

# **TAX CALC**

## **INCOME TAX CALCULATOR**

**A PROJECT REPORT SUBMITTED IN PARTIAL  
FULFILMENT OF REQUIREMENT  
FOR THE AWARD OF THE DEGREE  
MASTER OF COMPUTER APPLICATIONS  
(MCA)  
OF  
MAHATMA GANDHI UNIVERSITY, KOTTAYAM  
BY**

**ASIM THAHA AZEEZ**

**Reg No: 22PMC118**



**MARIAN COLLEGE  
KUTTIKKANAM**  
(AUTONOMOUS)

**MAKING COMPLETE**

**Marian College Kuttikkanam Autonomous**

**Peermade, Kerala – 685 531**

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**ASIM THAHA AZEEZ**

**Reg No: 22PMC118**

**Under the guidance of**

**Ms. KOCHUMOL ABRAHAM**

**Assistant Professor**

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**Marian College Kuttikkanam Autonomous**



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# **PG DEPARTMENT OF COMPUTER APPLICATIONS**

## **Marian College Kuttikkanam Autonomous**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

**KUTTIKKANAM – 685 531, KERALA.**

### **CERTIFICATE**

This is to certify that the project work entitled

**TAX CALC**

is a bonafide record of work done by

**Asim Thaha Azeez**

**Reg. No. 22PMC118**

In partial fulfilment of the requirements for the award of Degree of

**MASTER OF COMPUTER APPLICATIONS [MCA]**

During the academic year 2022-2023

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Finally, I express my deep appreciation to all my friends and family members for the moral support and encouragement they have given to complete this project work successfully.

**ASIM THAHA AZEEZ**

## **ABSTRACT OF TAX CALC**

An income tax calculator is a web-based tool that can be used to estimate the amount of income tax that an individual or household will owe. The calculator typically asks for information such as the taxpayer's income, filing status, and deductions, and then uses this information to calculate the tax liability. Income tax calculators can be a helpful tool for taxpayers who want to get an idea of how much tax they will owe before they file their return. They can also be used to compare different tax strategies and see how they would affect the amount of tax owed.

The Tax Calc is a python Django based web application designed to efficiently manage the tax liabilities. The storing and retrieving of the data are done using Django. The system utilizes the SQLite database for storage of data.

Key features of the system include Login and Registration, Tax Calculations, Slab rates, Savings Guide, Report Generations, Viewing Analytics. The Tax Calc System Creates an user friendly and efficient platform for managing Tax calculations

### ***OBJECTIVE AND SCOPE***

The main objective of developing a Tax calculator website is to provide a user-friendly environment to provide a chance to calculate their own income. There are many objectives of Tax Calc

- online 24/7, PAN-INDIA
- Convenience: Income tax calculators can be used from anywhere with an internet connection.
- Accuracy: Income tax calculators are based on the latest tax laws and regulations.
- Time savings: Income tax calculators can save taxpayers time by automating the tax calculation process

## ***PROBLEM STATEMENT***

The concept of traditional income tax calculation has changed radically within the last couple of years. During the Covid years, the use of income tax calculators increased drastically. It was due to the lack of access to tax professionals during the time. People were not able to calculate their income taxes with ease due to Covid protocols. This is when the idea of online income tax calculation came into existence. Now, you have access to online income tax calculation services whenever and wherever you want, as long as you have access to a computer and the internet. We are now entering a new era, the revolution of online income tax calculation. The purpose of online income tax calculators is to allow people to calculate their income taxes online with ease."

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# **1. INTRODUCTION**

## **1.1 PROBLEM STATEMENT**

The concept of traditional income tax calculation has changed radically within the last couple of years. During the Covid years, the use of income tax calculators increased drastically. It was due to the lack of access to tax professionals during the time. People were not able to calculate their income taxes with ease due to Covid protocols. This is when the idea of online income tax calculation came into existence. Now, you have access to online income tax calculation services whenever and wherever you want, as long as you have access to a computer and the internet. We are now entering a new era, the revolution of online income tax calculation. The purpose of online income tax calculators is to allow people to calculate their income taxes online with ease.

Limitations of existing system

- **Manual Control:** All report calculation is done manually so there is a chance of error.
- **Lots of Paper works:** Person record maintain in the register so lots of paper require storing details.
- **Not user friendly:** The present system not user friendly because data is not stored in structure and proper format.
- **Time consuming**

## **1.2 PROPOSED SYSTEM**

The proposed income tax calculator website aims to overcome the challenges of the current income tax calculation process by providing a comprehensive and user-friendly platform for calculating income taxes. The website will leverage technology to streamline the process, enhance convenience, and optimize income tax calculation accuracy. Key features of the proposed website include:

- Accuracy: The website will be based on the latest tax laws and regulations, ensuring that taxpayers receive accurate estimates of their tax liability.
- Convenience: The website will be easy to use, allowing taxpayers to calculate their taxes quickly and easily.

The proposed income tax calculator website will be a valuable resource for taxpayers of all income levels. It will provide a convenient and accurate way to calculate income taxes, saving taxpayers time and money.

In addition to the key features listed above, the proposed website will also offer the following benefits:

- Time Savings: Taxpayers will save time by not having to manually calculate their taxes.
- Peace of mind: Taxpayers can be confident that they are paying the correct amount of taxes
- Improved compliance: Taxpayers who use the website are more likely to comply with tax laws.

The proposed income tax calculator website will be a valuable resource for taxpayers and tax professionals alike. It will provide a convenient, accurate, and reliable way to calculate income taxes.

### ***1.3 PROJECT REQUIREMENTS***

The features of this website are:

- Tax Calculations
- Report Generation
- Analytics of Tax reports
- Tax Savings Guide
- Tax Slab Rates
- Mobile Responsiveness
- User-Friendly Interface.
- Administrative Dashboard.

## **2.FUNCTIONAL REQUIREMENTS**

## **FUNCTIONAL REQUIREMENTS**

0. User registration and login functionality for all users
1. Users can Calculate Tax.
2. User can view the generated report.
3. User can view the report analytics.
4. Users can Send feedback
5. Admin can add and manage users
6. Admin can update Tax Calculations.
7. Admin can view customer's and feedback
8. Admin can view the generated report.
9. Admin can view the report analytics.
10. Admin can add Dynamic contents

### ***User registration and login functionality for all users***

Customers can create accounts by providing personal details and register to the system. Users can login using their unique username and password to access their respective accounts in the system.

### ***Users can Calculate Tax***

Users can calculate their income tax after logging into their account.

### ***User can view the generated report***

Once the calculation process is completed, users can view the report of the calculation. The report provides a breakdown of each of the calculations.

***User can view the report analytics***

Once the calculation process is completed, users can view the analytics of the calculation. The analytics provide a insights of the calculations.

***User can send feedbacks***

Once the calculation process is completed, users can view the analytics of the calculation. The analytics provide a insights of the calculations.

***Admin can add and manage users***

Admin can add users to the system by providing their details. Once added, the admin assigns a username and password to the users.

***Admin can add dynamic content***

Admin can add dynamic content in the system such as Tax Slabs and Savings Guide. He can also add dynamic carousels also.

***Admin can view generated Reports***

The admin can view the generated reports based on the calculations given by the user. He can also update any changes if necessary

***Admin can view report Analytics***

Admin has the ability to view report analytics provided by users in order to gather insights and improve the system. Additionally, admin can also access feedback submitted by users to gain knowledge about the calculations.

## **3. NON-FUNCTIONAL REQUIREMENTS**



- ***Performance Requirement***

System should be Error-free.

Large amount of data should be handled easily.

- ***Safety Requirement***

Backups can be done regularly.

- ***Security Requirement***

A password is given to the SQL server. Administrator and the end user, who have their own username and password. Have only the right to open the software.

- ***Availability***

Since this application is a web-based application, it will be available to users 24x7 with the exception during server maintenance or upon site updates.

- ***Maintainability***

Since it is a web-based application, live maintenance can be performed at ease without hindering the user experience and user data.

## **4.FEATURES AND HIGHLIGHTS OF THE PROJECT**

### ***FEATURES AND HIGHLIGHTS***

- 1.Users can register and login into the system.
- 2.Users can calculate Taxes.
- 3.Users can view different Tax Savings Guide.
- 4.Users can add Tax Details.
- 5.User can view their respective Tax details.
- 6.User can take print of Tax details.
- 7.The Admin can view
  - 1.The whole Database
  - 2.Tax Calculations
  - 3.Dynamic Elements
- 8.Admin can add Tax Details.
- 9.Admin can add User Details.
- 10.Admin can edit all details.
11. Admin can view Analytics of calculations.

# **5. TECHNICAL ASPECTS**

## *TECHNICAL ASPECTS*

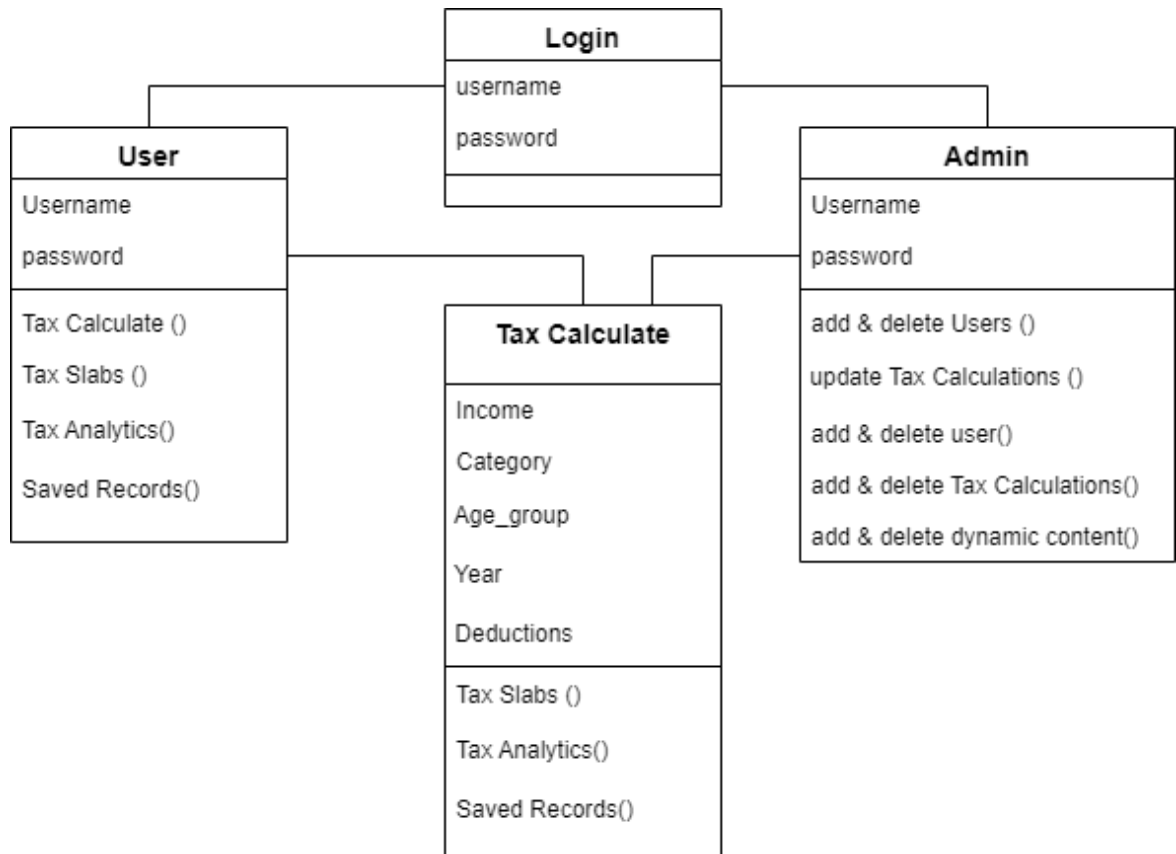
### Presentation Layer:

- User Interface (UI): This layer includes the components that interact with users, such as web pages or mobile app screens.
- Django Templates: Django's built-in template engine allows you to define HTML templates that render dynamic content and interact with the back-end.
- Bootstrap package: Bootstrap has made the website more responsive to various device widths.
- Jazzmin package: Jazzmin provides a very interactive Django admin panel GUI.
- Chart.js: JavaScript library that provides interactive charts for analytics.
- Pillow package: The Python Imaging Library is best suited for image archival and batch processing applications.

### Application Layer:

- Django: Django serves as the back-end framework, handling HTTP requests, routing, and managing the application's business logic.
- Django Views: Views receive requests from the user interface, process data, and generate appropriate responses. They interact with models, services, and external APIs as needed.

# **6.CLASS DIAGRAM**

*CLASS DIAGRAM OF DATABASE*

# **7. CHALLENGES FACED DURING DEVELOPMENT**



***1. User Interface Design:***

Designing a user-friendly interface that accommodates various functionalities and ensures a seamless user experience for users requires careful planning and consideration of usability principles.

***2. Coding the logic***

Coding the logic behind Tax Calculation were really difficult. It was completed after days of coding and getting help from friends

***3. System Charts:***

Developing a comprehensive charts system that caters to the needs of users, administrators was a challenge due to the inherent complexity of managing multiple charting libraries and their interactions.

***4. Data Management:***

Efficiently storing and retrieving data, such as Tax calculations, user information, feedback while ensuring data integrity and system performance can pose challenges.

***5. Security and Authentication:***

Implementing security measures to protect user data, prevent unauthorized access, and ensure secure authentication for users, administrators is crucial but can be challenging due to the need for secure encryption, authentication protocols, and access controls.

## **8. FUTURE ENHANCEMENTS**

### **1. *Mobile Application:***

Mobile Application: Develop a mobile application for the Tax Calculation to allow users to easily Calculate Income Tax, receive notifications, and manage their income and have insights on their mobile devices.

### **2. *Real Time Availability:***

Real-Time Availability: Implement real-time availability updates to provide users with up-to-date information on Tax Calculations.

### **3. *Other Calculators:***

Other Tax calculating Options: Other Tax calculating Options such as Sales tax, Deferred Tax Calculator, House Rent Allowance Calculator etc.

### **4. *Premium Version:***

Premium Version: which provides extra features such as tax payment recommendations, analytics

### **5. *Tax Calculations in multiple Currency:***

Tax Calculations in multiple Countries: which makes calculations in multiple countries easier.

### **6. *Advanced System Rating:***

Enhance the feedback system to include a detailed tax rating system, enabling customers to provide ratings for individual taxes based on their income, other income.

These future enhancements will further improve the Tax Calc, providing additional features, enhanced user experiences, and advanced functionalities to meet the evolving needs of customers.

## **9. CONCLUSION**

*CONCLUSION*

The project was successfully completed within the time span allotted. All the modules are tested separately and put together to form the main system. Finally, the modules are tested with real data and it worked successfully. Thus the system has fulfilled the entire objective defined. Our goal of developing this Income Tax Calculation System has come to a good result without many defects. Tax Calculation system improves the existing system since we are in the computerized world. With this new system is mandatory, it enables the user of the system (commoner, System administrator) to Calculate Income Tax online and this reduces the wasting of time of the clients looking for calculation of taxes, increases the tax payment to the Government since the tax calculator is making them a better citizen. So this system provides all the available best services to all the customers

## **10. REFERENCES**

### *REFERENCES*

- <https://incometaxindia.gov.in/pages/tools/income-tax-calculator.aspx>
- <https://cleartax.in/paytax/TaxCalculator>

GitHub Repo:

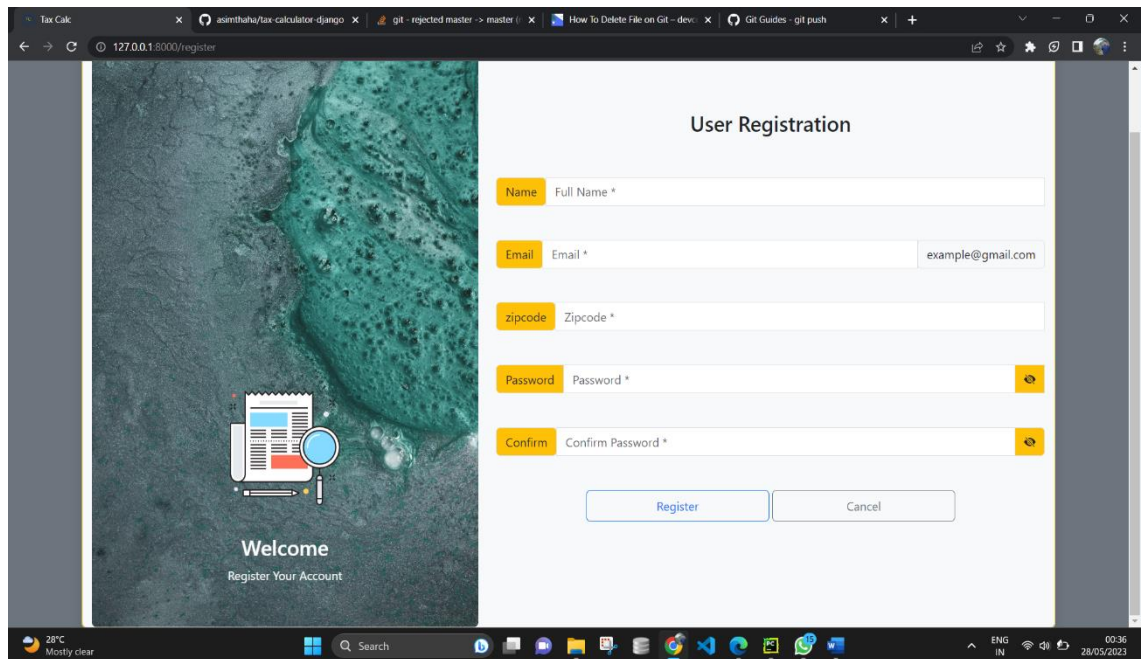
- <https://github.com/asimthaha/tax-calculator-django.git>

# ANNEXURE



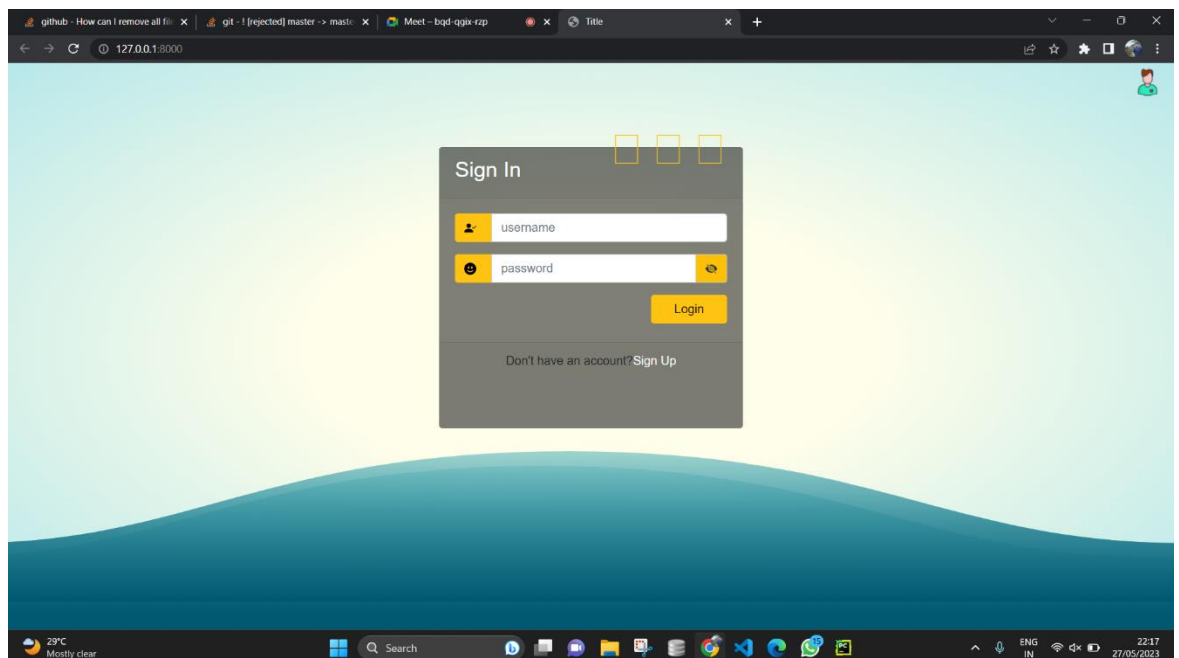
## Screen Shots

### USER SIGN UP

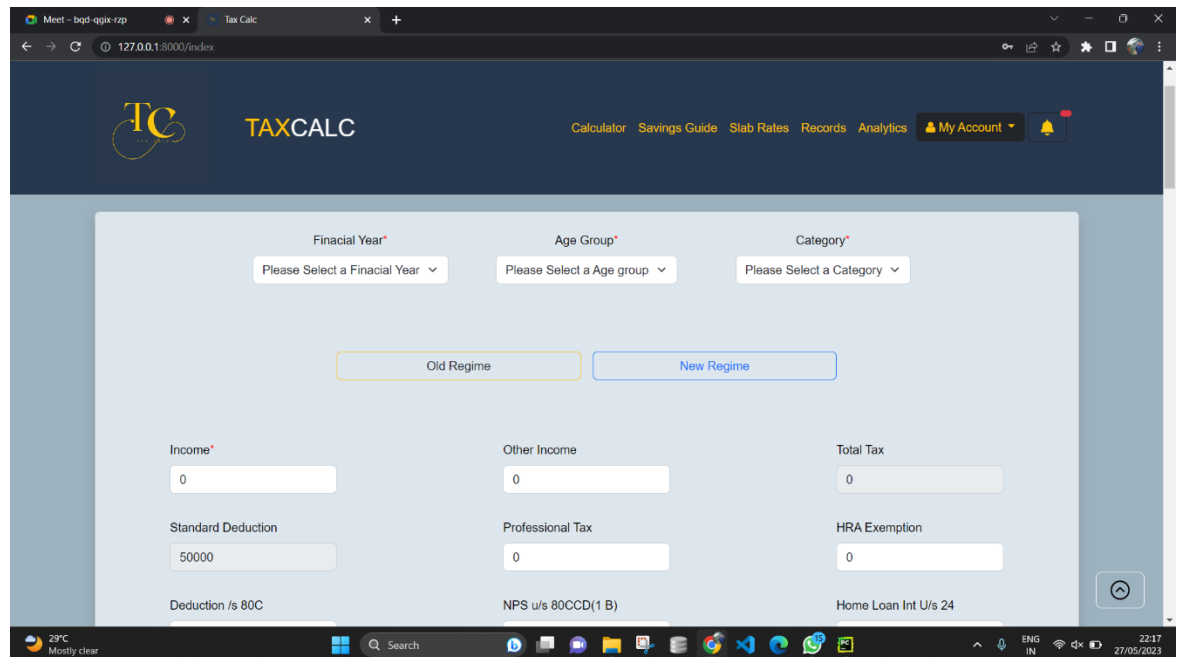


A screenshot of a web browser displaying a 'User Registration' form. The browser's address bar shows '127.0.0.1:8000/register'. The form is titled 'User Registration' and includes the following fields: 'Name' (Full Name \*), 'Email' (Email \* with 'example@gmail.com' entered), 'zipcode' (Zipcode \*), 'Password' (Password \* with a toggle icon), and 'Confirm' (Confirm Password \* with a toggle icon). Below the fields are 'Register' and 'Cancel' buttons. The background of the page features a green, textured image with a 'Welcome Register Your Account' graphic. The Windows taskbar at the bottom shows the date as 28/05/2023 and the time as 02:36.

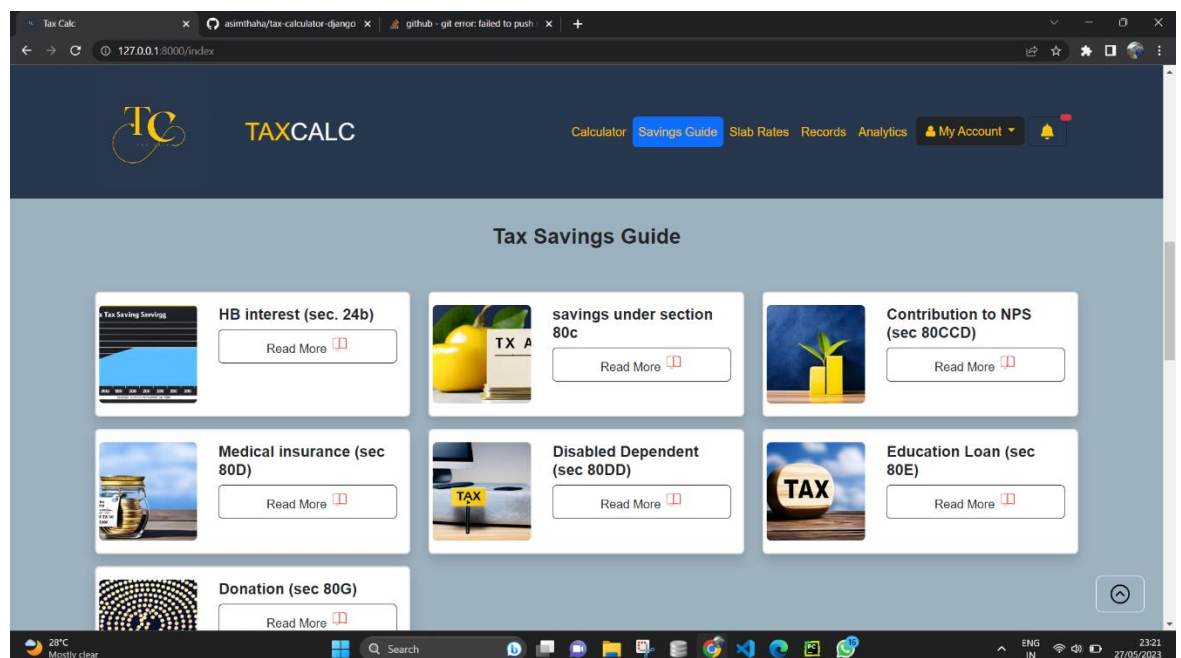
### USER LOGIN



A screenshot of a web browser displaying a 'Sign In' form. The browser's address bar shows '127.0.0.1:8000'. The form is titled 'Sign In' and includes the following fields: 'username' and 'password' (with a toggle icon). Below the fields is a 'Login' button. At the bottom of the form, there is a link that says 'Don't have an account? Sign Up'. The background of the page features a blue and green gradient with a stylized mountain silhouette. The Windows taskbar at the bottom shows the date as 27/05/2023 and the time as 22:17.

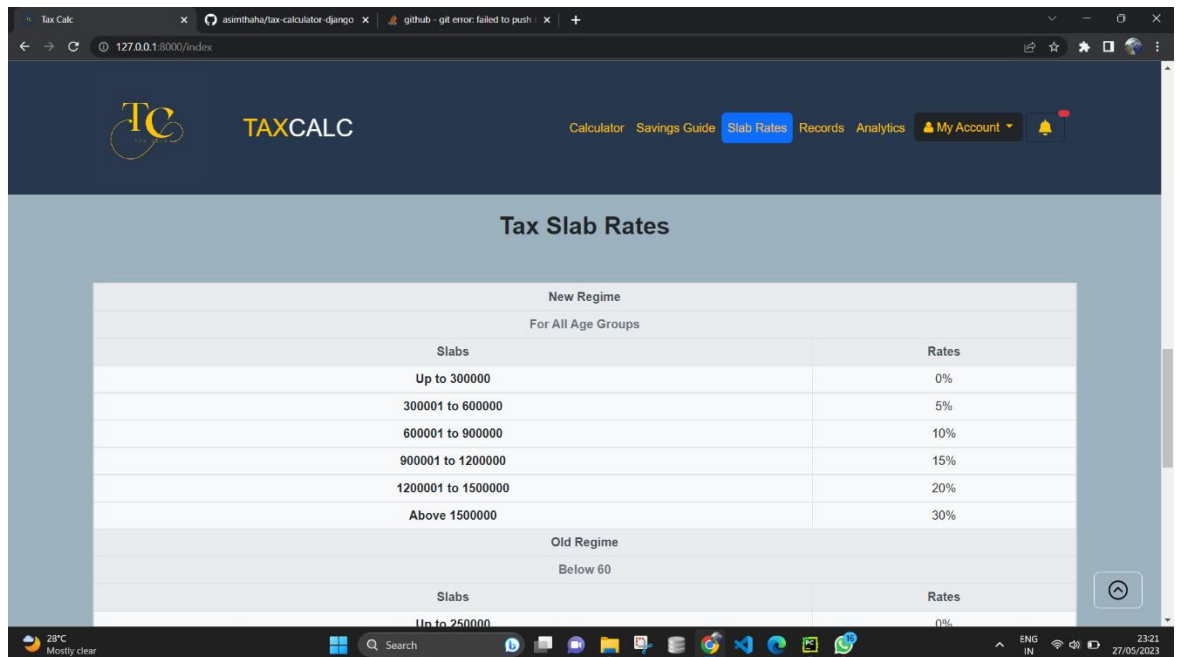
*USER DASHBOARD*

The screenshot shows the TAXCALC User Dashboard. The header includes the TAXCALC logo and navigation links: Calculator, Savings Guide, Slab Rates, Records, Analytics, My Account, and a notification bell. The main form area contains three dropdown menus for Financial Year, Age Group, and Category. Below these are two buttons: Old Regime and New Regime. The form also includes input fields for Income, Other Income, Total Tax, Standard Deduction, Professional Tax, HRA Exemption, Deduction u/s 80C, NPS u/s 80CCD(1 B), and Home Loan Int U/s 24. The bottom of the dashboard shows a weather widget (29°C Mostly clear) and a Windows taskbar with the date 27/05/2023.

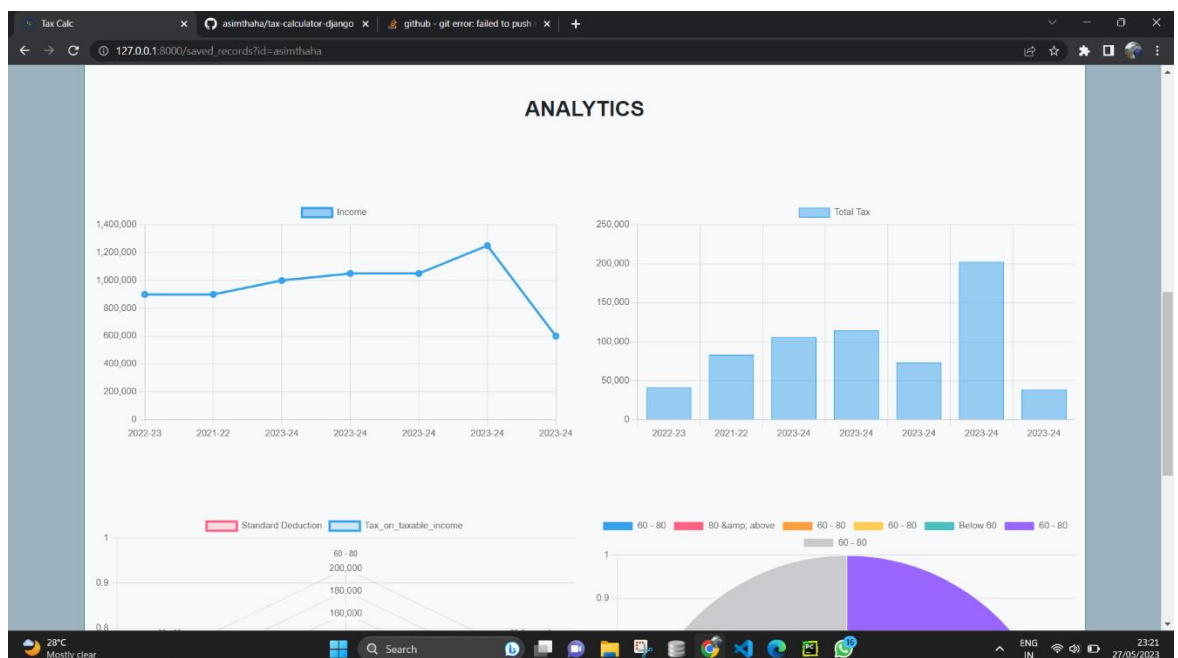
*TAX SAVINGS*

The screenshot shows the TAXCALC Tax Savings Guide. The header is the same as the User Dashboard. The main content area is titled "Tax Savings Guide" and features a grid of seven cards, each representing a different tax saving option. Each card includes an icon, a title, and a "Read More" button. The cards are: HB interest (sec. 24b), savings under section 80c, Contribution to NPS (sec 80CCD), Medical insurance (sec 80D), Disabled Dependent (sec 80DD), Education Loan (sec 80E), and Donation (sec 80G). The bottom of the page shows a weather widget (29°C Mostly clear) and a Windows taskbar with the date 27/05/2023.

## TAX SLAB ARTES REQUEST



## ANALYTICS PAGE



*FEEDBACK FORM*

What service You need ?

name  E-mail

write your message

**Feedback Form**  
Give us your valuable feedback to improve our services

*ADMINISTRATIVE DASHBOARD*

Site administration | Tax calc: Admin | asimthaha/tax-calculator-django | github - git error: failed to push

127.0.0.1:8000/admin/

**admin**

**Dashboard** | Home > Dashboard

**Authentication and Authorization**

- Groups
- Users

**Admin\_Tools\_Stats**

- Cached values
- Dashboard stats
- Dashboard stats criteria

**Taxes**

- Carousel imagess
- Tax detailss
- Tax savings guides
- Tax slab ratess
- User detailss
- User feedbacks

**Recent actions**

- athul 2 days, 22 hours ago
- Old Regi me 2 days, 23 hours ago
- status 4 days, 7 hours ago  
Added "status".
- taxgra ph 4 days, 7 hours ago  
Added "taxgraph".
- asimt haha 4 days, 22 hours ago
- asimthaha 3 weeks ago

## ADMIN ANALYTICS

