## Introduction to Document AI by Google Yogesh Haribhau Kulkarni

## Document AI

## Introduction Introduction

- Overview of Document AI by Google
- Importance of intelligent document processing
- Introduction to key features of Document AI

# Concepts Concepts

- Understanding intelligent document processing (Brain with a document)
- Optical Character Recognition (OCR) technology (Scanning document with OCR icon)
- Natural Language Processing (NLP) for document understanding (Document with speech bubbles)
- Extracting structured data from unstructured documents (Document with structured data flowing out)
- Key concepts of machine learning applied to document processing (Document with ML model icon)

#### Framework

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- Overview of the Document AI platform (Cloud with document icon)
- Integration with Google Cloud services (Interconnected Google Cloud services)
- Document AI API and SDKs (Code icon with API abbreviation)
- Training custom models for specific document types (Document with custom training icon)
- Scalability and reliability of the framework (Scaling bars with checkmark)

## Workflows

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- Automating document processing workflows (Document passing through workflow steps)
- Document ingestion and preprocessing (Document entering a processing pipeline)
- Document classification and data extraction (Documents being classified and data extracted)
- Validation and verification of extracted information (Validation checkmark on extracted data)
- Integration with other systems and processes (Documents integrating with other systems)

#### Architecture

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- High-level architecture of Document AI (Architecture diagram of Document AI)
- Document processing pipeline (Pipeline flowchart for document processing)
- Distributed computing and parallel processing (Multiple nodes processing documents)
- Scalability and fault tolerance considerations (Scaling servers with fault tolerance)
- Data security and privacy aspects (Lock icon with data protection)

### Use Cases

#### Use Cases

- Overview of real-world applications of Document AI (Multiple icons representing different industries)
- Invoice and receipt processing (Invoice icon with data extraction)
- Contract and legal document analysis (Gavel icon with document analysis)
- Forms processing and data extraction (Form icon with data extraction)
- Regulatory compliance and data governance (Compliance icon with document review)

## **Applications**

#### **Applications**

- How Document AI can be used across industries (Multiple icons representing different industries)
- Financial services: Loan processing, KYC, etc. (Bank icon with loan document)
- Healthcare: Patient records, claims processing, etc. (Medical icon with patient record)
- Legal: Contract analysis, eDiscovery, etc. (Gavel icon with legal document)
- Retail: Inventory management, order processing, etc. (Store icon with inventory)

#### Conclusion

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- Recap of the key points covered (Bulleted list summarizing key points)
- Advantages of Document AI for intelligent document processing (Document AI logo with advantages)
- Encouragement to explore Document AI's capabilities (Magnifying glass searching in a document)
- Contact information for further inquiries or assistance (Contact information icon)

#### References

#### References

- List of resources and references for further reading (Books icon with reference list)
- Google Cloud documentation on Document AI (Google Cloud logo with documentation link)
- Case studies and success stories (Case study icon with links to case studies)
- Relevant whitepapers and research papers (Paper icon with links to papers)