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Invoicely "AI Based Invoice Generator"

Rohan Kanojia¹, Chandan Mishra², Arnav Narkar³, Kartik Awhad⁴, Nilam Parmar⁵

- ¹ Student, Computer Engineering Dept Thakur Polytechnic Mumbai-101, India. rohankanojia 2006@gmail.com
- ² Student, Computer Engineering Dept Thakur Polytechnic Mumbai- 101, India. <u>cdnmishra10@gmail.com</u>
- ³ Student, Computer Engineering Dept Thakur Polytechnic Mumbai-101, India. narkararnav@gmail.com
- ⁴ Student, Computer Engineering Dept Thakur Polytechnic Mumbai-101, India. Kartikawhad25@gmail.com

ABSTRACT -

The AI- Based Invoice Generator(Invoicely) is an intelligent billing system that automates invoice creation for various product types. The system dynamically customizes invoices according to customer requirements supports global payment in USD, and provides a limited period for invoice generation. This project leverages optical character Recognition to extract product and customer details, ensuring accuracy and efficiency in the billing process. Additionally, the system offers automatic tax calculation and discounts applications, making the invoice process seamless. The platform is hosted live, allowing real time access to customer and merchants world-wide.

Keywords - OCR, Global payments, Dynamic Billing, Automation, Tax calculation

INTRODUCTION

The AI- Based Invoice Generator (Invoicely) is an advanced tool design to automate billing process, enabling business to create customized invoices for different product categories. The system offers global accessibility and supports payment in

USD, making it a versatile . solution for international transaction .with built in OCR technology, the system includes automated tax computation and Discount application features ,which further streamline the invoicing process.

It also maintain the streamline invoicing process.

It also maintain the secure record of all generated invoices ,which can be accessed for auditing and verification.

By automating invoice creation and streamlining payment processing, the platform significantly reduces manual effort, minimizes errors, and enhances operational efficiency.

This paper provides a detailed exploration of the system's architecture, key modules, technological foundation, testing methodology, and future enhancements

Need of Invoicely

Managing invoices manually is time-consuming, error-prone, and difficult to scale as businesses grow. Traditional invoice generation often leads to mistakes in billing, delayed payments, and compliance issues, especially when dealing with different tax rules in various regions. Businesses that operate globally also need a system that can handle payments securely, especially in *USD*, and apply the correct tax rates dynamically. The "AI-Based Invoice Generator" solves these problems by automating invoice creation, applying accurate tax rates, and processing payments securely. Using 'OCR' and 'AI models', it extracts and validates product and customer information, reducing manual effort and minimizing errors. It also provides a secure platform where businesses can generate invoices quickly and store transaction records safely for audits. This system improves efficiency, reduces costs, and ensures compliance, making it an essential tool for businesses worldwide

Aim of Invoicely

The primary aim of the "AI-Based Invoice Generator" (Invoicely) is to automate the process of invoice generation by leveraging Optical Character Recognition (OCR) technologies. The system is designed to extract, validate, and process customer and product data efficiently, ensuring accurate and error-free invoice generation. It dynamically applies relevant tax rates and discounts based on regional regulations and supports secure payment processing in USD for global transactions. Additionally, the platform provides a secure environment for storing and retrieving transaction records, ensuring compliance with audit and regulatory requirements. By reducing manual effort, minimizing errors, and improving payment efficiency, the AI-Based Invoice Generator aims to enhance operational efficiency and provide businesses with a reliable, scalable and cost effective invoicing solution.

Architecture and Features

1System Architecture:

All The AI based Invoice Generator (Invoicely) follows the modular Three tier Architecture:

- User Interface Layer: Provides a web-based interface that enables uders to input customer and product details, customized invoice fields and process payments.
- 2. Application Layer: Processes extracted data, .applies applicable tax rules and generates invoices dynamically
- Data base Layer: Stores invoices records, payment history and customer data in a secure, cloud-based environment, ensuring high availability and data integrity.

IV.2 Key Features:

Data Extraction Module

The system uses *OCR technology* to extract relevant information from scanned documents, product catalogs, and customer databases. Key functions include:

- Text Recognition: Extracts product names, quantities, and pricing information.
- Data Validation: Ensures extracted data meets accuracy thresholds.
- Error Handling: Identifies and corrects data discrepancies before invoice generation.

Application

1.) E-Commerce Platforms:

Automated Billing for Online Orders: E-commerce websites can use the system to automatically generate invoices for customer purchases, ensuring that billing details, product information.

2.) Service-Based Industries:

Custom Invoice Generation for Services: Freelancers, marketing agencies, and consulting firms can create customized invoices for their services, specifying billable hours, service descriptions, and applicable taxes.

3.) Retail and Wholesale Businesses:

Inventory Management Integration: The system can be integrated with inventory management platforms to update stock levels automatically and maintain accurate records.

4.) Healthcare and Medical Billing:

Insurance and Claim Processing: The system can generate detailed invoices that facilitate insurance claims by providing accurate billing information and service breakdowns.

Challenges and future development

CHALLENGES:

Compliance with International Tax Laws:

- Ensuring compliance with multiple jurisdictions require continuous update to tax model
- Scalability of Payment Processing: Handling high Transaction volume without compromising performance.
- Fraud Prevention and Security: Implementing robust security measures to prevent fraud and unauthorized transactions.

FUTURE DEVELOPMENT:

- 1. Multi-Currency Payment Support: Expanding payment gateway options to support multiple currencies beyond USD.
- 2. **AI-Powered Fraud Detection**: leveraging machine learning models to detect fraudulent transactions and enhance payment security.
- 3. ERP System Integration:: Supporting more VR headsets and AR devices.
- 4. Real-Time Analytics and Business Insights: providing business with actionable insights on invoice trends and customer behavior.

CONCLUSION

The AI-Based Invoice Generator(Invoicely) offers an innovative solution for automating invoice management, ensuring accuracy, security, and compliance with international standards. Through its advanced features, including OCR-based data extraction, dynamic tax application, and secure payment processing, the system streamlines the billing process and enhances overall business efficiency. With future enhancements focusing on fraud detection, multi-currency support, and ERP integration, the AI-Based Invoice Generator is poised to become an indispensable tool for businesses worldwide.

REFERENCES

Online Billing Software | Trusted by 1000s of Businesses
Zoho
https://www.zoho.com