing this functionality, however, it was imperative that we maintain the design principles of

(a) **Cross-organisational standards**, that all organisations could easily adopt
(b) **Flexibility**: so that we could accommodate different organisations with different time/resource constraints
(c) **Ease of use**

To do this, we decided to adopt some widely used technologies; namely *Microsoft's Active Server Pages, Visual Basic, Microsoft Access databases, Javascript* and *HTML*. Standards used across much of the Internet and supported by most relatively recent browsers such as *Internet Explorer 4* and *Netscape 4*.

Users would simply access the TREENET system via the TREENET web site.

The system has been written to be easily expanded and maintained as we adopt new technology and improve the system to accommodate users' needs.

The Problems

The problems that we encountered trying to collate data and information from so many different organisations and from so many different parts of Australia (and, indeed, the world) could be summarised as follows:

(a) Maintaining maximum flexibility whilst minimising complexity for the end-user

(b) Catering for different organisations and individuals with (i) different areas of expertise and (ii) different time/resource constraints

(c) Allowing organisations and individuals to co-operate to collect and contribute data

(d) Building in the flexibility to accommodate user suggestions and easily integrate related organisations' data and technology

(e) Designing the system so it can grow to accommodate new ideas utilising technologies such as ASP.NET, C# or Java – if future developments necessitate it.

(f) Bringing different types of information together - raw trial data, anecdotal evidence, articles, papers and user feedback so that it can be accessed as a whole.

The Solutions

(a),(b) Customisation: allowing users to collect as much data as they want, by organising TREENET data into optional modules. Users can then select the data they are interested in.

(c) Users can also ask for help collecting or creating data, the system will link people who need help to those willing to provide it based on geographical criterion.

(d), (e) The modular nature of the approach allows new elements to be accommodated as new modules.

(f) All data can be related together using keywords/semantic analysis engine. Searches can reveal information from all sorts of modules - messages, anecdotal evidence, trial data, etc, this bringing together customised sets of data that can be stored as part of the user's preferences.

For those who do not have access to the Internet, we will be providing the functionality to summarise a great deal of the data and make it available in publications and regular newsletters made available by traditional post as well as email.

The web application will streamline administration so that we can reduced administrative overheads to a minimum.

The Future

The next year will be a period of testing, consolidation and improvement. Early adopters of the TREENET model will have the opportunity to markedly influence the development of the system. We would really appreciate your feedback, and will attempt to improve the system to meet your needs.