



Computer Applications Company, Desoft

WEB APPLICATION

FOR THE MANAGEMENT OF THE ELECTRONIC PROGRAMMING GUIDE

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INTRODUCTION

The introduction of Digital Terrestrial Television (DTT) in Cuba is a step forward in the computerization process of Cuban society, reaching most households with a wide range of information.

Better quality of the received signal, the digital images always free of distortions, ghosts, noises, fading and the sound has higher quality.

Access to all programming channels from a single transmitter, without having to reorder the antenna each time to optimize the signal quality in different channels.

Increase in the number of programming channels.

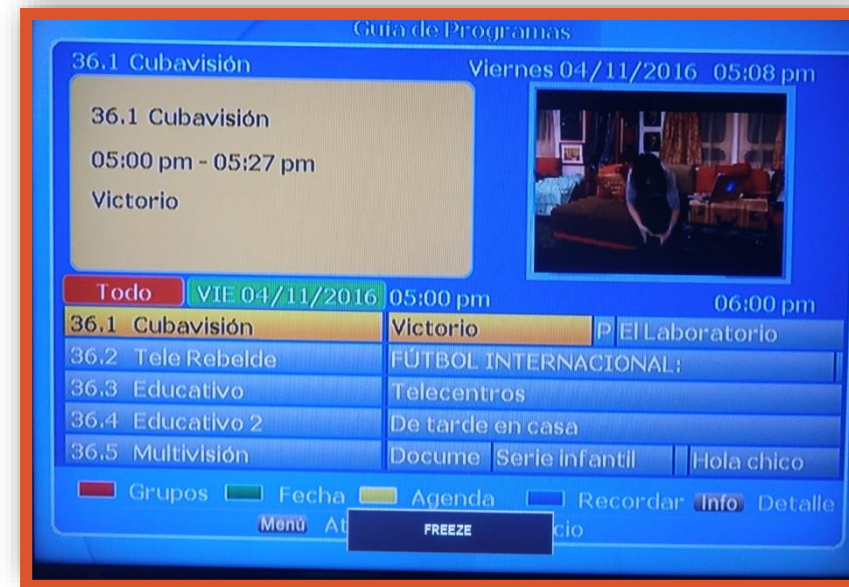


INTRODUCTION

Access to new and useful services through the television.



Added value services



Electronic programming guide

INTRODUCTION

Limitations of the current application.



- It does not have nomenclators that classify the information.
- Installation for each work station of the channels.
- Output of information only in XML files.
- It does not have a view where the programming is shown in a timeline.

INTRODUCTION

Other limitations of the current tool for the management of the programming guide.

- Absence of an internal messaging system.
- Lack of mechanism for the correction of errors.
- Insufficient management of security
- Does not record the actions of users in the system.

INTRODUCTION

Problem to solve: How to perfect the management of the Electronic Programming Guide?

Object of study: Electronic Programming Guide.

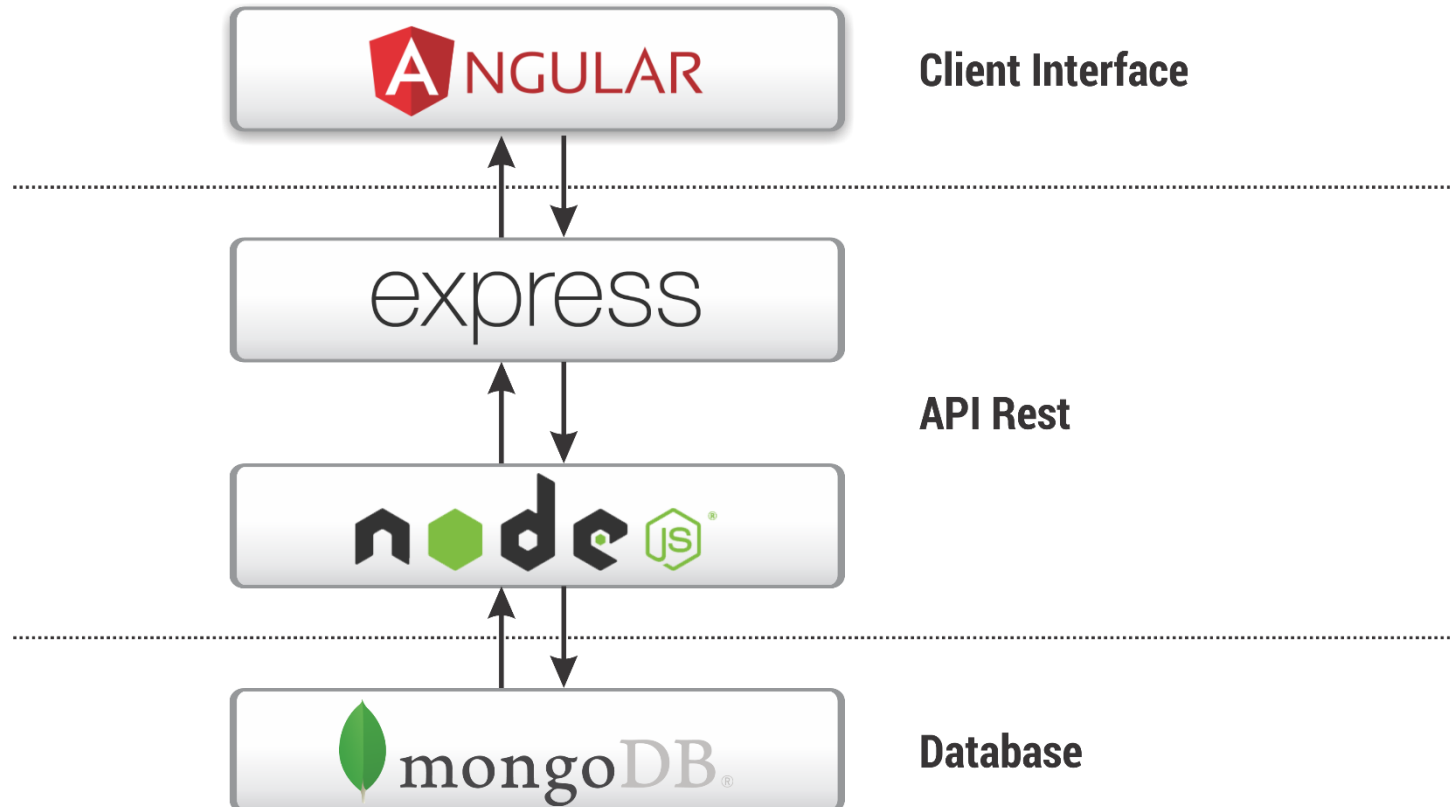
Field of action: Management process of the Electronic Programming Guide.

General objective: Develop a system to perfect the management of the Electronic Programming Guide.



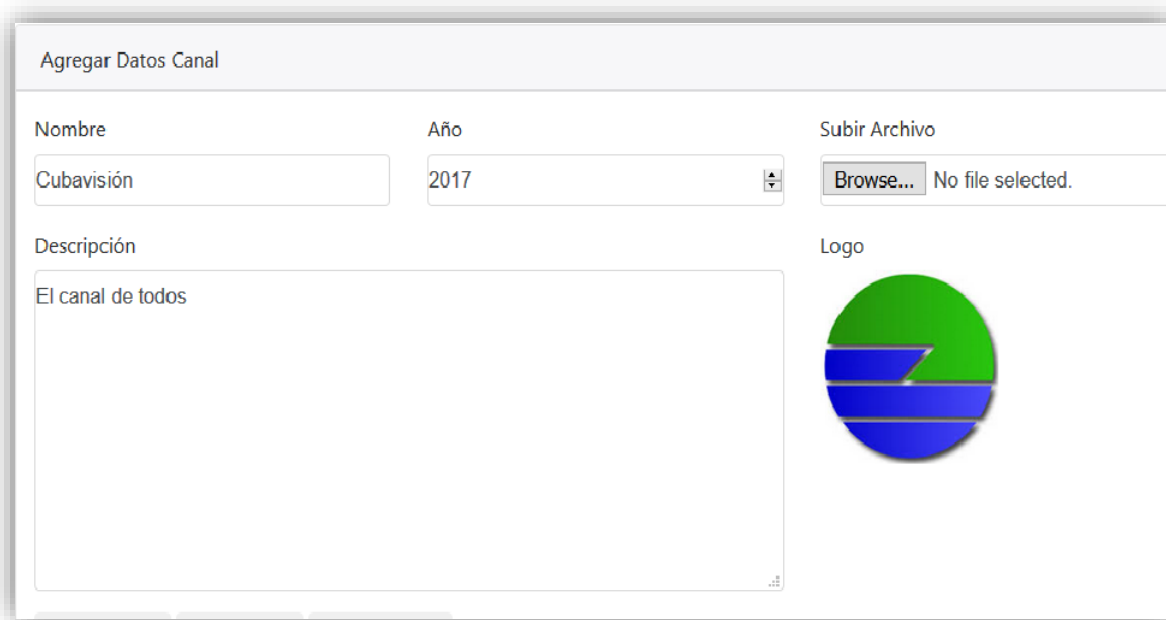
DEVELOPMENT

Its development is based on free software technology, and on a multiplatform and Client-Server architecture.



DEVELOPMENT - New functionalities

The system incorporates a group of nomenclators among which are:



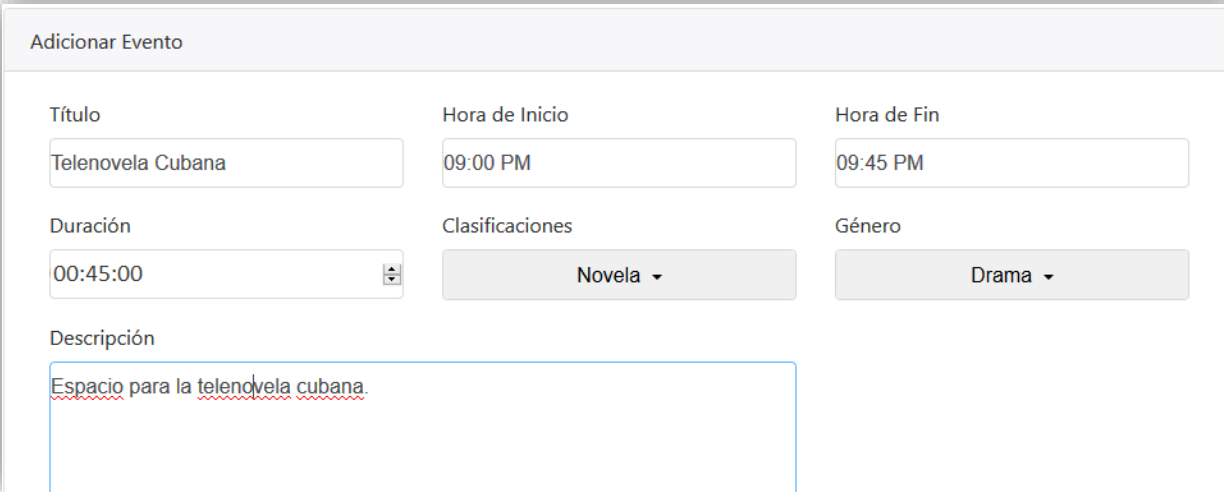
The screenshot shows a web form titled "Agregar Datos Canal". It contains the following fields and elements:

- Nombre:** A text input field containing "Cubavisión".
- Año:** A dropdown menu showing "2017".
- Subir Archivo:** A button labeled "Browse..." next to the text "No file selected."
- Descripción:** A large text area containing "El canal de todos".
- Logo:** A circular logo with a green upper half and a blue lower half, featuring a stylized white 'E' shape.

- Channels
- Genders
- Classifications
- Events or Programs
- Seasons
- Templates

DEVELOPMENT - New functionalities

The system incorporates a group of nomenclators among which are:



The screenshot shows a web form titled "Adicionar Evento". It contains the following fields:

- Título:** A text input field containing "Telenovela Cubana".
- Hora de Inicio:** A time selection field showing "09:00 PM".
- Hora de Fin:** A time selection field showing "09:45 PM".
- Duración:** A time selection field showing "00:45:00".
- Clasificaciones:** A dropdown menu showing "Novela".
- Género:** A dropdown menu showing "Drama".
- Descripción:** A text area containing the text "Espacio para la telenovela cubana." with a red squiggly underline.

- Channels
- Genders
- Classifications
- Events or Programs
- Seasons
- Templates

DEVELOPMENT - New functionalities

The system incorporates a group of nomenclators among which are:

Agregar Datos Plantilla

Plantilla Eventos asociados

Título
Lunes de fin de año

Canales
Cubavisión ▾

Temporadas
Programación Especial - Fin de año ▾

Descripción
Lunes de programación especial para fin de año.

Días de la semana
Lunes ▾


Guardar Limpiar Regresar

- Channels
- Genders
- Classifications
- Events or Programs
- Seasons
- **Templates**







DEVELOPMENT - New functionalities

Management of the schedule of each channel

Parrilla del Canal: Cubavisión

Fecha: 12-09-2017 

Plantillas: Martes ▼

Título	Actions
12-09-2017	
Noticiero estelar	 
De la Gran Escena	 
Telenovela Extranjera	 

Título: Noticiero estelar

Clasificación: Informativo Género: Noticiero

Hora de Inicio: 08:00 PM Hora de Fin: 09:00 PM Duración: 01:00:00

Descripción: Noticiero estelar de la televisión cubana.
Cobertura especial por el Huracán Irma.

➡ New field:

Premiere or retransmission

➡ May change:

Gender

➡ Update:

Schedule and Description

DEVELOPMENT - New functionalities

- It provides an interface for the schedule of each channel according to international standards, showing in a timeline the current programming and the programming for the next days.
- The information can be consulted from external applications.
- Role-based access control and use of authentication through the Lightweight Directory Access Protocol (LDAP).
- The standard XML format for television is kept as output and also another Word format is added.
- The system implements a traceability policy.

DEVELOPMENT

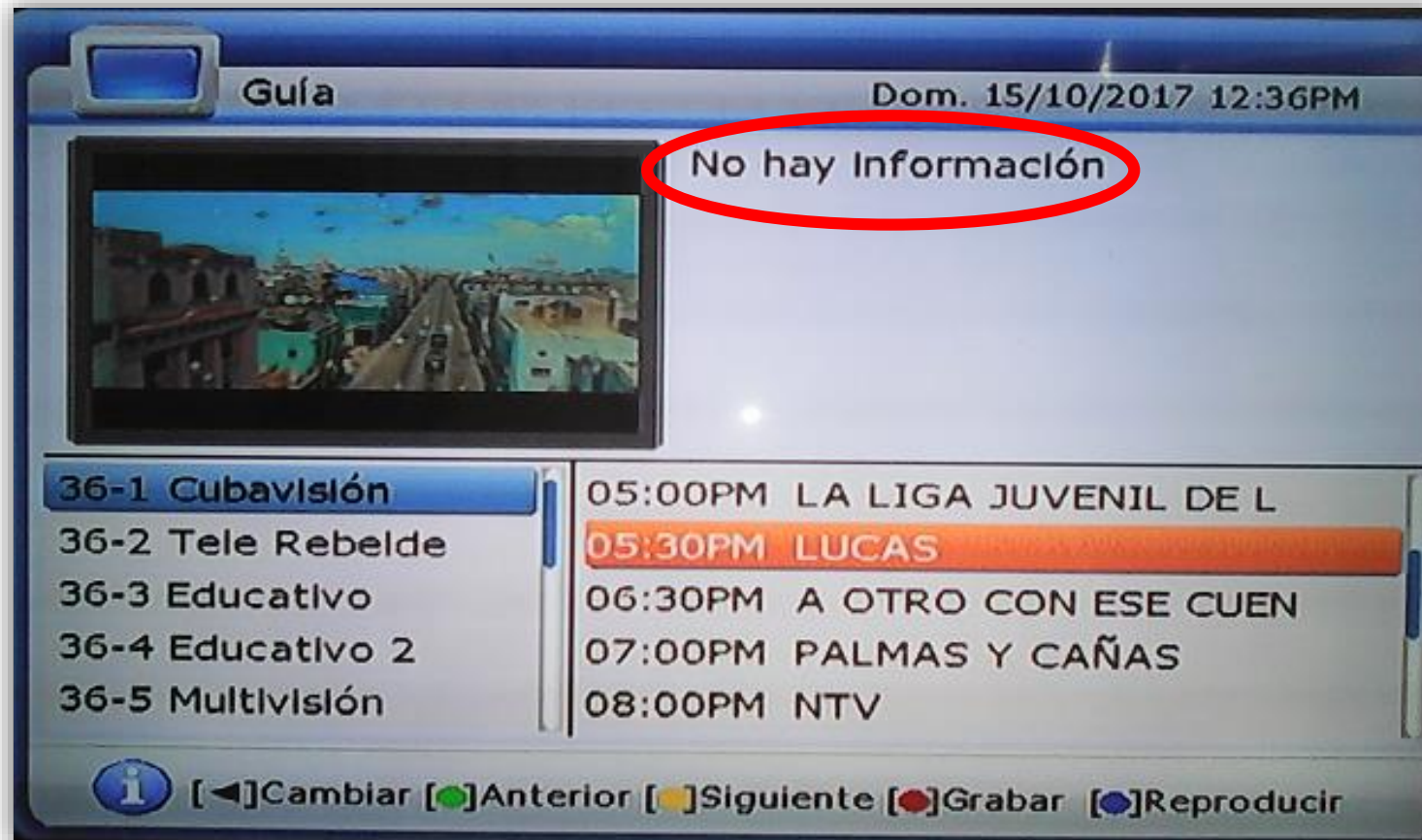
Security focuses on role-based access control and the use of authentication through the LDAP, which defines a specific role for each type of user in the system.

Roles

- Administrator
- Editor or Programming Manager
- Reviser

Incorrect uses of the system

Lack of information about the events.



Incorrect uses of the system

Inconsistencies between the programming guide and the actual transmission of events.



CONCLUSIONS

The developed web application implements the standard for the Electronic Programming Guide, which generates the same structure of the XML files with the schedule of the television channels, that the current system, but achieving a better management in its preparation.

It incorporates new features such as role-based security and LDAP authentication, traceability, as well as a set of nomenclators that allow better reliability of the information that is managed.

It also generates an output in Word format for sending it to the press, as well as several services that can be used for other applications related to Mobility or websites.



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