

整合GPS、WiFi、3D Space 開發校園空間導航導覽系統

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摘要

The IT technology has been well developed for current generation. The popularity of communication has promoted the application of IT and the navigation systems are used by more population. The house selling companies have provided the guide system so customer can look up the space pattern through internet to save the transportation time. Some big enterprises and education may be lack of navigation system and guide system therefore can not provide visitors a better space guidance service. In this study the GPS and WiFi are used to construct Space Guidance System for visitors to easily navigate to target. This study will use 3D technology to build 720 degrees animations for selected points so users can look the views of new environments through browser. The ER Model, SQL Server, ASP.net, ODBC, PDA and Windows environment are used to develop "Space Navigation and Guidance System" which includes modules such as 'Organization Management', 'Faculty Management', 'Space Management', 'ScheduleManagement', 'Activity Management' and 'Space Guidance'. This study will integrate space and faculty data. When related data of visited person, such as name, phone number, extension number, fax number, email, faculty number or room number, is keyed-in, the system will show the path from start point to destination

point. The system will use GPS outside the building and use WiFi to navigate customers inside the building. When visited person has multiple offices or in lecture or meeting, system can detect and provide user to choose appropriate target. The system will guide visitor to selected destination to save groping time for visitor and promote space service quality as well as enterprise image. When visitors want to attend some activity such as conference or meeting, the system can direct them to scene of selected activity. Through the help of 3D guidance, user can view the 720 degrees animation to familiar interesting points. This will help us to know new environment easily and significantly promote the organization image.

關鍵字：GPS, WiFi, Database, ER Model, PDA