

DigiClips Media Search Engine

Team: sdmay25-05

User Needs and Requirements



Project Overview

The **DigiClips Media Search Engine** project aims to solve the problem of effectively managing, tracking, and analyzing a wide range of media data, including TV, radio, social media, blogs, and podcasts. The key issue is that current media monitoring solutions are either too costly or inefficient at providing real-time updates across multiple platforms. This is especially problematic for professionals such as reporters, lawyers, and media analysts who need real-time alerts, comprehensive media coverage, and detailed analytics.

The importance of this project lies in its ability to provide a user-friendly system that allows users to set up keyword-based alerts, manage large volumes of media, and generate reports. Real-time updates are essential for staying informed, while analytics features allow users to gain deeper insights into media trends and performance. DigiClips also addresses the need for a robust, scalable platform that can handle multiple users and media types without compromising performance.



Problem statement

DigiClips needs to upgrade and debug its media search engine to effectively process and make searchable various media types, including television, radio, and social media.

The system requires an Angular 17 upgrade and must serve both public users and subscribers.

Key challenges include implementing multi-platform media processing, developing content analysis features, and creating a user-friendly interface for search and streaming, while ensuring robust backend support for real-time processing and data management.

Immediate Priorities

Debug existing frontend issues

Upgrade to Angular 17

Implement proper user authentication
Fix media streaming functionality

Develop and test email alert system

Long Term Priorities

Implement advanced features like language translation

Develop mobile and desktop applications

Create administrative dashboard for system

Implement advanced analytics and reporting

Personas: Mr.Law

Mr. Law



Location: Ames

Occupation: Lawyer

Age: 32

Personas: Mr.Law



He wants to know everything about his clients in the media asap.

User needs:

- Real-time update and accurate information
- Notify to his personal devices.

Personas: Mr.Law



Requirements:

- Back-end
 - Database should cover wide range of information source
 - Update regularly
- Front-end
 - Notification pop-up
- System
 - Quick recover from failure so the system can run almost 24/7

Personas : Researcher

The researcher is an analytical and detail-oriented professional dedicated to uncovering insights and trends across various topics.

Utilizing a sophisticated media search engine, they aggregate news, trends, and diverse resources to conduct comprehensive investigations.

Their expertise lies in synthesizing complex data into actionable insights, supporting informed decision-making and fostering a deeper understanding of the subject matter.

Personas : Researcher

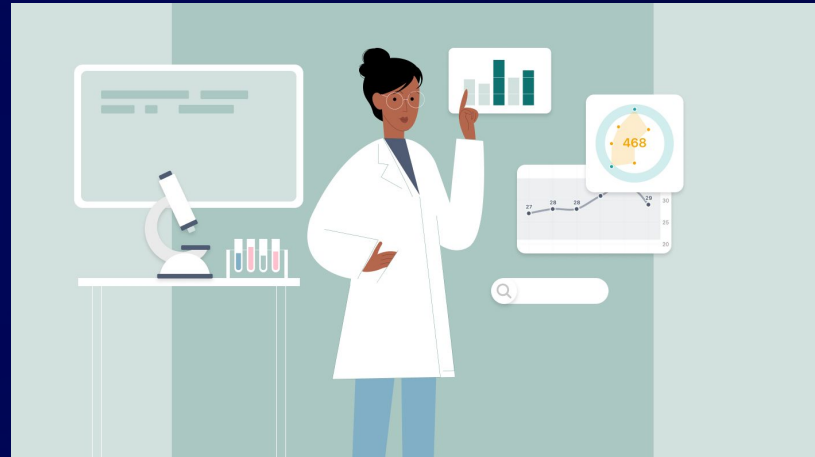
Trend Analysis: Identifying patterns over time to predict future developments in specific fields.

Literature Reviews: Synthesizing existing research to establish a foundation for new inquiries or projects.

Case Studies: Analyzing specific instances to draw broader conclusions and understand complex phenomena.

Qualitative Research: Gathering in-depth insights through interviews, focus groups, and surveys to explore perceptions and experiences.

Quantitative Research: Employing statistical methods to analyze numerical data, providing a more objective view of trends and correlations.



Personas: Reporter



A reporter is responsible for staying updated with the latest news and media trends to report on them quickly and accurately. They work in a fast-paced environment and rely heavily on real-time information to maintain relevance.

User Goals:

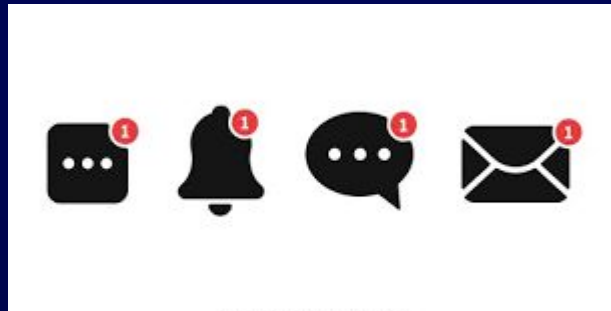
- **Receive Alerts**
 - Reporters need instant notifications for breaking news and media updates on specific topics or keywords.
- **Media Scanning**
 - They require an organized system to quickly scan different media sources (TV, radio, podcast, social media, etc.).
- **Analytics and Insights**
 - The ability to receive detailed reports about trending stories and media analytics to make informed decisions about what to cover next.

Personas: Reporter



User Needs:

- Real-Time Alerts
 - Set up keyword-based notifications to stay informed about specific topics.
- Efficient Media Monitoring
 - Monitor multiple sources without missing crucial news.
- Customizable Notifications
 - Filter out unnecessary information by using negative keywords.



Personas: Reporter



Pain Points:

- Overwhelmed with Too Much Information
 - Reporters often find existing platforms cluttered or overwhelming when dealing with large amounts of data.
- Missed News Alerts
 - A lack of real-time updates on important news can hinder their reporting.
- High Subscription Costs
 - Some media monitoring tools are expensive, limiting accessibility.



Media Analyst

Key Responsibilities:

- Analyze media trends and user interaction data.
- Generate detailed reports that highlight user engagement and content popularity.
- Provide insights to improve the platform's media content and enhance user experience.





User Needs:

- Access to dashboards that show how users interact with different types of media.
- Ability to visualize data trends over time to identify which content is performing well and which is not.
- Create and export comprehensive reports for stakeholders, such as the marketing and content teams.

Requirements for Media Analysts

Backend:

- A comprehensive database that organizes media interaction data.
- Support for complex queries to filter, sort, and retrieve specific information.
- Regular data updates to ensure the latest trends are captured.

Frontend:

- User-friendly dashboards that allow easy access to data.
- Interactive graphs and charts to represent user engagement trends.
- Export options for generating reports in formats like PDF and CSV.

Data Management:

- Secure storage of user interaction data to ensure privacy and compliance.
- Integration with other data sources for a more holistic view of media trends.



Engineering Standards

- **IEEE 830-1998:** This standard outlines best practices for documenting software requirements. It ensures that the functionality, performance, and design constraints of the software system are clearly defined.
- **IEEE 802.11ac:** The standard is critical to ensuring that any wireless access to the media search engine is fast and reliable, allowing the lawyer to receive updates promptly.
- **IEEE 12207:** Given the system's requirement to run 24/7 and recover quickly from failures, this standard helps in structuring the software life cycle processes, ensuring that maintenance, operation, and updates are handled smoothly.

Engineering Standards

- **ISO/IEC 25010:** This standard provides a framework for evaluating software quality, including functionality, reliability, usability, efficiency, maintainability, and portability. It ensures that your software meets quality requirements and is well-structured.
- **ISO/IEC 27001:** This standard focuses on information security management, ensuring that your system protects sensitive information and data through structured security processes and controls.

Conclusion

DigiClips Media Search Engine solves real-time media monitoring for lawyers, reporters, and media analysts.

Key features:

- Real-time updates on personal devices.
- Scalable backend for multi-platform media processing.
- User-friendly dashboards and advanced analytics.

Technical highlights:

- Angular 17 upgrade for better performance.
- Compliance with IEEE standards ensures reliability and 24/7 operation.

Outcome: A powerful tool to help users stay informed and make fast, data-driven decisions.