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| **Feature** | **Feature Description** | **Technology Stack** | **User Stories** | **User Story Description** | **Efforts (Days)** |
| **Frontend Upload** | Allow users to upload PDF documents along with metadata. | React, Azure App Service, HTML, CSS, JavaScript | As a user, I want to upload a document with metadata. | User selects a file, adds metadata, and uploads. | 5 |
| **Upload API** | Handles file uploads and saves them to Azure Blob Storage. | Flask, Azure App Service, Azure Blob Storage SDK | As a system, I need to securely store files. | API receives file & metadata, stores it in Blob. | 3 |
| **Blob Storage** | Store uploaded files in a structured hierarchy. | Azure Blob Storage | As a system, I need to organize files by metadata. | Structure files by project, type, year, etc. | 2 |
| **Blob Trigger Function** | Detects new uploads and enqueues processing messages. | Azure Functions, Event Grid, Azure Queue Storage | As a system, I need to trigger processing. | When a new file is uploaded, trigger processing. | 3 |
| **Processing Service** | Processes documents, performs OCR, and indexes data. | Azure Functions, Python, Azure Form Recognizer | As a system, I need to extract text from PDFs. | Call OCR, extract text, index in Azure Cognitive. | 7 |
| **Azure Cognitive Search** | Index extracted text for efficient retrieval. | Azure Cognitive Search, Vector Indexing | As a user, I need to search document content. | Extracted text is indexed for querying. | 4 |
| **LLM & QA Processing** | Enhances extracted text using LLM for entity extraction and QA. | OpenAI API, Azure Functions | As a system, I need to improve extracted data. | Process extracted text and store refined results. | 5 |
| **Result Storage** | Store processed results in structured format. | Azure Blob Storage | As a system, I need to store processed outputs. | Save JSON results in "results" container. | 2 |
| **Flask API** | Serves processed data to frontend queries. | Flask, Azure App Service, Python | As a user, I need to retrieve processed results. | API fetches stored results based on query params. | 4 |
| **Frontend Display** | Displays processed document data to users. | React, Azure App Service, HTML, CSS, JavaScript | As a user, I need to view my uploaded results. | UI fetches data via Flask API and presents it. | 5 |
| **Security & Authentication** | Secure endpoints and implement authentication/authorization. | Azure AD, OAuth, JWT | As a system, I need to control data access. | Implement authentication and role-based access. | 4 |
| **Monitoring & Logging** | Track system performance and failures. | Azure Monitor, Application Insights, Logging | As a system, I need to track errors. | Monitor API, function logs, and alerts. | 3 |
| **CI/CD Deployment** | Automate deployments using Azure DevOps. | Azure DevOps, GitHub Actions | As a developer, I need automated deployments. | Configure CI/CD pipeline for smooth deployments. | 5 |