

**System: WebCongress** 

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**Software Configuration Management** 

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### INTRODUCTION

This baseline document describes the fundamental aspects of the system called "WebCongress" intended for the management of a congress. The system will provide users with the possibility of consulting information about workshops and conferences, purchasing their tickets and registering for the events of their choice.

The main objective of this document is to present a clear basis for the requirements, analysis and design of the system, ensuring a structured and efficient development.

### SYSTEM DESCRIPTION

The project involves the development of a website dedicated to the management of conferences. This site will be divided into two modules:

#### User module:

allows users to access detailed information about workshops and conferences, including schedules, specific locations and available seats. In addition, users will be able to purchase entrance passes to the conference, which will be of two types:

Free package: Limited access to some workshops and conferences.

Full package: Full access to all events.

Users who have purchased a pass will be able to register for the workshops or conferences of their choice, provided there are available seats. To purchase a pass, it is necessary to create an account on the website.

#### Administrator module

The system includes an administrator profile which can be accessed with administrator credentials. From this section, the content of the site can be managed, such as the data of speakers, events and registered users.

# FUNTIONAL ANDO NON-FUNTIONAL REQUIREMENTS

In this section we present the functional and non-functional requirements of the system.

Code	Description	Type of requirement	
RFU-001	Registration and	Functional requirement	
	authentication of users.		
RFU-002	Purchase of passes for	Functional requirement	
	the congress (free and		
	complete).		
RFU-003	Registration for	Functional requirement	
	workshops or		
	conferences, subject to		
	availability of places.		
RFU-004	View information on	Functional requirement	
	workshops and		
	conferences (name,		
	description, time, place,		
	place and speaker).		
RFU-005	Information on available	Functional requirement	
	packages.		
RFU-006	Speaker management:	Functional requirement	
	registration, editing and		
	deletion of data.		
RFU-007	Event management:	Functional requirement	
	registration, editing and		
	deletion of workshops		
	and conferences.		
RFU-008	View registered users,	Functional requirement	
	including emails and		
	purchased packages.		
RFU-009	Top menu with the	Functional requirement	
	sections: Event, Packages,		
	Workshops/Conferences		
	and Buy Pass.		

Code	Description Type of requirement	
RNF-001	Intuitive and user-friendly	Non-functional
	design.	requirement
RNF-002	Compatibility with	Non-functional
	modern browsers.	requirement
RNF-003 Ability to manage up to		Non-functional
	multiple simultaneous	requirement
	users.	
RNF-004	Encryption of passwords	Non-functional
	and sensitive data.	requirement
RNF-005	Prevention of attacks	Non-functional
	such as SQL injection	requirement
RNF-006	24/7 access to the	Non-functional
	system.	requirement
RNF-007	Possibility of	Non-functional
	incorporating new	requirement
	functionalities in the	
	future.	

# REQUIREMENTS ANALYSIS

The system is designed to meet the needs of three main types of users:

### Visitors:

- Check conference information.
- Create an account to purchase passes.

### Attendees:

- Buy passes.
- Register for workshops or conferences.

#### Administrators:

- Manage speaker and event data.
- Monitor registered user information.

The following priorities were identified:

High priority: User registration, purchase of passes, event registration, administrator administration of events.

Medium priority: User review by administrator.

Low priority: Future optimizations and scalability.

### SYSTEM DESIGN

The system will follow a client-server-based architecture. The frontend will be developed in React, while the backend will use Node with Express. The database will be MySQL to store information about users, events and speakers.

### Main Components:

Frontend	Backend	
Interface design for the navigation	RESTful services to handle user	
menu and different views of the site.	operations, events, and administration.	
User registration form and purchase of		
passes.		

### **Navigation Diagram**

There will be a top menu that will connect the main sections:

Event	Packages	Workshops/Conferences	Buy Pass
General information about the conference.	Details of available passes.	List of all events	Process for acquiring a pass.

### **Administrator Profile**

A control panel will be included for the administrator view that will contain the following:

Speaker management.	Event management.	Display of registered
		users.