

# CASE STUDY

Development of OCR for Text extraction and redaction for a USA-based credit servicing company

## CHALLENGES:

The client faced challenges with efficiently managing sensitive documents that required extraction and redaction of key information while ensuring data privacy and regulatory compliance.

Manual processing of PDFs was time-consuming, error-prone, and did not scale well with high document volumes.

Additionally, the lack of a user management system limited the ability to assign roles and manage access securely across teams.

These challenges resulted in reduced operational efficiency, increased risks of compliance failures, and difficulties in handling sensitive information across multiple stakeholders.

## TECH STACK:

- ASP.NET
- Angular
- RabbitMQ
- MariaDB

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## SOLUTIONS:

Euphoric developed a robust OCR-based web application leveraging ASP.NET Core Web API, Angular, and RabbitMQ, with MariaDB database as the backend. The application automates PDF processing by performing high-accuracy text extraction and targeted redaction of sensitive information.

The solution also includes a comprehensive user management system to securely assign roles and manage access to ensure seamless collaboration across teams. With features like document upload, role-based access, and workflow automation, the application simplifies document handling and compliance tasks.

The integration of RabbitMQ ensures efficient queue-based processing for high document throughput, while the use of OCR technology enables advanced text recognition and redaction.

## BENEFITS:

The benefits that the client achieved are as follows:

- **Automated Document Processing:** Automated extraction and redaction workflows significantly reduced manual efforts and processing times, ensuring consistent and error-free results.
- **User Management:** Secure user roles and permissions provided granular access control, enabling better collaboration and data security across teams.
- **Scalability:** RabbitMQ-powered queuing system handled high volumes of documents efficiently, ensuring the application scales with organizational needs.
- **Improved Compliance:** Redaction ensures sensitive information is hidden while maintaining document integrity, and meeting regulatory requirements.
- **Real-time Insights:** Dashboards provided real-time monitoring of processing status and logs, enabling quick issue resolution and ensuring transparency.