



TECHNICAL – UNIQUE VIDEO MANAGEMENT SYSTEM

Over the last year the technology behind Reading University's Student Television Station RUON has been dramatically improved. This started at the beginning of the year with the design and implementation of a brand new and highly innovative web based Video Management System (VMS) named RUON Demand. This was supplemented later in the year by a brand new website based on the website baker Content Management System (CMS) designed to integrate seamlessly with RUON Demand.

RUON Demand (www.ruon.tv/ondemand) was developed using a relational MySQL database to store all the relevant information about each programme we produce. The database uses a relational structure allowing the videos to be organised into series, shows and categories. This allows the user to quickly locate videos within a certain genre and allows the VMS to suggest suitable related videos.

The front end of the on demand system was developed using the PHP scripting language allowing data to be extracted from the MySQL database, processed and displayed in a standard web format. The front page of the VMS displays links to recently added and featured videos in a smooth scrollable bar developed using the JQuery Java toolkit. This allows users to quickly navigate to our latest and greatest programs.

Other video navigation systems featured within the VMS are displayed as tabs at the top of the page. These include categories which allow the user to navigate through videos by their category followed by the show and the series. Also featured is an A to Z section allowing users to search programs alphabetically. The VMS also features an AJAX equipped search bar allowing the users to get real time results for their search queries as they type.

To display the actual videos the VMS uses JW Player, an open source flash based video player, which is highly configurable and currently allows the website to broadcast subtitled and HD footage. Alongside this player information about the current video is shown along with any other videos in that series or related to it. This is shown in a sleek tab based system, also based on JQuery, following the theme of the site and increasing usability.

The main RUON website (www.ruon.tv) has been developed using the Website Baker CMS this allows the creation of user accounts so that individual shows can administer their own part of the website without affecting the rest of it. This CMS also features a web based WYSIWIG page design tool allowing even non-technical users to edit pages quickly and easily.

The website uses the same tab based navigation system as the VMS however it also includes a drop down sub-menu allowing users to quickly navigate to their desired page. All pages feature the RUON Twitter feed to keep the user up to date with RUON news and are styled to complement the VMS.