Innovative System for Preservation and Valorization of the Romanian Literary Heritage: INTELLIT Platform

Lidia BĂJENARU
National Institute for Research & Development in Informatics - ICI Bucharest
University Politehnica of Bucharest
lidia.bajenaru@ici.ro

Ion Alexandru MARINESCU, Ionuț GIURA
National Institute for Research & Development in Informatics - ICI Bucharest
ion.marinescu@ici.ro, ionut.giura@ici.ro

Eugen SIMION
"George Călinescu" Institute of History and Literary Theory, Romanian Academy
eugen.ioan.simion@gmail.com

Abstract: In the context of a globalized and digitized world, there is a growing concern of altering national identity through the loss or dilution of the cultural landmarks that are the basic pillars of each nation. Therefore, numerous initiatives to preserve cultural heritage in all its dimensions, including the literary one, have been initiated around the word. This paper presents a system for the preservation and valorization of the Romanian literary heritage collections using intelligent digital solutions for knowledge extraction and systematization. This digital solution represented by a dedicated integrated platform offers access to literary works, manuscripts, dictionaries of Romanian Literature and many more other essential works.

Keywords: Literary Heritage, Preservation, INTELLIT Platform.

INTRODUCTION

Globalization is considered today as the reality of the modern world, representing the most extensive and complex process of metamorphosis of local elements into global content components, with the ultimate goal of creating a single homogeneous system (Guttal, 2007). Although the globalization process is usually associated with the accelerated transformation of world economic relations, it can be observed that this phenomenon captures all the elements that define a modern contemporary society (environment, culture, political system, economic system, etc.). The cultural dimension of globalization represents an increasingly visible phenomenon through

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the way it influences everything, including the cultural specificity of a country, hence the fear of altering the national identity, the cultural factor being one of its main pillars (Arion, 2014).

National literature plays an extremely important, even vital, role in the development of a country, de facto representing its identity. Often, national literature means those works and documents that describe the peoples with all the features and elements that define them, thus setting a cultural basis that defines the essence of a nation. It is very important for a person to know their origins, history, customs, especially nowadays, when traditions and customs are fading away, and the process by which borrow habits, words, traditions from other cultures, is more and more intense and often in a non-critical manner, and thus are gradually losing what there are most valuable, fragments of national identity.

In this sense, the topic of this paper highlights a very important problem, namely the way in which the literary heritage is preserved, part of the cultural heritage of the people in the context of the challenges generated by globalization. Such concerns are not new, people have tried over time to preserve their cultural heritage through archives, libraries, museums, etc., today new technological opportunities being available for the achievement of this goal.

Under these circumstances, this work proposes an innovative system that represents both an open portal to the digital era, as well as the transformation of this process of globalization and the minimization of its negative impact on the cultures. A digital platform is the one that stored, analyzed and processed literary works, dictionaries of Romanian literature and many more other documents, and also allows quick access to literature and related materials for everyone. The dataset is provided from different sources of the Romanian Academy, the Institute of History and Literary Theory. This dataset consists mainly of literary works, dictionaries of Romanian literature and many other documents.

The digitization of these data allowed the creation of the Virtual Library of Romanian Literature. This virtual space represents a safe and friendly environment, accessible for all users, being the answer offered for the preservation and promotion of the Romanian literary heritage.

The development of the online platform INTELLIT has exposed contents from data sources provided by the Institute of Literature of the Romanian Academy, such as: the General Dictionary of Romanian Literature (GDRL 2.0), the Chronology of Romanian Literary Life (1994-2000) and the Canonical Work of the Romanian Writers and from other structured and unstructured data sources.

The General Dictionary of Romanian Literature is an academic work for the general public both in Romania and abroad, interested in the phenomenon of literature (Simion, 2016-2018). This work presents all Romanian authors regardless of where they wrote and from where they became known. The essential criterion of selection and judgment was that of an axiological and historical nature, suitable to the requirements of a dictionary. The dictionary also includes writers from the diaspora. A unitary criterion of appreciation has been attempted. It also includes literary and cultural publications, even newspapers that have a literary page. The dimensions of an article correspond to the place occupied by the author or publication in the general Romanian literature. Due to the nature of the content and the quality of the work, the „General Dictionary of Romanian Literature" can be a relevant tool in the process of learning and documenting in fields such as: literature, history, journalism, sociology, linguistics, etc. In this sense, the platform uses some specific functions (searching, filtering and ordering the results). For this reason, the entire text is processed in order to extract information and index according to criteria that are relevant to the user.

The Chronology of Romanian Literary Life (volumes I-XIIIB, Bucharest, 2010-2017) is a complex research work, unique in the historical landscape of literature, both by the magnitude of the information, by the type and by the quality of the interpretative approach. A reconfiguration of the Romanian landscape, details of the events

from the years 1944-1957, 1965-1967, 1990-1996 are presented. (Simion, 2010-2017).

The canonical work of the Romanian writers could be shared by the authors, clustering in order to offer a more relevant sorting of literary genres. The major lyric genres, the epic genre and the dramatic genre form the basis of the platform search, related to the canonical work (Diaconu, 2013).

RELATED WORK

In a digital and globalized world, the only way to not lose the cultural heritage, especially the national cultural heritage, is to invest in tools capable on one hand of increasing the digital fund of literary works and on the other hand of aggregating the information, to extract knowledge and to present it to users according to certain criteria and filters chosen by them. Some platforms developed over the years that allow users to access the digitized literature fund or meta-information are presented. It should be noted that, in some cases, these platforms offer incomplete functionalities, are difficult to access, especially for inexperienced users, and less friendly in viewing and interpreting the displayed information.

In line with the National Strategy for the Digital Agenda in Romania and other national initiatives for accessing the past or current cultural digital information, a series of platforms designed to preserve the national literary heritage have been developed. Among the most important platforms can be mentioned: The national catalog ROLiNeST, the National Digital Library, e-Heritage, the OPAC online catalogue, etc.

The national catalog ROLiNeST, the largest Romanian collective virtual catalog, was created in 2005 within the research project NUSIDOC („Unitary National System of Scientific and Technical Information and Documentation") which included the databases of the most important university libraries in the country. Currently, ROLineST allows searching and retrieving existing bibliographic information in 12 libraries in Romania.

The National Digital Library provides access to a collection of digital documents resulting from the digitization process of the collections of the National Library of Romania, organized by themes or events. The online catalogs allow access to users to full-text documents or documents entered into the library's collections starting with 1993: periodicals, multimedia documents, books and articles from cultural periodicals.

The OPAC online catalog of the Romanian Academy Library is the core of the library's automation system and includes several databases that provide information contained in the catalog of the Romanian Academy Library. Online cataloging began in 1998 and currently includes approximately 450,000 records. The ORB database is the database for special collections, of which the „Old Romanian Book" is completed and includes a number of 8360. Particular importance has been given to the description of each copy, the existence of ex-libris being also specified, and various notes. The BIB database contains the Contemporary Romanian Bibliography, 1919-1952, which concludes the series of the Retrospective Bibliography of Romanian Books, and text-image databases that can be consulted under the generic title IMG, the first of which is that of the Eminescu manuscripts.

e-Patrimoniu is a web portal developed by the National Institute of Heritage, representing the gateway to Romania's cultural heritage. In this sense, online databases are available, such as "Books", "Museums", "Archaeology", "Ethnography", "Architecture", etc. The catalog of incunabula, existing on the territory of Romania, includes a digital description of the first copies of a printed book that dates from the invention of the printing press by Johann Gutenberg. The Digital Library contains versions of manuscripts related to Romanian heritage.

The most representative platforms worldwide for preserving literary heritage include the Encyclopedia Britannica, the European Digital Library, the The British Library, the Manuscriptorum and the Gallica.

The Encyclopedia Britannica (Orig. Encyclopædia Britannica) managed to change its status as a voluminous work; the 2010 edition having over 32 volumes; and an outdated one (updating editions took so long that the information became

invalid), using an online platform. Encyclopedia Britannica includes online platforms with content that is adapted according to several criteria such as: geographical aria, field of interest and age groups. The bibliographic catalogue represents a separate model where the content is ordered in categories and subcategories according to the field of activity (literature, art, science, etc.) and can be filtered according to 3 predefined criteria.

The Europeana represents the main access path to European cultural heritage, users having the opportunity to access in one place different types of digital content belonging to various heritage holding institutions. Thus, millions of books, paintings, films, museum objects or archival documents digitized throughout Europe can be admired, thus promoting the support of the conservation of cultural heritage.

The British Library includes more than 20 specialized catalogues. Most of the documents belonging to the British Library can be found in these catalogues, some materials not yet being accessible online, such as some categories of early printed materials.

The Manuscriptorium is the digital library of the National Library of the Czech Republic that provides free access to information focused on historical resources through integrated tools.

The Gallica is the digital component of the National Library of France (BnF). It provides access to many types of documents: printed documents (books, press and magazines) in image and text form, manuscripts, maps and plans, being intended for all readers.

INTELLIT PLATFORM

In order to prevent the definitive loss of the elements that ultimately define Romanian culture, it became necessary to create a Virtual Library of Romanian Literature (BVLR) that would contain in digital format (quasi)exhaustive information about Romanian literature: authors, genres, trends, literary magazines, etc. Unlike other existing catalogs, BVLR includes an exhaustive bibliography, as well as information on all editions, manuscripts, etc. Likewise, the digital version also includes the works of the most important Romanian writers that are no longer bound by the copyright laws, as well as other types of content, such as philological notes, indications regarding variants, etc. made by professional editors. The main data sources that feed this vast data warehouse with content are provided by the Romanian Academy Institute. This data warehouse contains 4 types of documents described in the introduction of this paper.

The INTELLIT platform represents the gateway for the general public, the academic and the economic environment to all the information about Romanian literature available in the data warehouse. This platform is a service broker for BVLR, and contains information such as: collection and storage services, search services and advanced, intelligent semantic analysis by correlating structured data in a uniform, complete and open format; services for identifying trends and formulating predictions regarding Romanian literature; knowledge transfer services, etc. Through the provided services, the INTELLIT platform allows quick and easy access to the Romanian literary heritage for all users. The platform has been designed and developed to adapt to any type of device (regardless of device size and resolution) used to access the platform (computer, tablet, phone, etc.).

The main functionalities and features offered by the platform are the following:

- Storage, analysis, filtering and processing of different kinds of literary works, dictionaries of Romanian literature, the chronology of Romanian literary life, etc.
- Modern design created by following the rules and guidelines provided by the Google Material Design, but also providing a user-friendly experience.
- The application is responsive, adapting to any resolution and size of the screen on which it is viewed. As such, it can be used on both PC and mobile devices such as tablets or phones.
- Use of modern technologies that guarantee a high level of dynamic scalability when needed.
- Facilitates quick access to information about Romanian Literature.

INTELLIT PLATFORM ARCHITECTURE

The INTELLIT Platform Architecture consists of 3 levels, each level having its own structure and ramification. This structure can be visualized in Figure 1.

- *View level:* represented by the client application is a Web portal which is accessed by the users;
- *Application level:* represented by the processing part, data validation, all the processed required for the platform to run according to specifications.
- *Storage level:* the storage warehouse (ElasticSearch) where all the provided documents are stored.

This approach provides a higher level of security because there is no direct communication (and implicitly no access) between the client application, the server application and storage level, the communication being realized only through the REST Application Programming Interface (API) and various security and authorization middlewares. In this sense, the risks of propagating malicious attacks are reduced.

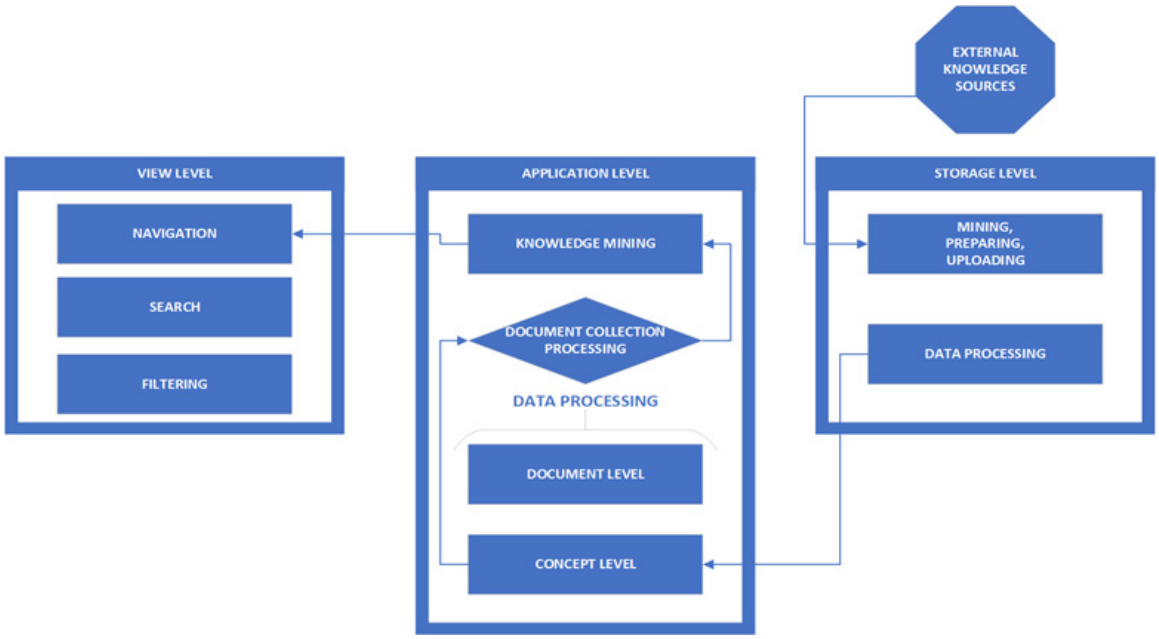

Fig. 1: *The architecture of the INTELLIT Platform*

FEATURES AND TECHNOLOGIES

In the following, the main concepts, technologies and features that characterize each level and corresponding application are described.

VIEW LEVEL – THE CLIENT APPLICATION

The view level (the client application) allows users to access all the pages and views of the INTELLIT platform. Among the most important sections there are:

- Registration / Authentication / Permissions
- View Documents - all documents within the platform offer view both to full-text documents and parts of documents resulted from the filtering of information;
- The display of processing results;
- Advanced search – it shows full documents or just parts that respect the selected criteria (after authors, type of paper, institution, book, bibliography etc.);
- Sorting fields – the platform offers a diversity of fields used to search elements;
- Calendar section – it displays an action / apparition / day of birth / special event;
- News section, etc.

The client Application is a Single Page Application, a web application that interacts with the user by dynamically rewriting the current web page with new data from the web server, instead of the default method of a web browser loading entire new pages. Built on an extremely modular architecture, this standalone application (with its own structure) is divided into components according to their role.

Also, this application follows the latest PWA (Progressive Web Application) standards (Tandel et.al, 2018), benefiting from all the related features of this type of structure (web manifest, Service Worker, Offline work mode, Push notifications, Background synchronization, Connectivity independence, etc).

These approaches in the development of the client application were used due to their performance, modularity, low code duplication and the reusability of the components. The most important characteristics can be stated as follows:

- Dynamic building of components according to the user's actions;
- The path to specific components is automatically updated without reloading the entire page;
- All elements of the page, transition or animation act independently, being changed dynamically without affecting the rest of elements;
- Dynamic data loading and storage in the internal cache;
- Faster page rendering once the original application is loaded;
- Providing operating system notifications;
- Interaction with API components;
- Using application offline or by installing it on any device.

Also, this application follows the latest PWA (Progressive Web Application) standards (Tandel et.al, 2018), benefiting from all the related features of this type of structure (web manifest, Service Worker, Offline work mode, Push notifications, Background synchronization, Connectivity independence, etc).

SERVER APPLICATION

Application Level contains all processes that are linked to data validation, all business processes and algorithms for implementing processing functions or knowledge analysis and extraction functions. These functions and algorithms are realized by using dedicated tools such as Intelligent Miner Tool for Text which takes as input and processes structured and unstructured data to generate patterns, models and knowledge, as well as identifying trends or creating connections.

From a technological point of view, this level is represented by an application (server application) consumed by the client. This application is RESTful, stateless and modular with its own router and middlewares.

NodeJS is used for the main technology and the framework used is KoaJS. In addition, many libraries/packages are used, resulting in a complex and modular architecture. The main features of this architecture can be stated as follows:

- modularity;
- high scalability;
- real-time functionality;
- data synchronization;
- asynchronous calls;
- REST endpoints and specific logic;
- support concurrent connections.

THE STORAGE LEVEL

Actions such as storing, processing and modifying data from the three document types of the INTELLIT platform are performed at this level. It is about data warehouses for literary dictionaries, biographies and works of national writers.

From a constructive point of view, each warehouse offers similar functionalities, the differentiation being made at the level of data extraction and processing methods, which are associated with different categories and criteria for selecting the data to be processed. The relevant data categories thus obtained are available in a specific document used both to keep track of them, but also to extend the list in the future.

The main technology used here is ElasticSearch (Elastic Docs, 2020). This is a distributed search

engine capable of full-text searching, providing users with an HTTP-based Web interface as well as JSON documents that are not limited by data schemas [Elastic Stack and Product Documentation, accessed 2022].

ElasticSearch is a way to store JSON documents based on the Apache Lucene search engine. Documents are indexed according to a specific set of rules. The indexing in this case consists in mapping the values from the fields to the corresponding documents or the corresponding rows for a better search. This decreases the execution time of queries, based on these already created indexes.

Kibana was used to view the data provided by ElasticSearch, but also to navigate within its structures, providing a wide range of tools/ graphs that allow quick visualization of the data and their representation through specific graphs.

Some of the core functionalities for ElasticSearch are as follows:

- It is very fast and can perform several iterations at the same time;
- Allows the implementation of inverted indexes with a finite number of states for full-text processing;
- It is fully indexed, thus allowing full and fast access to any file;
- It is accessible through an API and provides JSON type objects;
- Provides support for a wide range of programming languages and development environments (Python, Java, .Net, SQL, PHP, etc.);
- Through the Web interface you can see processes, performance, run jobs on specific machines to detect anomalies;
- High security, monitoring, alerts, reports, machine learning, etc.

THE SECURITY LEVEL OF THE INTELLIT PLATFORM

The INTELLIT platform is an innovative product among similar products developed in Romania, being designed to become Romania's largest digital archive, its unique content being for the first time exposed in the online environment (Gavrilă & al., 2019).

The platform was designed and tested in line with CIA concepts (confidentiality, integrity and availability) (Moghaddas & al., 2016). Following this model, identity verification mechanisms were created to allow only authorized users to access data according to predetermined roles, security measures being implemented on all components/layers of the applications (architecture security, authentication security, database security, etc.). All these measures are aimed at avoiding the interruption of the services offered. The platform is available starting with 2020, with no reported problems so far regarding the interruption of the provided services as a result of a cyber-attack.

It can be notedthat the cyber security environment is constantly evolving towards newer and more significant threats. These threats come not only from advanced cybercriminals, but also from the growing global online competitive environment (Vevera & al., 2021). Today, the number of cyber-attacks is increasing exponentially, partly boosted by the pandemic context and the massive transition of the population and companies to the digital environment (Brooks, 2022).

There are currently a series of criteria described in the specialized literature regarding the structure and type of cyber security events (Li et.al., 2021), the most frequent types of cyber-attacks being the following: DOS (Denial of Service) and DDoS (Distributed Denial of Service), SQL Injection, Cross site scripting (XSS), Man in the Middle attack, Brute Force, etc. (Gavrilă & al., 2020).

Next, some of the security measures are presented, which are taken at the level of the INTELLIT platform in order to reduce the risk of compromising the availability of the provided services, denying access to resources or affecting data traffic. In this regard, generic security measures regarding limiting the amount of data and information about the application and associated structure that an attacker can access and the methods adopted to prevent the most common types of attack such as those listed above can be discussed. (Li & al., 2021).

SERVER APPLICATION

To limit the exposed data and structure about application, INTELLIT appeals to the advantages offered by the microservices-oriented architecture, through which all individual services can be accessed through an entry point (or gateway) which routes the traffic accordingly. Thus, not only is it possible to limit an attacker's access to sensitive information about the application, but a much more granular and consequently effective control of what enters and leaves the application (request/responses) is achieved.

Another security objective achieved at the level of the INTELLIT application refers to the adoption of some restrictions regarding the circulation of data between the modules/services of the application. Thus, each module/service of the application has access only to necessary data (from database), with the exact permissions. Thus, even if a service is compromised, this only partially affects the database.

In some cases, in the development process of an application, a series of vulnerabilities may result from the use of outdated or compromised tools and third-party software. That is why a continuous audit process of all these tools is mandatory. The INTELLIT platform uses multiple automated audit solutions that scan for and notify possible vulnerabilities, thus reducing the risk associated with a large dependency tree. Besides the integrated solution for a? dependency manager (Node Security Platform audits) two additional tools are also being used? (Krumar, 2021):

- Snyk – checking for weaknesses in dependencies and fixing them;
- Source clear – checking the builds and fixing the problems before deploying in production.

PREVENTION METHODS FOR SPECIFIC CYBER ATTACKS

DOS (Denial of Service) and DDoS (Distributed Denial of Service) attacks

As previously mentioned, DoS and DDoS are two of the most widespread types of cyber-attacks, characterized by a „flooding" with requests to access a service and thus prevent the legitimate requests from being processed.

The attacker can create several such requests that send the content instantly to the server, which tries to honor and respond to them, thereby wasting all resources that could handle legitimate requests. Due to the loading of the specially targeted service, there is a risk that the application will encounter an error and even stop working. In order to limit such attacks on the INTELLIT platform, active measures have been implemented at the router level to block some classes of IPs from geographical areas known to be of high risk. Also, another prevention method is the implementation at the API gateway level of a number-limit for requests that can be taken from a specific IP address on a given resource/ endpoint within a specified period of time. Thus, five unsuccessful authentication attempts can be made in 24 hours. After this interval the IP will be blocked for a certain period.

XSS – Cross-site Scripting, CSRF – Cross-site request forgery attacks

To reduce the risk of such attacks, the INTELLIT platform uses JWT (JSON Web Token) as the authentication method. A token is generated on the server side and sent to the client, which is later sent back to the server and verified. The platform also prevents XSS (inserting malicious JavaScript code into the database via the victim browser) and CSRF by implementing a secure connection using the HTTPS standard and other methods including Browser Fingerprinting This is a method that involves generating a „fingerprint" of the browser and the operating system from which the user accesses the platform; if the „fingerprint" is changed, the user must log in again.

SQL Injection

To prevent SQL Injection attacks (deleting data from the database, deleting tables, resetting passwords, gaining privileges, etc.) in the INTELLIT application, the following methods were used:

- Verbose error messages are not being displayed in the interface, which would allow an attacker to learn the structure of the database;
- Limiting the information in the headers of the responses sent by the server so that a

possible attacker does not have access to the technologies used at the server and database level (versions and possible vulnerabilities existing in the respective version);
- Using a NoSQL database (MongoDB) as well as an ORM for all direct user data manipulations (all data being validated by possible malicious code or other deviations from the validation rules of both the ORM and the database data included), the SQL database not being directly influenced by users with data from them (influenced with data? Rephrase please, it's unclear), but only by the application server.

Brute Force

To prevent Brute Force attacks (attacker submit many passwords or passphrases with the hope of eventually guessing correctly) a configurable rate-limiting system (middleware for processing requests from users) is used. Thus, the browser fingerprinting system is also be incorporated into it. As such, if a user attempts to log in from a device whose fingerprint is not associated with that account, they have a lower rate-limiting of just a few attempts per hour. If instead, he connects from a machine already associated with his account, he has a more permissive rate-limiting.

Third-Party Code

In case of a Third Party Code attack, the application is secured against the injection of third-party code by using a framework specific to SPA applications on the front-end side, a framework that provides various methods to prevent such attacks (for example automatically converts HTML or JavaScript to plain text). In addition, an ORM is used at the database level that automatically sanitizes the input data (does not allow the insertion of commands specific to NoSQL queries).

Man in the Middle attack

Since most MitM attacks rely on session hijacking (intercepting and stealing session cookies from a request, the attacker then gaining access to the system / replacing the victim), a simple but effective method is to use a sessionless stateless authorization system. Such a system can be implemented with JSON Web Tokens (JWT). The information in these tokens is digitally signed using either a secret (HMAC algorithm) or a public/private key pair using RSA. As such, the integrity of the token can be verified the moment it reaches the gateway (checking whether or not the application issued the token and whether the token is still valid).

Field validation

Input data is checked both at the client level through well-defined rules and at the application level. Moreover, they are once again validated by the schema corresponding to the collection or table and the field in which the respective data is to be inserted. To achieve the last part, Mongoose (a MongoDB-specific ORM) is used, which forces the validation of input data against well-defined schemas. Mongoose also prevents NoSQL injections (using MongoDB-specific operators as input and trying to run queries that way – similar to SQL Injection).

Logging

For logging, some of the most popular packages designed for this purpose are used: Winston [Winston, accessed 2022] for the internal part of the server, by which various errors or warning messages that may appear are logged - they are strictly used to help fix any problems that may occur, are not sent back to the user and Winston, strictly used to log HTTP requests and responses that the server sends or receives. They can be configured according to the developer's wishes, they can be archived automatically, and in case of an incident, they can be easily consulted.

Error handling

All errors that are sent back to the client are general ? and do not include technical details of any kind (the path or line of code where the error occurred, or the entire error is not sent, only messages like: „An error occurred").

THE USER INTERFACE OF THE INTELLIT PLATFORM

The INTELLIT web platform is the gateway to the collections of the Romanian literary heritage, providing information in an easy-to-use and accessible environment. The main interfaces of the platform and its structure are presented below.

Main Page

The main page (figure 2) of the application offers quick access to its modules: DGLR (general dictionary of Romanian literature), CVLR (chronology of Romanian literary life), and OPERE (where numerous Romanian literary works can be found).

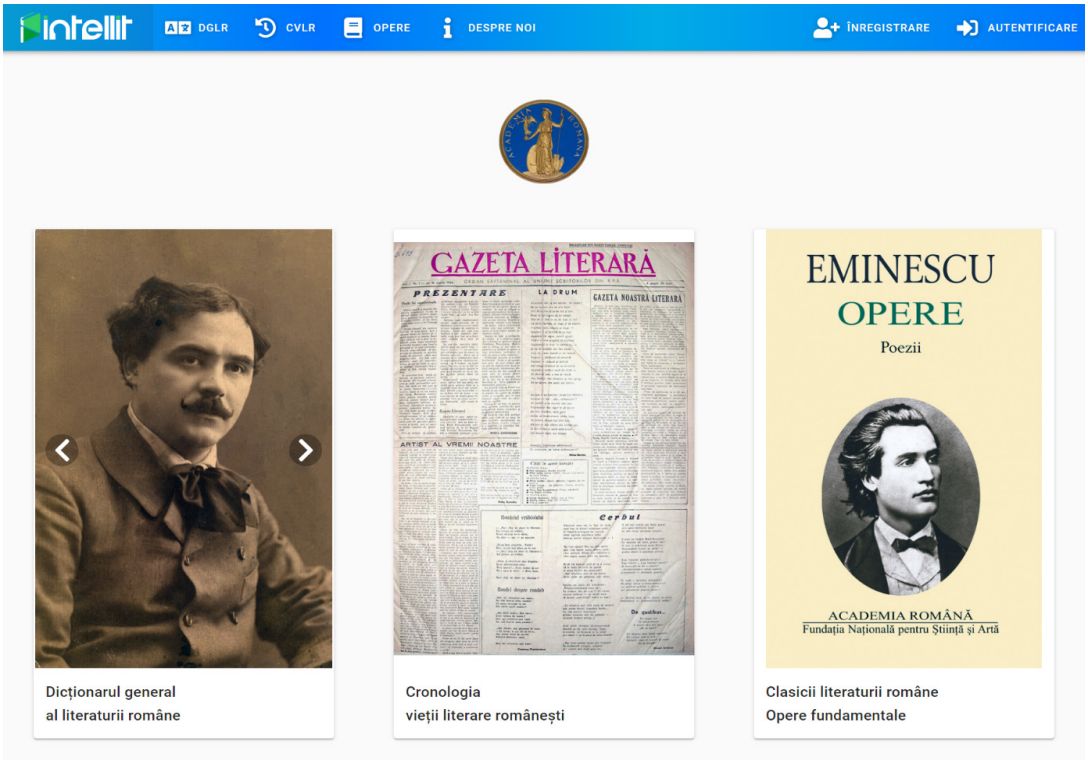

Fig. 2: *The Main Page of the INTELLIT Platform*

The application's authentication page (figure 3) has a simple and intuitive interface, where users can access their accounts.

If the user does not have an account, the „register" button will redirect him to the registration page.

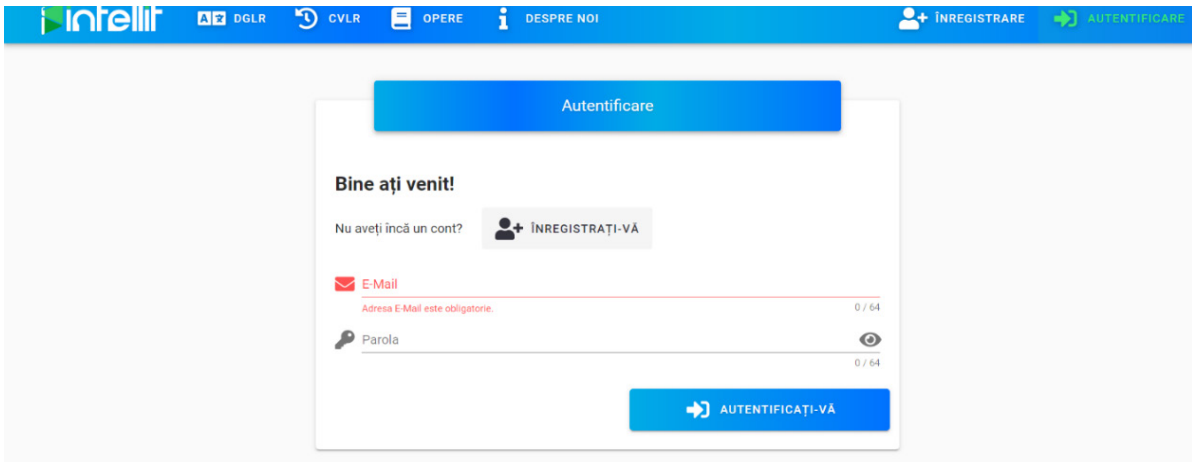

Fig. 3: *The Authentication Page of the INTELLIT Platform*

The „authors" page (figure 4) presents the categories of Romanian authors. Each category offers detailed information about the authors. (please rephrase this last sentence, it is not clear).

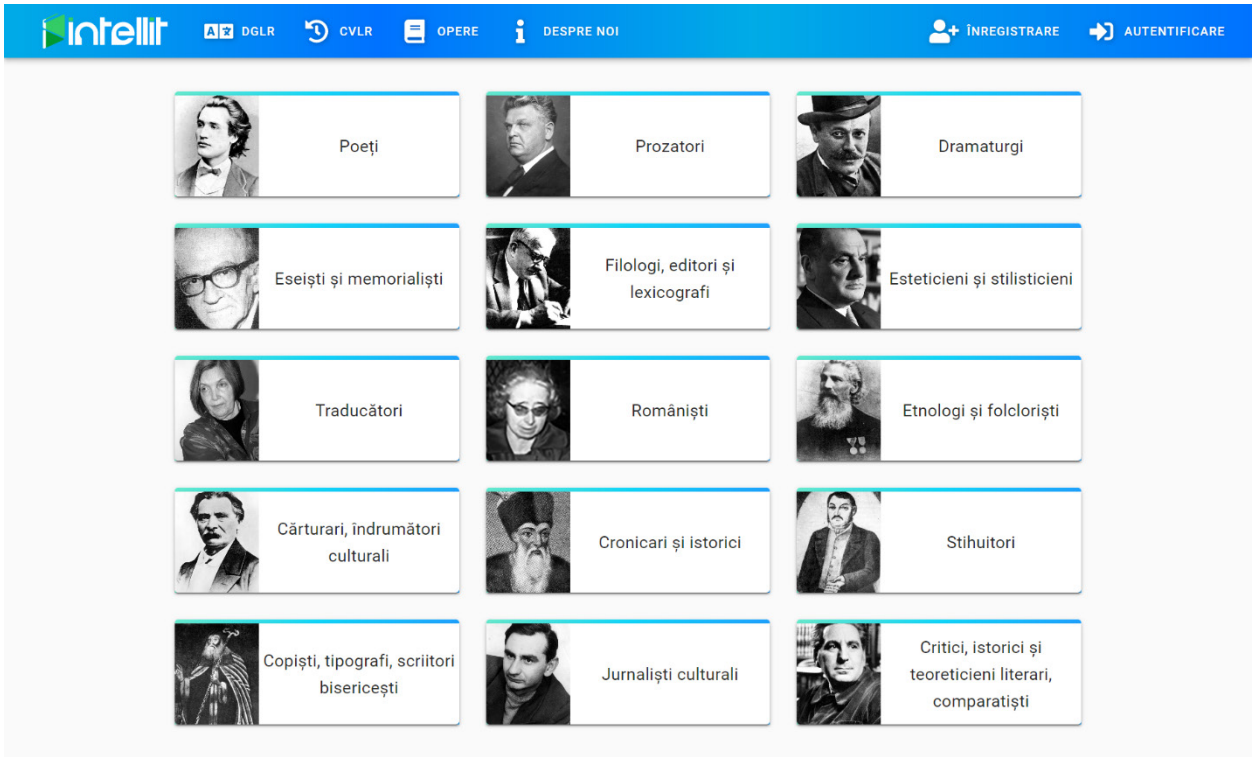

Fig. 4: *The "authors" Page of the INTELLIT Platform*

In the section (figure 5) dedicated to the General Dictionary of Romanian Literature (DGLR), the user has access to the bibliographies of Romanian authors with all associated information (life, work, bibliography, quotations, representative writings, etc.), but also to other important elements of the Romanian literary heritage, namely: magazines, institutions, concepts, currents, etc.).

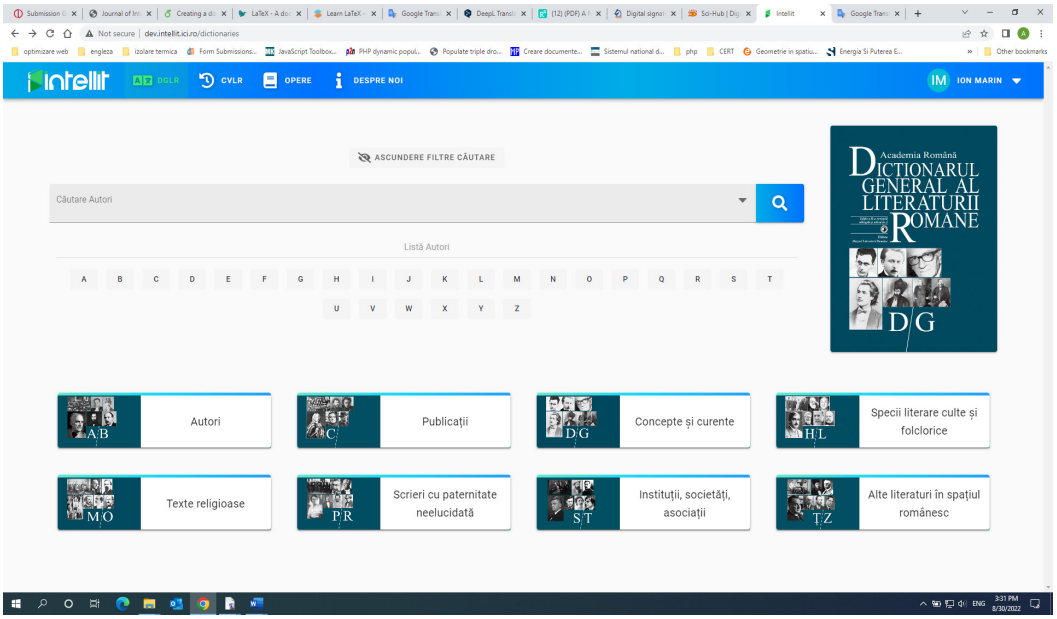

Fig. 5: *The DGLR" Page of the INTELLIT Platform*

Examples of presentation for non-canonical and canonical authors can be seen in figure 6.

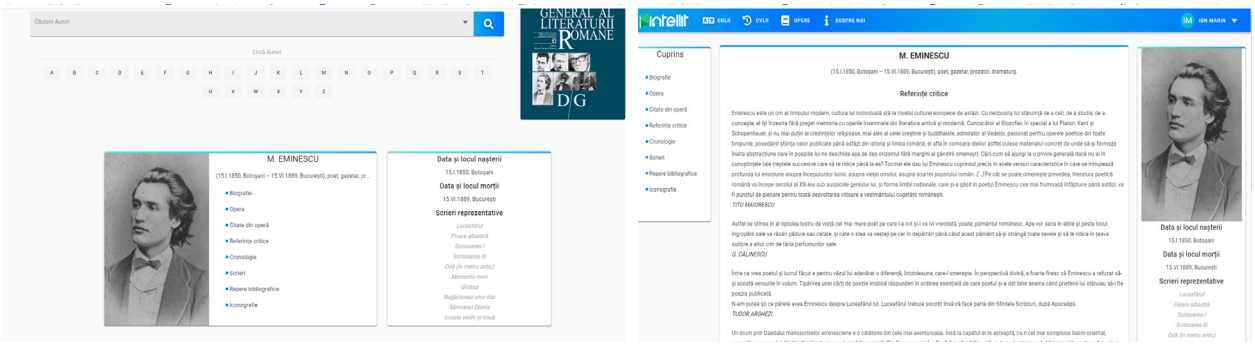

Fig. 6: *Examples of canonical and noncanonical authors on DGLR" Page of the INTELLIT Platform*

In the section dedicated to the Chronology of Romanian literary life (CVLR), information extracted from important literary publications from the period 1944-2000 is available, presented in the form of a narrative chronology. The page dedicated to this section (Figure 7) allows the complete display of the chronology with the possibility of filtering by years, authors, publications, events, themes and free search to offer users a pleasant experience and easy access to data. The CVLR page (Chronology of the Life of Romanian Literature) aims to display the years compactly for quick and easy user-access.

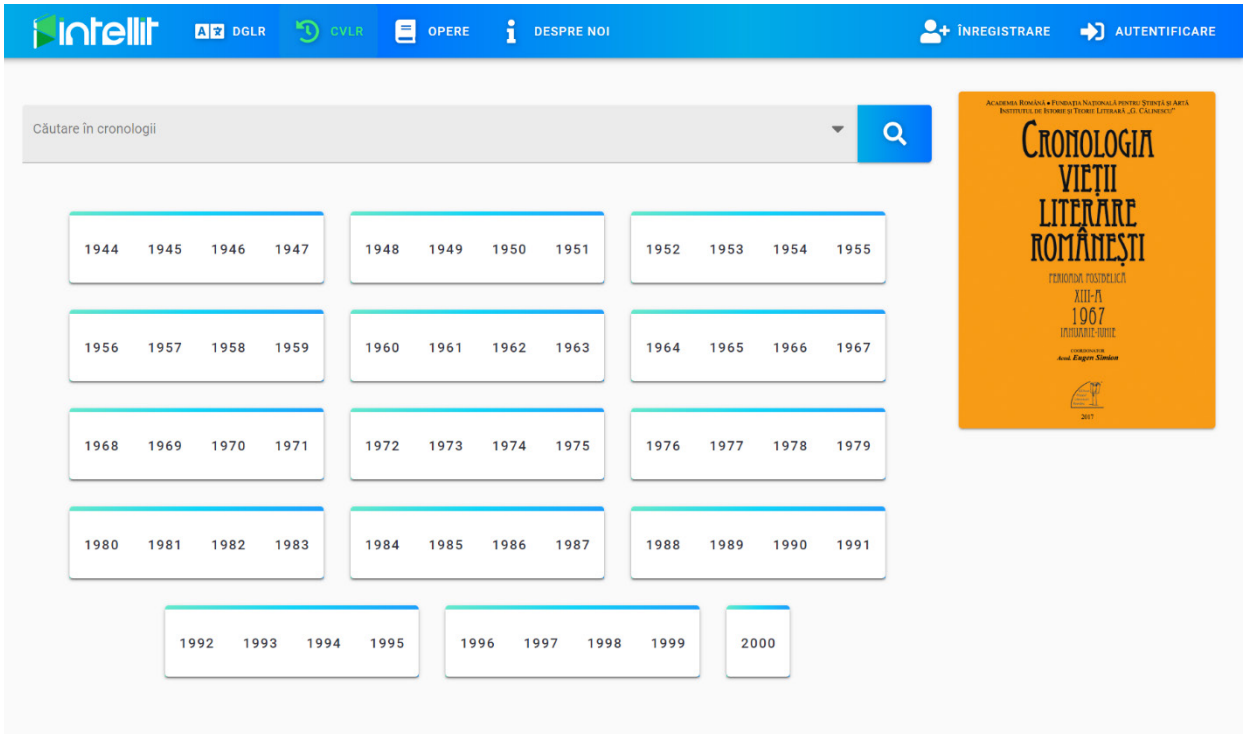

Fig. 7: *The "CVLR" Page of the INTELLIT Platform*

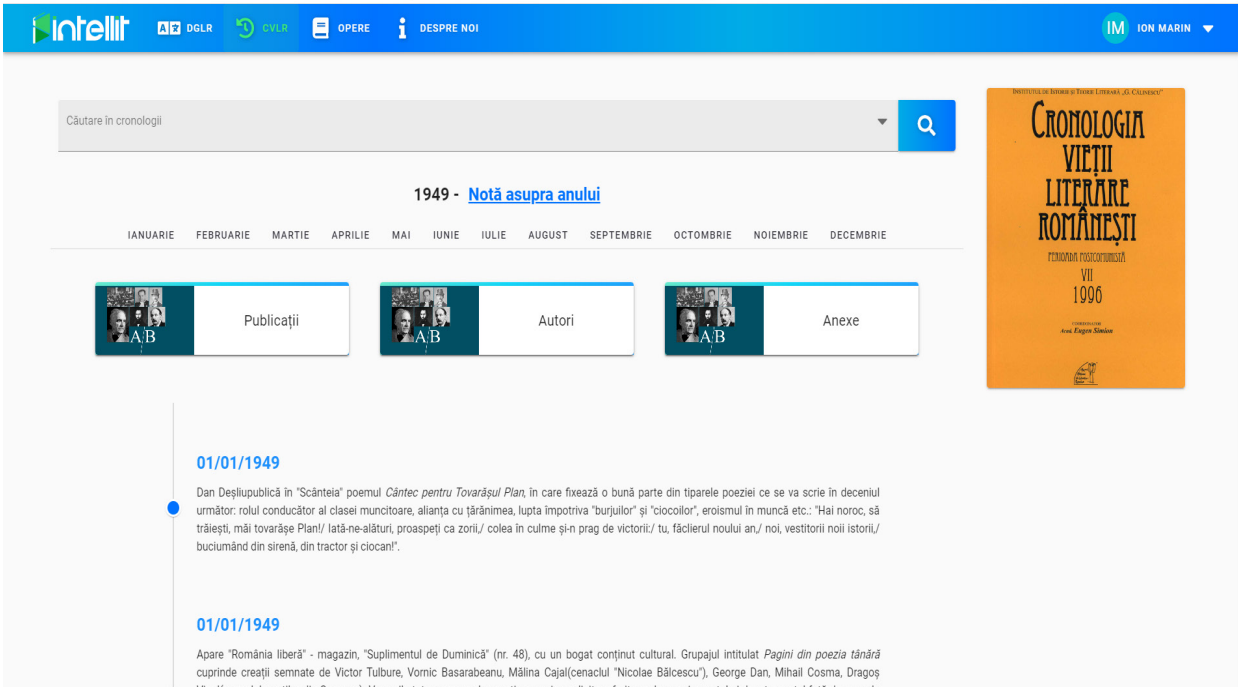

Fig. 8:*The display mode of the elements in the "CVLR" Page*

CONCLUSIONS

In this paper we have shown a solution that has been developed for the preservation and systematization of Romanian literary patrimony, a solution that consists of an integrated web platform that stores, analyzes and processes data from the „General Dictionary of Romanian Literature", the „Chronology of the Romanian Literary Life: 1944-2000" and other structured and unstructured sources provided by the Romanian Academy Institute of History and Literary Theory.

The INTELLIT digital platform is the answer to the current problems concerning the alteration of cultural heritage in its literary dimension. Thus, appropriate tools are provided through which the user can access the necessary information easily and quickly.

Through the functions and features presented, as well as through the architecture and technologies used in the development of the platform, the premises have been created for INTELLIT to become the main gateway for public access to the Romanian national literary heritage.

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