

TAX SAVING SYSTEM

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ABSTRACT

Tax planning is an essential part of our financial planning. Efficient tax planning enables us to reduce our tax liability to the minimum. This is done by legitimately taking advantage of all tax exemptions, deductions under chapter VIA, rebates and allowances while ensuring that your investments are in line with their long-term goals. The project deals to find out the most suitable and popular tax saving instrument used to save tax and also to examine the amount saved by using that instrument. Over all findings reveals that the most adopted tax saving instrument is Provident Fund, which got the first rank in this study and the second most adopted tax saving instrument is Life Insurance policy. Tax Saving System is software that assists people who are employed or currently working in saving Taxes using the different government schemes and regulation. This application takes customised inputs from the user and gives personalised recommendation of saving taxes based upon the feedback or the input provided by the user. This project streamlines the process by eliminating the work of going to chartered accounted for personalised tax saving option. The Tax Saving will take various inputs from the user such as name, age, gross income, dependent age, medical expense and deduction. These details can be uploaded manually or can be fetched automatically from the income tax slip using Optical character recognition. The tax saving options are provided depending upon the input entered by the user. These options come with an option of explore which can guide you to the details of each option.

Keyword: Recommendation System, optical character recognition (OCR), Tax Saving, Tax Saving Instruments.

1. INTRODUCTION

Being a citizen of India, paying tax is one of our constitutional duties in return of fundamental rights Tax Planning is an exercise undertaken to minimize tax liability through the best use of all available allowances, deductions, exclusions, exemptions, etc., to reduce income.

The Tax Saving System will first calculate the required amount of tax that needs to pay and then it suggest various tax saving option that are there in the government regulation and various other tax saving option that the people are not aware of and sees the needs to go to chartered accounted for their personalised tax saving option. This system will be giving accurate recommended option based upon the input of the user. It gives a complete overview of the option of tax saving that are available for the particular individual from which the user can save taxes under the government norms and regulation and under legal method. The process of going to chartered accounted for getting a personalised plan for the individual can be automated and it will save a lot of individual time and money which can be used for saving money. This system will provide the service free of cost which will help any individual to see his plan free of cost and then the user can take his decision based upon the output provided.

1.1 BACKGROUND

The government offers tax-saving investments to both salaried and the self-employed to save on taxes. You also have tax exemptions and tax deductions that help you save money to lower your tax liability. A popular tax deduction is

the Section 80C of the Income Tax Act, 1961. You are eligible for tax deduction up to a maximum of Rs 1.5 lakh a year, under Section 80C on suitable investments and expenses.

1.2 OBJECTIVES

This system will be giving accurate recommendation of option based upon the input of the user . It gives a complete overview of the option of tax saving that are available for the particular individual from which the user can save taxes under the government norms and regulation and under legal method . The process of going to chartered accounted for getting a personalised plan for the individual can be automated and it will save a lot of individual time and money which he needs to spend for saving money. Our system will provide the service free of cost which will help any individual to see his plan free of cost and then the user can take his decision based upon the output provided to him . Our system will provide customised output for every individual and will also keep the record of the data of the previous year of the individual.

2. IMPLEMENTATION PHASES

The Tax saving system has been carried out in various phases .When all these phases are combined together it brings the whole system together . Phases of the Tax saving system are mentioned below.

2.1 COLLECTION OF DATA FOR DATABASE

Various Tax saving options that comes under Indian norms and regulation are searched and collected for storing into database. The database used here for storing of data is MongoDB. MongoDB is a cloud base platform that is used to store the data in the cloud. Different tax saving option are stored on the MongoDB and these data are further retrieved based upon the input and data needed to be fetched.

2.2 USER INPUT COLLECTION

User input collection is necessary for consideration of various background factors that are needed for calculating taxable income. Some of the data required to be entered by the user are name ,age ,gross income ,deductions, dependent age and medical expenses. These data can be entered by the user in two ways : (a) manually or (b) automatically . The automatic entering of the input by the user is done by scanning the income tax slip and the relevant picture is read and entered as an input by the optical character recognition(OCR).

OCR – A simple OCR engine works by storing many different font and text image patterns as templates. The OCR software uses pattern-matching algorithms to compare text images, character by character, to its internal database. If the system matches the text word by word, it is called optical word recognition.

2.3 TAXABLE INCOME CALCULATION

We take the inputs from the user such as income, deduction and other investments . First the annual income is calculated since the entered income is in monthly basis. Next the taxable income is calculated by subtracting deduction and the other investments from the calculated income . If the taxable income is less than Rs.300000 then the amount of tax to be paid is zero . The amount of tax will be calculated depending upon the category in the tax slab where our taxable income falls .

Income Tax Slab (FY 2023-24)	Tax Rate
Up to ₹3,00,000	Nil
From ₹3,00,001 to ₹6,00,000	5%
From ₹6,00,001 to ₹9,00,000	10%
From ₹9,00,001 to ₹12,00,000	15%
From ₹12,00,001 to ₹15,00,000	20%
Income Above ₹15,00,001	30%

Fig-1: Income Tax Slab (FY 2023-24)

2.4 FETCHING OF TAX SAVING OPTIONS

Various tax saving option that stored in the database are fetched according to the user input provided. The best tax saving option that are relevant to the user are retrieved with the help of Rule Based algorithm where the taxable income is compared with the values and factors provided.

Rule Based Algorithm: Rule-based classifiers are just another type of classifier which makes the class decision depending by using various “if..else” rules. These rules are easily interpretable and thus these classifiers are generally used to generate descriptive models.

2.5 EXPLORATION OF TAX SAVING OPTION

Exploration provides an overview of the tax saving option and also provides deep information about the tax saving option that are shown here. User can get a deep dive and information about the schemes and regulation that are shown.

Some of the tax saving options are mentioned below:

- (1) Section 80TTB – Interest From Deposits Held by Senior Citizens
- (2) Section 80GG – Income Tax Deduction on House Rent Paid
- (3) Section 80E – Interest on Education Loan
- (4) Section 80DD – Deduction for Medical Treatment of a Dependent with Disability
- (5) ELSS Mutual Funds
- (6) Public Provident Fund (PPF)
- (7) Sukanya Samridhi Yojana (SSY)
- (8) National Pension Scheme (NPS)

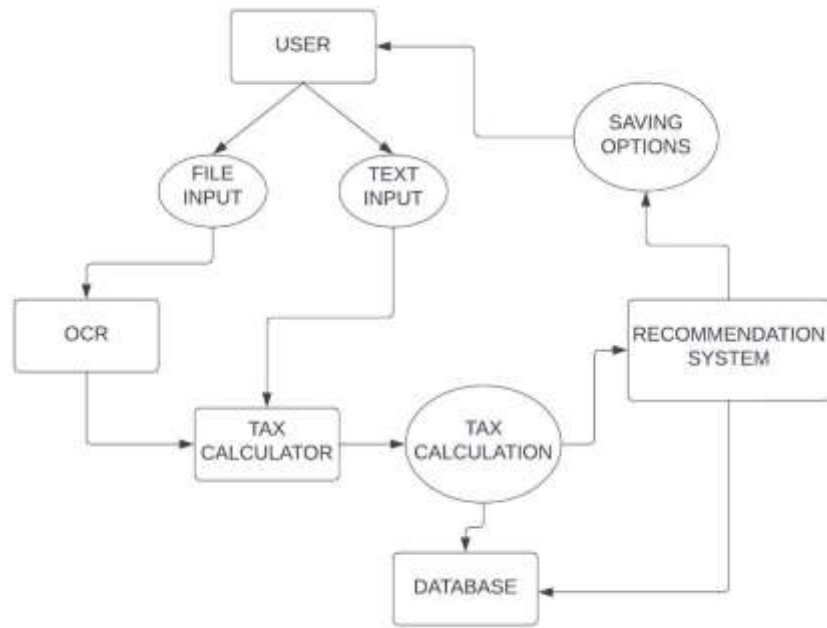


Fig-2: Level 2 Data flow Diagram of the system

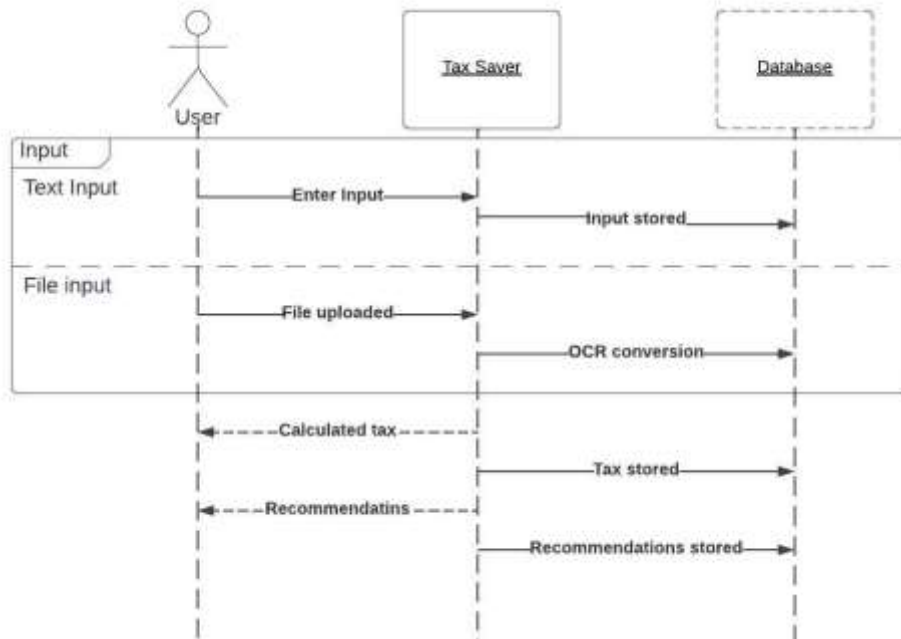


Fig-3: Sequence Diagram

3. RESULTS

The screenshot shows a web form titled "Tax Optimizer". Below the title is a header bar with the text "Tax Optimizer". Underneath is a section titled "Please fill all details". The form contains several input fields: "Name" with the value "test", "Age" with the value "3", "Gross Income (Monthly)" with the value "₹ 0", "Deductions" with the value "₹ 0", "Dependents Age" with the value "0", and "Annual Expenses" with the value "₹ 0". There is a button labeled "LOAD FROM SALARY SLIP" and a green "NEXT" button at the bottom.

Fig-4: User Input for the Tax Saving System

The screenshot shows the "Tax Optimizer" form after calculation. The header bar still says "Tax Optimizer". Below it is a box that says "Your Taxable Amount: ₹ 6700". At the bottom, there is a green button labeled "SHOW TAX SAVING OPTIONS".

Fig-5: Taxable Amount Calculated



Fig-6: Tax savings options recommended

4. CONCLUSION

This project streamlines the process by eliminating the work of going to chartered accounted for personalised tax saving option.

The Tax Saving System is able to first calculate the required amount of tax that needs to be paid by the user and then it suggests various tax saving options that are there in the government regulation including those other tax saving options that are unaware by the people. The user has the complete liberty to either enter the input data manually or scan the income tax slip. The data in the income tax slip is extracted by the Optical Character Recognition (OCR). This system is very beneficial for senior citizens as they can get easily updated with the recent tax saving options and regulations.

Hosting the tax saving system on the cloud platform will give an access to people interested in utilizing the available source. This could be a development that maps to the qualities of the Computing Cell. And, the computing cells are known for their consistent need for finer and sophisticated software infrastructure, which is paired with intricate features like encryption, third party authentication, efficient and reliable network segmentation, and data management.

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