COMPANY PROFILE

Company Name: EZ Trainings and Technologies Pvt. Ltd.

Introduction:

EZ Trainings and Technologies Pvt. Ltd. is a dynamic and innovative organization dedicated to providing comprehensive training solutions and expert development services. Established with a vision to bridge the gap between academic learning and industry requirements, we specialize in college trainings for students, focusing on preparing them for successful placements. Additionally, we excel in undertaking development projects, leveraging cutting-edge technologies to bring ideas to life.

Mission:

Our mission is to empower the next generation of professionals by imparting relevant skills and knowledge through specialized training programs. We strive to be a catalyst in the career growth of students and contribute to the technological advancement of businesses through our development projects.

Services:

College Trainings:

• Tailored training programs designed to enhance the employability of students.

• Industry-aligned curriculum covering technical and soft skills.

• Placement assistance and career guidance.

Development Projects:

• End-to-end development services, from ideation to execution.

• Expertise in diverse technologies and frameworks.

• Custom solutions to meet specific business needs.

Locations: Hyderabad | Delhi NCR

At EZ Trainings and Technologies Pvt. Ltd., we believe in transforming potential into excellence

ABSTRACT

The Historic Film Archive System Proof of Concept (POC) is a digital platform designed to preserve, catalog, and provide access to a collection of historic films.

The system incorporates essential functionalities, including CRUD operations for managing film data, cataloging historic films with unique identifiers and metadata, and facilitating controlled access to researchers.

The CRUD functionality enables users to create, read, update, and delete film records within the archive, ensuring efficient management of the collection.

The catalog_historic_films function organizes films systematically, assigning unique identifiers and storing relevant metadata such as title, director, release year, and genre.

This facilitates easy search and retrieval of films based on various criteria.

Additionally, the system incorporates a mechanism to provide access to researchers, ensuring that only authorized individuals can explore the film archives.

Access control mechanisms are implemented to authenticate users and grant appropriate permissions based on predefined criteria or access tokens.

Overall, the Historic Film Archive System POC serves as a foundational framework for the development of a comprehensive digital archive, aiming to preserve cultural heritage and facilitate scholarly research in the field of cinema history.

INTRODUCTION OF THE PROJECT

In the realm of cultural preservation and scholarly research, historic films represent invaluable artifacts that offer insights into the past, shaping our understanding of society, culture, and artistic expression.

As the digital age transforms the way we archive and access information, the development of robust systems for managing and preserving historic film collections becomes imperative.

In response to this need, the Historic Film Archive System Proof of Concept (POC) emerges as a pioneering initiative aimed at harnessing digital technologies to safeguard and promote access to these cinematic treasures.

This introduction sets the stage for exploring the critical role of the Historic Film Archive System POC in the preservation, cataloging, and accessibility of historic films.

It highlights the significance of these endeavors in preserving cultural heritage and fostering scholarly inquiry, underscoring the importance of technological innovations in facilitating these objectives.

With a focus on essential functionalities such as CRUD operations, film cataloging, and researcher access management, the Historic Film Archive System POC represents a foundational step towards realizing the vision of a comprehensive digital archive for historic cinema.

MODULE DESCRIPTION

1. **CRUD Operations Module**:

    Functionality: This module facilitates the basic operations of creating, reading, updating, and deleting film records within the archive.

    Features:

    Create: Enables users to add new entries for historic films, including metadata such as title, director, release year, etc.

    Read: Provides functionality to retrieve and view existing film records from the archive.

    Update: Allows authorized users to modify and update information related to film entries, ensuring data accuracy and relevance.

    Delete: Permits the removal of obsolete or erroneous film records from the archive, maintaining data integrity.

2. **Cataloging Module**:

    Functionality: This module focuses on organizing and managing historic films within the digital archive, ensuring systematic cataloging and easy retrieval.

    Features:

    Assigning Unique Identifiers: Automatically generates and assigns unique identifiers (film_id) to each film entry for efficient tracking and referencing.

    Metadata Management: Stores and manages metadata associated with each film, including title, director, release year, genre, synopsis, etc.

    Search and Retrieval: Implements robust search functionality to enable users to locate films based on various criteria such as title, director, genre, or keyword search.

    Categorization: Allows films to be categorized and organized into collections or genres for easier navigation and browsing.

3. **Access Management Module**:

    Functionality: This module governs access to the archived films, ensuring that only authorized users, such as researchers, can explore and utilize the collection.

    Features:

    Authentication: Requires users to authenticate themselves using credentials or other authentication mechanisms to verify their identity.

Authorization: Implements access control policies to grant or restrict access permissions based on user roles, privileges, or specific access tokens (access_id).

Access Provisioning: Facilitates the provision of access to authorized researchers, enabling them to explore and utilize the film archives for scholarly research purposes.

Access Logging: Maintains logs of user activities and access attempts for auditing purposes, ensuring accountability and security.

These modules collectively form the backbone of the Historic Film Archive System POC, providing essential functionalities for managing, cataloging, and providing access to historic films within a digital environment.

ALGORITHM

Film Class

1. Initialize the Film class with the following attributes:

   film_id: Unique identifier for the film

   title: Title of the film

   director: Director of the film

   release_year: Year the film was released

   archived: Boolean flag indicating if the film is archived or not

FilmArchive Class

1. Initialize the FilmArchive class with the following attributes:

   film_records: List to store the Film objects

   researchers: List to store the Researcher objects

2. Implement the following methods:

   add_film(self, film): Add a new Film object to the film_records list.

   delete_film(self, film_id): Remove a Film object from the film_records list based on the film_id.

   update_film(self, researcher, film_id, updated_data): Update the details of a Film object based on the film_id and the updated_data object. Only authenticated researchers can perform this operation.

   get_film_details(self, film_id): Retrieve the details of a Film object based on the film_id.

   add_researcher(self, researcher): Add a new Researcher object to the researchers list.

   delete_researcher(self, researcher_id): Remove a Researcher object from the researchers list based on the researcher_id.

   authenticate_researcher(self, name, password): Authenticate a researcher based on their name and password.

get_normal_movies(self): Return a list of Film objects that are not archived.

get_archived_movies(self): Return a list of Film objects that are archived.

delete_film_by_researcher(self, researcher, film_id): Delete a Film object from the film_records list based on the film_id. Only authenticated researchers can perform this operation.

Researcher Class

1. Initialize the Researcher class with the following attributes:

   id: Unique identifier for the researcher

   name: Name of the researcher

   password: Password of the researcher

Main Program

1. Create an instance of the FilmArchive class.
2. Add some Film objects to the film_records list.
3. Create some Researcher objects and add them to the researchers list.
4. Prompt the user to enter their user type (regular user or researcher).
5. If the user is a researcher:

   Prompt the researcher to enter their name and password.

   Authenticate the researcher using the authenticate_researcher method.

   If the authentication is successful, allow the researcher to update and delete films.

6. If the user is a regular user:

   Retrieve the list of normal (non-archived) movies using the get_normal_movies method and display them.

The program should handle the following scenarios:

Updating a film by an authenticated researcher

Deleting a film by an authenticated researcher

Displaying the list of normal (non-archived) movies for a regular user

Displaying the list of archived movies for a researcher

OUTPUT 1:

Are you a regular user or a researcher? (Type 'user' or 'researcher'): user
Normal Movies:
Title: Casablanca, Director: Michael Curtiz, Release Year: 1942
Title: Kesari, Director: Anurag Singh, Release Year: 2019
Title: Mangal Pandey, Director: Ketan Mehta, Release Year: 2001

OUTPUT 2:

Are you a regular user or a researcher? (Type 'user' or 'researcher'): researcher
Enter your researcher name: anupama
Enter your researcher password: password321
Authentication successful Welcome researcher.
Enter the ID of the movie you want to update: 1
Enter updated title: KGF
Enter updated director: Prashanth
Enter updated release year: 2015
Is the movie archived? (True/False): true
Film updated successfully!

Updated List of Movies:
Film ID: 1, Title: KGF, Director: Prashanth, Release Year: 2015, Archived: True
Film ID: 2, Title: Gone with the Wind, Director: Victor Fleming, Release Year: 1939, Archived: True
Film ID: 3, Title: Kesari, Director: Anurag Singh, Release Year: 2019, Archived: False
Film ID: 4, Title: Mangal Pandey, Director: Ketan Mehta, Release Year: 2001, Archived: False
Film ID: 5, Title: Padmaavat, Director: Leela Bhansali, Release Year: 2018, Archived: True

Archived Movies:
Title: KGF, Director: Prashanth, Release Year: 2015
Title: Gone with the Wind, Director: Victor Fleming, Release Year: 1939
Title: Padmaavat, Director: Leela Bhansali, Release Year: 2018

Enter the ID of the movie you want to delete: 2
Film with ID 2 has been successfully deleted.

CONCLUSION

In conclusion, historic film archives are invaluable repositories of our cultural heritage and collective memory. Through meticulous preservation efforts, these archives safeguard not only the films themselves but also the stories, emotions, and historical contexts they encapsulate. They provide researchers, historians, filmmakers, and the general public with a window into the past, allowing us to understand, learn from, and appreciate the diverse tapestry of human experience. As technology evolves, it becomes increasingly crucial to prioritize the preservation and accessibility of these archives to ensure that future generations can continue to benefit from the wealth of knowledge and inspiration they offer. By supporting and investing in historic film archives, we not only honor our past but also enrich our present and empower our future.