



CODECELL-CMPN, VESIT

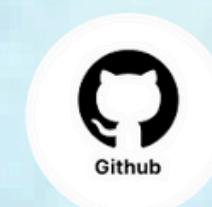
SYRHS HACKATHON 2025

Category Code: C1

Problem Statement Title: ITYaar

Team Name: StackUnderflow

Institute Name: Vivekanand Education Society's Institute of Technology



Problem Statement

Filing Income Tax Returns (ITR) in India is often a complex, tedious, and time-consuming process for individuals, especially those unfamiliar with tax laws and regulations. Many taxpayers struggle with Complex Tax Calculation, Inefficient Tax Optimization, Filing Difficulties, Missed Deadlines, Lack of Guidance, Support and Awareness.



Idea / Approach details (& implemented features)

- AI-Powered Tax Calculation
- Smart Tax Optimization
- OCR-Based Document Scanning
- Assisted/Automated ITR Filing Using Chrome Extension
- Voice-Enabled UI
- Tax Learning Module
 - Tinder for Tax
 - WhatsApp Tax Coach (Interactive chatbot)
 - Swipe-based short videos
- Twilio-Based Tax Reminders



Innovation (Showstopper)

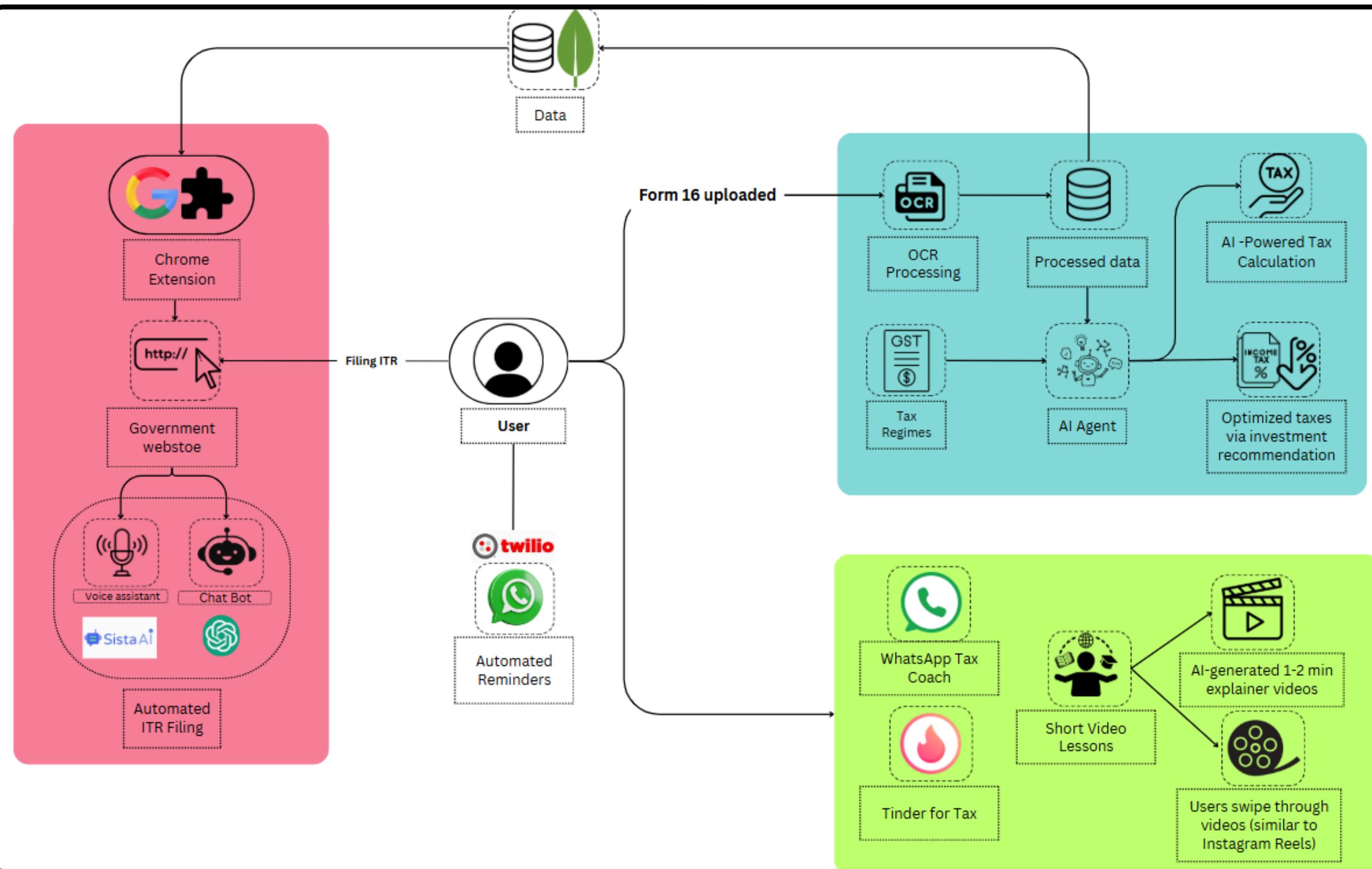
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1. Chrome Extension Integration with ITYaar
 2. AI Assistant to file taxes.
 3. Users can fill the form by giving Voice Commands.
 4. Smart notifications for deadlines & savings opportunities.
 5. Smart Investment recommendations to Save Taxes.
 6. Interactive WhatsApp-based learning experience without time-consuming gameplay.
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Tech Stack

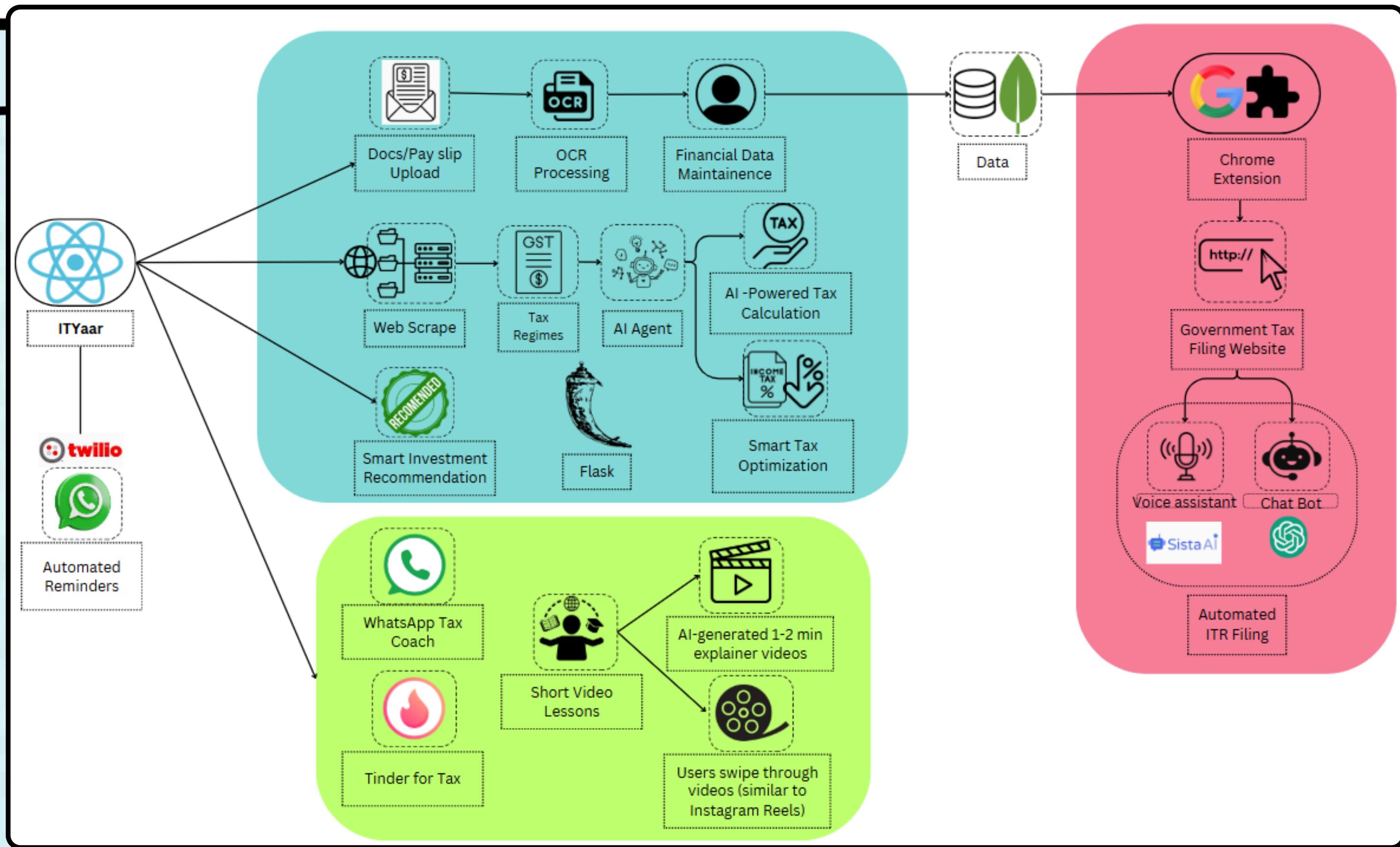
Frontend: React.js, TailwindCSS, ShadCN
API: Twilio, SistaAI, OpenAI
Agent platform: AutoGen
Backend: Flask
Database: MongoDB



Use Case Diagram



System Architecture Diagram



OCR-based Document Scanning & Processing

TDS Centralized Processing Cell | **TRACES** TDS Reconciliation Analysis and Correction Enabling System

Government of India
Income Tax Department

FORM NO. 16
[See rule 31(1)(a)]

PART A

Certificate under Section 203 of the Income-tax Act, 1961 for tax deducted at source on salary

Certificate No. ABCDEFG	Last updated on 28-May-2014			
Name and address of the Employer				
EMPLOYER INDIA PRIVATE LIMITED Plant 2, Block A, Some Street, Mumbai-400079 Maharashtra +(91)22-66660000 finance-manager@example.com	JOHN DOE 101 EASY STREET APARTMENT 101 MUMBAI - 400011 MAHARASHTRA			
PAN of the Deductor	TAN of the Deductor	PAN of the Employee	Employee Reference No. provided by the Employer (If available)	
ABC1234A	BLRI00560A	AAAP1111A		
CIT (TDS)	Assessment Year	Period with the Employer		
The Commissioner of Income Tax (TDS) Room No. 900A, 9th Floor, K.G. Mittal Ayurvedic Hospital Building, Charni Road , Mumbai - 400002	2014-15	From 01-Apr-2013	To 31-Mar-2014	
Summary of amount paid/credited and tax deducted at source thereon in respect of the employee				
Quarter(s)	Receipt Numbers of original quarterly statements of TDS under sub-section (3) of Section 200	Amount paid/credited	Amount of tax deducted (Rs.)	Amount of tax deposited / remitted (Rs.)
Q1	ABCDEFGHI	57546.00	195.00	195.00
Q3	ABCDEFGHI	84552.00	2133.00	2133.00
Q4	ABCDEFGHI	93296.00	314.00	314.00
Total (Rs.)		235394.00	2642.00	2642.00

```
"Period with Employer": {  
    "From": "01-Apr-2021",  
    "To": "31-Mar-2022"  
}  
,  
"SalaryDetails": {  
    "GrossSalary": 2557983.  
},  
"Exemptions": {  
    "HouseRentAllowance": 180150.0,  
    "LeaveEncashment": 0.0,  
    "TravelAllowance": 0.0,  
    "Gratuity": 0.0  
},  
"TotalTaxableIncome": 2377833.0  
,  
"TaxDetails": {  
    "TotalTaxDeducted": 483740.0,  
    "TotalTaxDeposited": 483740.0,  
    "QuarterlyBreakup": [
```

Extracts key tax details from salary slips and investment proofs.



AI-Powered Tax Calculation

Total Taxable Income = ₹25,57,983.00 - ₹1,80,150.00
Total Taxable Income = ₹23,77,833.00

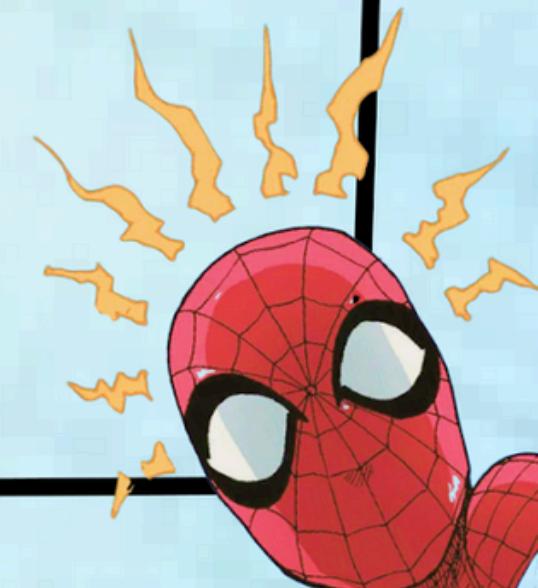
3. Tax Calculation:

- Income up to ₹2,50,000: 0%
- ₹2,50,001 - ₹5,00,000: 5%
- ₹5,00,001 - ₹7,50,000: 10%
- ₹7,50,001 - ₹10,00,000: 15%
- ₹10,00,001 - ₹12,50,000: 20%
- ₹12,50,001 - ₹15,00,000: 25%
- Above ₹15,00,000: 30%

Slab	Income Range	Tax Rate	Tax Amount
1	₹0 - ₹2,50,000	0%	₹0
2	₹2,50,001 - ₹5,00,000	5%	₹12,500
3	₹5,00,001 - ₹7,50,000	10%	₹25,000
4	₹7,50,001 - ₹10,00,000	15%	₹37,500
5	₹10,00,001 - ₹12,50,000	20%	₹50,000
6	₹12,50,001 - ₹15,00,000	25%	₹62,500
7	Above ₹15,00,000	30%	₹99,449.90

Total Tax before Cess = ₹2,87,949.90

Automatically computes tax liability under best suited Tax Regimes with the help of **Web Scraping** and **Agentic AI**.



Smart Tax Optimisation

Your portfolio details

Period of Investment

10

Capital

50000

Goal Amount

500000

Risk Tolerance

Medium

Get Recommendations

Fixed Deposits: Regular investments in fixed deposits or periodic lump sums could further add to your corpus, but the growth would be slower compared to mutual funds.

To align more closely with your goal of ₹500,000 and considering the estimates above might be on the higher side due to the assumptions of consistent high returns, let's refine our approach:

Invest ₹40,000 initially in mutual funds and ₹10,000 in fixed deposits.

Start a monthly SIP of ₹4,000 to ₹5,000 in mutual funds.

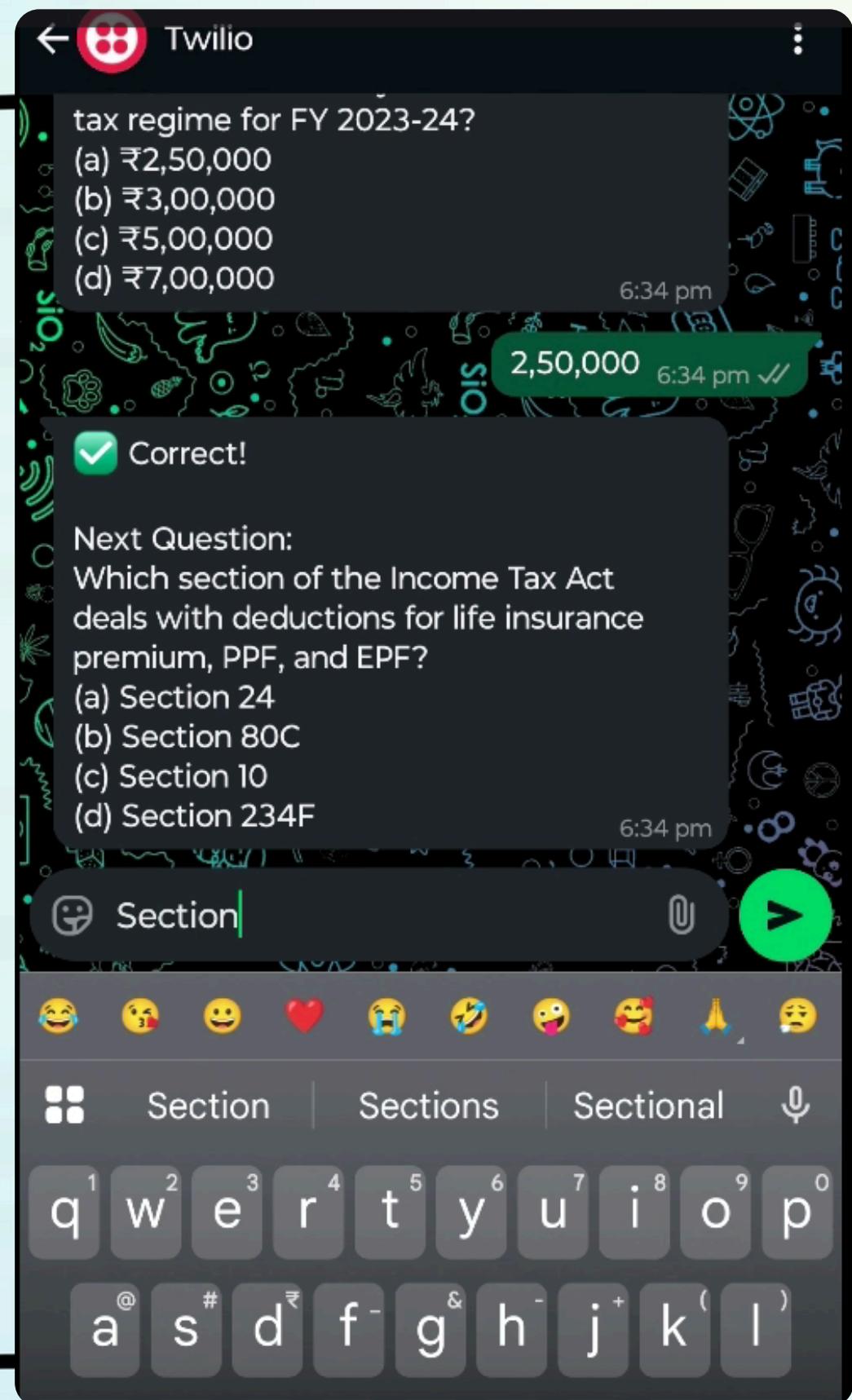
Periodically review and adjust your SIP amount or allocation between mutual funds and fixed deposits based on your financial situation and market performance.

This strategy should help you grow your investments over time, balancing risk and potential returns. However, it's crucial to monitor your investments periodically and be prepared to make adjustments as needed to stay on track with your financial goals.

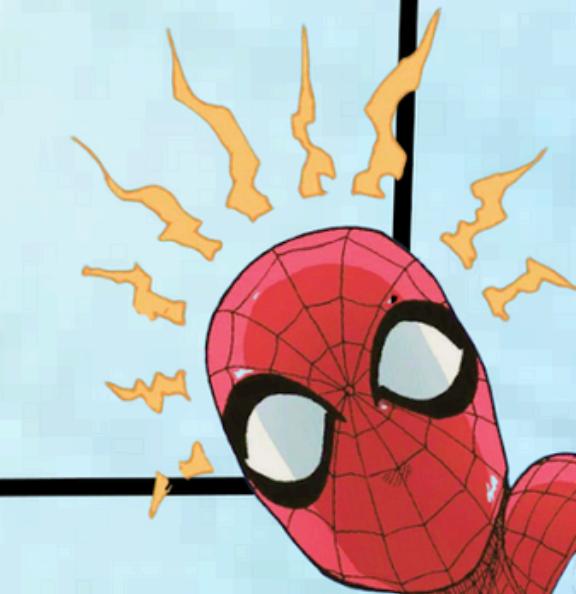
The total predicted returns from your mutual fund investments, assuming an average annual return of 12%, could be in the range of 100% to 150% over the 10-year period, depending on market conditions and the specific funds chosen. This means your initial investment in mutual funds could potentially double or triple by the end of the

Provides personalized investment suggestions to minimize tax burden.

WhatsApp Integration



It conducts **quiz** on WhatsApp about Tax related concepts and it also **notifies** users about upcoming filing deadlines and investment opportunities on WhatsApp.



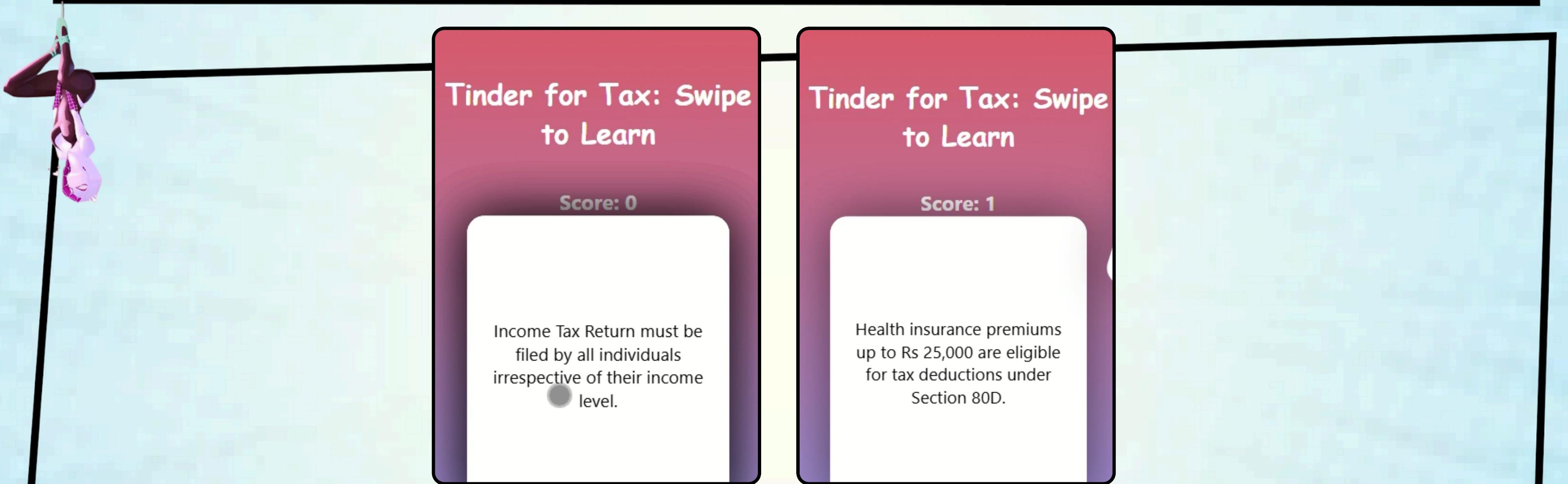
Short Video Lessons (Like Reels & Shorts)



- AI-generated 1-2 minute explainer videos on **tax concepts**.
- Users swipe through videos (similar to Instagram Reels).



Tinder for Tax: Swipe to Learn



A **swipe-based learning** system like Tinder:

- Right Swipe for correct tax strategies.
- Left Swipe for common tax mistakes.
- Users get a score based on the number of correct swipes.



Google Chrome Extension



When a user visits the government website for filing taxes, they can enable our extension for:

- **Assisted ITR Filing** – Parses ITR form and guides users through filing with the help of:
 - **Chatbot for Tax Queries** – Answers FAQs related to tax deductions, exemptions, and filing.
 - **Voice-Enabled UI** – Allows users to interact via voice for accessibility.



Google Chrome Extension



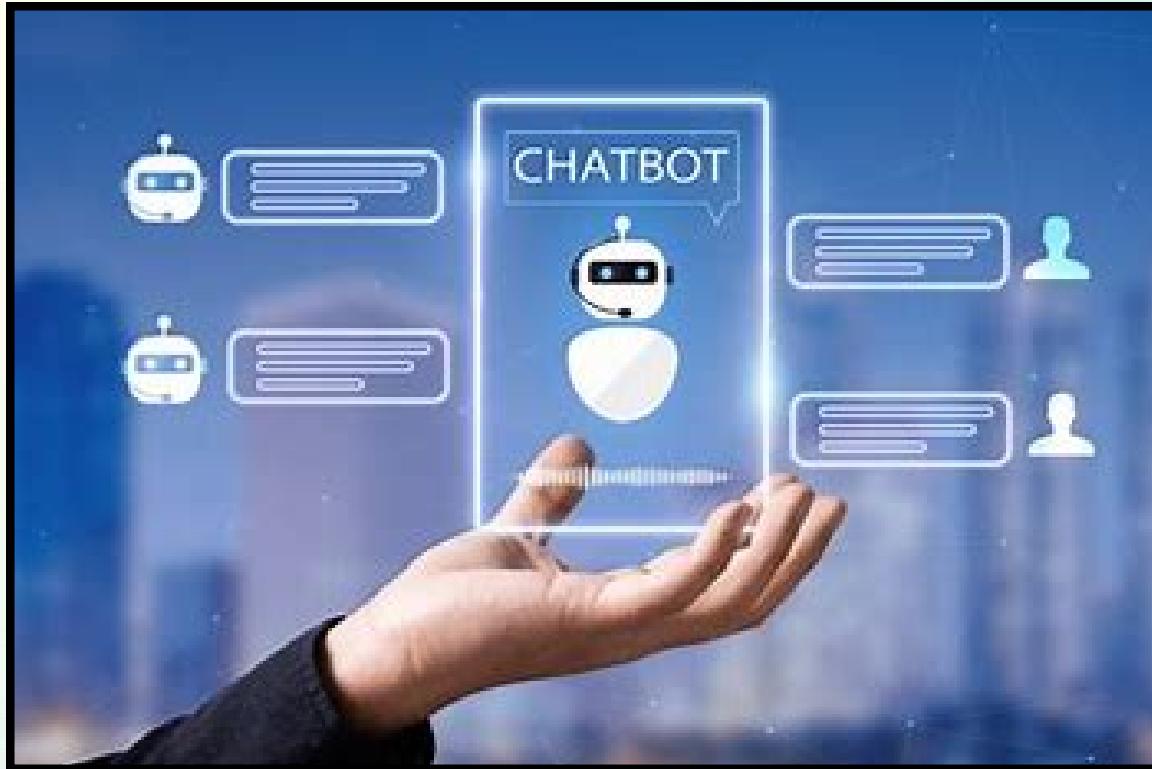
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To be Implemented:

1. Google Chrome Extension
2. Chatbot for Tax Queries



Our Solution

Demonstration Video Link-

https://drive.google.com/drive/folders/1OvIU42Pxvp9GwZCIQkkrLA60TY2eEUBy?usp=drive_link



Future Objectives

- Linking Pan and Aadhar to our website so that we can access Form-16 directly.
- Expand to Business ITR (ITR-3, ITR-4)
- Investment Portfolio Integration
- Multilingual Support

