"TAX CALCULATOR"

A PROJECT REPORT

Submitted by

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KUCHHADIYA HARDIK L. (206270307026)

In partial fulfillment for the award of the degree Of

DIPLOMA OF ENGINEERING

In

COMPUTER ENGINEERING



GOVERNMENT POLYTECHNIC, PORBANDAR

Gujarat Technological University, Ahmedabad

Academic Year: 2022-23

GOVERNMENT POLYTECHNIC PORBANDAR



COMPUTER ENGINEERING DEPARTMENT

VISION OF THE DEPARTMENT

To achieve excellence in Computer Engineering by imparting technical and problem-solving skills along with ethical value to meet industrial requirements having social and environmental concerns.

MISSION OF THE DEPARTMENT

M1: To provides a learning ambiance to enhance discipline knowledge, technical skill and problem-solving skill.

M2: To motivates students for lifelong learning to adapt challenges in rapidly changing technology.

M3: To induces ethical values and spirit of social commitment.

M4: To provide opportunities to promote leadership skill required in Computer Engineering industry's diverse culture.

Subject: Project II

Subject Code: C306, 3360707

Course Outcomes:

C306.1 Identify problem statement by surveying variety of domains.

C306.2 Identify design methodologies based on requirement analysis.

C306.3 Apply advanced programming techniques.

C306 .4 Present technical report by applying different visualization tools and Evaluation metrics.



GOVERNMENT POLYTECHNIC, PORBANDAR



COMPUTER ENGINEERING

DECLARATION

We hereby declare that the Reports, submitted along with the Project Report for the project entitled "TAX CALCULATOR" submitted in partial fulfillment for the degree of <u>Diploma in Computer Engineering</u> to Gujarat Technological University, Ahmadabad, is a Bona-fide record of the project work carried out at <u>Government Polytechnic Porbandar</u> under the supervision of Respected <u>J.D. DHANESHA</u> sir and that no partof any of these reports has been directly copied from any students' reports or taken fromany other source, without providing due reference.

Student Name

Student's Sign

MODHWADIYA POPATKUMAR (206270307022)

KUCHHADIYA HARDIK (206270307026)



GOVERNMENT POLYTECHNIC, PORBANDAR



COMPUTER ENGINEERING

CERTIFICATE

This is to certify that the reports, submitted along with the project entitled "TAX CALCULATOR" has been carried out by MODHWADIYA POPATKUMAR(206270307022) under my Guidance in partial fulfillment for the degree of: Diploma in Computer Engineering of Gujarat Technological University, Ahmadabad during the academic year 2022-23. These students have successfully completed report activity under my guidance.

Internal Guide J.D. DHANESHA SIR **Head of Department** J.M. Pavagadhi



GOVERNMENT POLYTECHNIC, PORBANDAR



COMPUTER ENGINEERING

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Internal Guide J.D. DHANESHA SIR **Head of Department**J.M. Pavagadhi

ACKNOWLEDGEMENT

I am grateful to Mrs. J. M. Pavagadhi head of department of computer engineering for providing me all the facility that was required for the successfully completion of our project. our special thanks of gratitude to our internal guide Mr. J.D. Dhanesha sir for their valuable guidance and support in completing our project.

I would like to thanks to all professors, parents and friends who helped me a lot in finalizing this project within the limited time frame. Last but not the least we are grateful to authors of the reference and other literatures referred to in this project.

ABSTACT

The aim of this project was to design and create a computer program that gives easy interaction to the online classifieds portal. This site allows the user to view different classifieds, send query for particular classified and get response for it. And it allows advertiser to upload and manage their classifieds, get queries of user and send them response.

The site is simple, user friendly and secured. The solution is designed to implement several database management techniques and was primarily evaluated by its ability to transfer data speedily, maintaining secure transaction and easy interaction.

The main goal this project is to provide the customer with various goods just by sitting in front of a computer. This is to facilitate all people who are busy with their works and have no time to get their desired goods. He can get the goods easily without moving from place to place. Consumers can also have a chance of introducing their products not only in a single place but throughout the world using online classifieds. This system allows the user to interact directly just by sitting in front of the computer. Consumers have a chance of comparing the product and purchase the desired one.

It has many technical elements and the rules are fairly simple. This simplicity makes it a good choice for learning a new program environment. It covers a range of areas (data modelling, some coding challenges, user interface, etc.)

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Tax Calculator Introduction

Chapter 1: Introduction

- 1.1 Characteristics of Existing System
- 1.2 Overview of Proposed System with Advantage
- 1.3 Scope
- 1.4 Process Model

Tax Calculator Introduction

1.1 Characteristics of Existing System

- Calculate income tax
- Comparison between old regime and new regime
- Generate report
- Free to use

1.2 Overview of Proposed System with Advantage

- Our application can calculate income tax and compare old and new tax regime.
- Provide information of every clause
- All the types of income are provided
- Many deductions are provided
- Multiple languages are supported like Gujarati, Hindi , Marathi , English
- User can see generated report

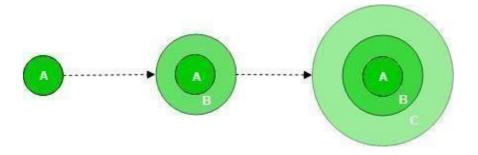
1.3 Scope

- Income tax calculation
 - Calculate income tax with all type of incomes andmany deductions
- Income tax comparison
 - Compare income tax between old tax regime andnew tax regime
- Change language
 - Change language of application
- Change theme
 - Change theme of application (dark and light)

Tax Calculator Introduction

1.4 Process Model

Incremental model



- Incremental model is also known as successive version. This model requirements are broken down into multiple modules of software development cycle.
- We are developing our application module wise so we are using incremental model.

Chapter 2: System Requirement Specification

- 2.1 User Characteristics
- **2.2** Functional Requirement
- 2.3 Non-Function Requirement

2.1 User Characteristics

1. USER

- Income tax calculation
- Income tax comparison
- Change language
- Change theme

2.2 Functional Requirements

1. USER

- Income tax calculation
 - User can calculate income tax by filling number of incomes and by applying number of deduction.
- Income tax comparison
 - User can compare old tax regime with new tax regime.
- Change language
 - User can change languages like gujarati, hindi, English, marathi.
- Change theme
 - User can change theme like dark, light.

2.3 Non-Functional Requirements

Reliability

• reliability can be defined as the probability of failure-free operation of acomputer program in a specified environment for a specified time

Portability

 Portability is a characteristic attributed to a computer program if it can be used in an operating systems other than the one in which it was created without requiring major rework

Maintainability

 The ease with which a software system or component can be modified to correct faults, improve performance or other attributes, or adapt to a changedenvironment

Graphical User Interface

 A graphics-based operating system interface that uses icons, menus and amouse (to click on the icon or pull down the menus) to manage interaction with the system

Usability

 Usability is a quality attribute that assesses how easy user interfaces are touse

Chapter 3: System Analysis Modeling-User-Based

- 3.1 Feasibility Study Of The New System
- 3.2 User Based Modeling
 - 3.2.1 Use Case Diagram

3.1 Feasibility Study of the New System

1) Technical feasibility

The application developed for the income tax calculator in which we are using android and java therefore our application is easy to develop and maintain. So our application is technically feasible.

2) Time feasibility

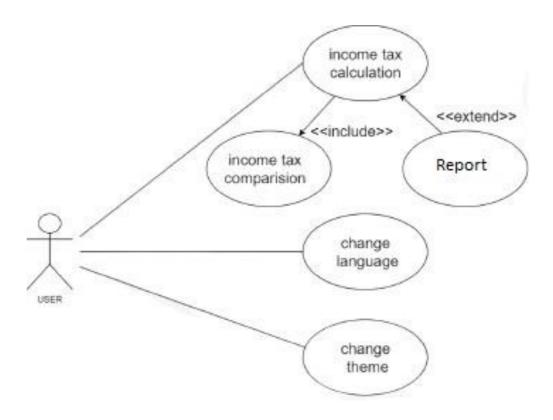
Time feasibility is a measure of reasonable the project timetable is. Each frame of the system development should bedone within a specific time frame to avoid delays in the implementation and testing of the final project.

3) Cost feasibility

• Our project is cost free. Therefore the project is cost feasible.

3.2 User-Based Modeling

3.2.1 Use case diagrams



Chapter 4: System Analysis and Design-Data-Based

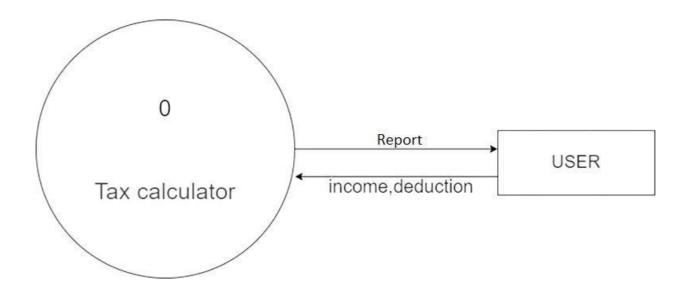
4.1 Behavioral Modeling

- **4.1.1 Data Flow Diagram**
 - **4.1.1.1** Context Level Diagram (Level 0)
 - 4.1.1.2 **DFD-Level** 1
 - 4.1.1.3 **DFD-Level 2**

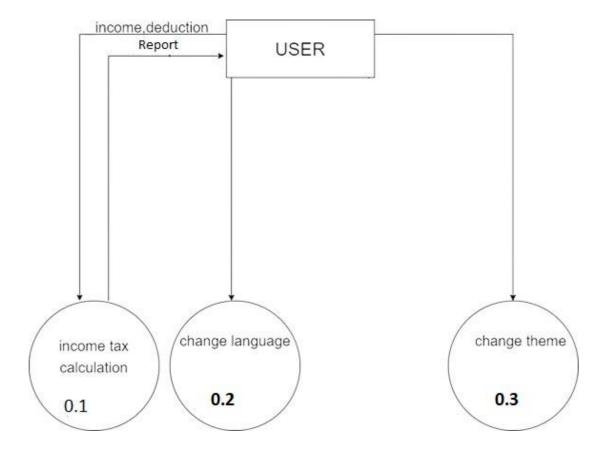
4.1 Behavioral Modeling

4.1.1 Data Flow Diagram

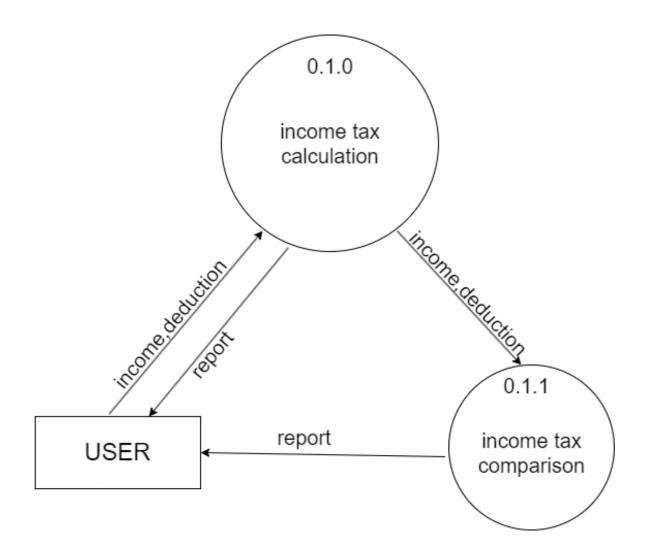
4.1.1.1 Context Level Diagram (Level 0)



4.1.1.12 DFD-Level 1



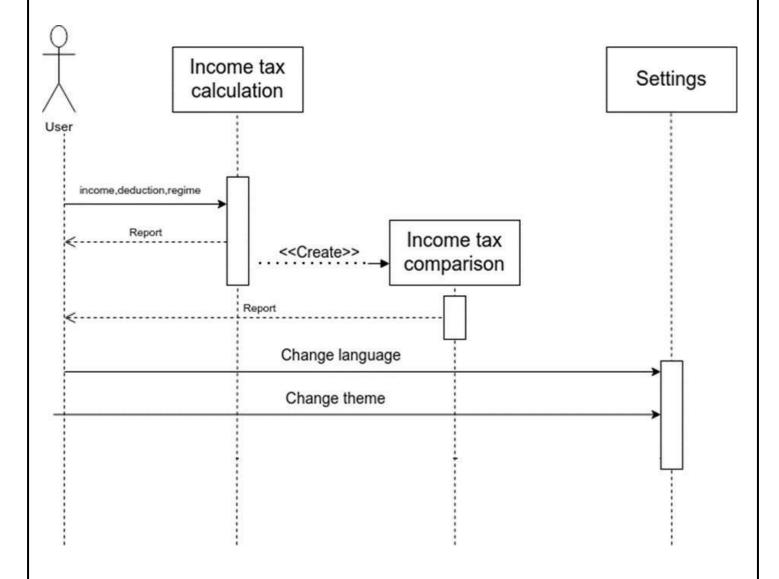
4.1.1.3 DFD-Level 2



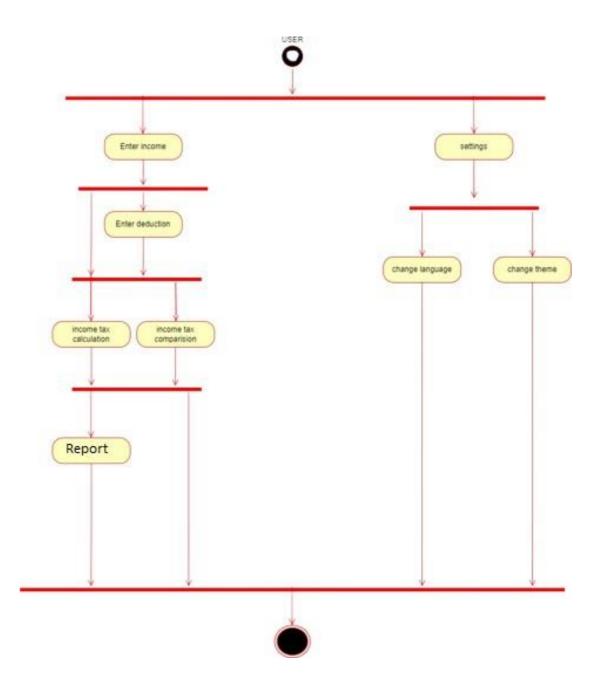
<u>Chapter 5: System Design – UML</u>

- **5.1** Sequence Diagram
- **5.2** Activity Diagram

5.1 Sequence Diagram



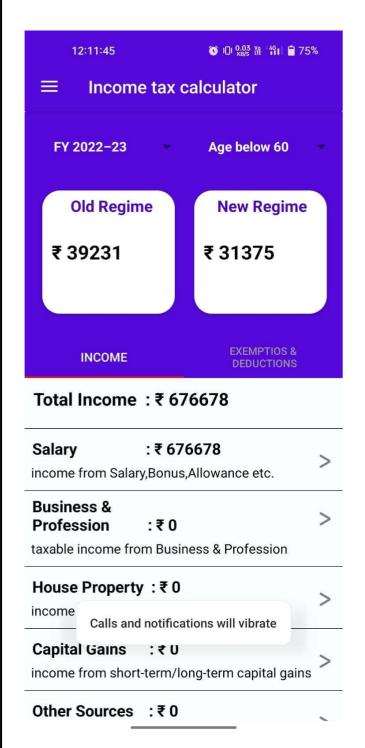
5.2 Activity Diagram

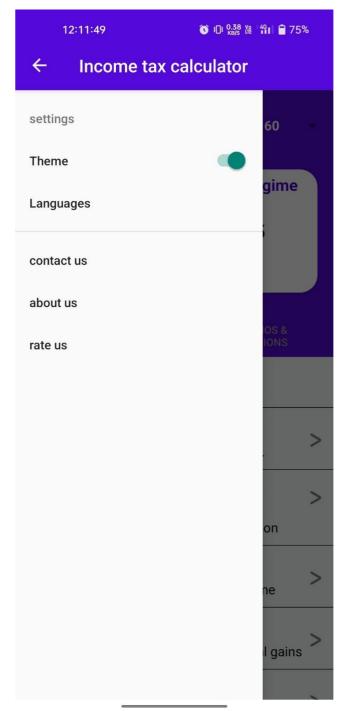


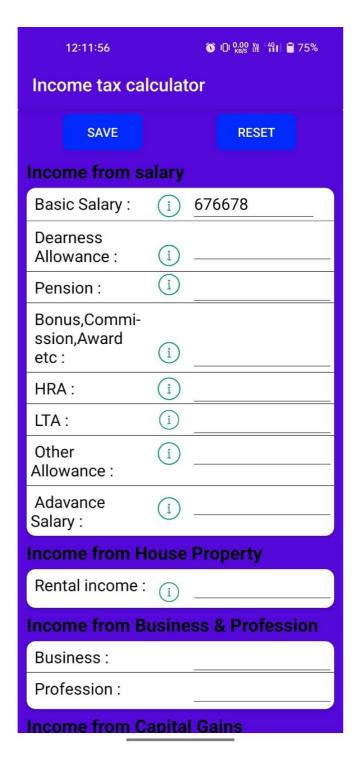
Chapter 6: System Interface Design

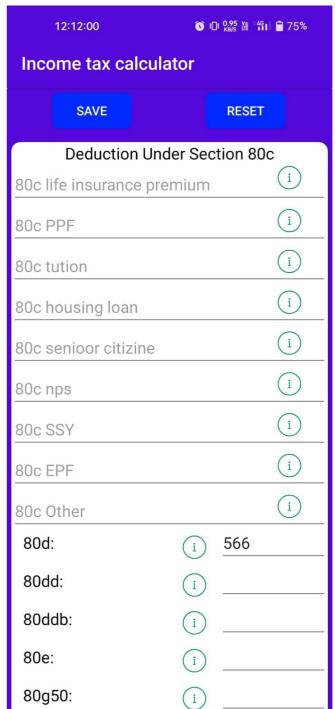
6.1 Graphical User Interface Design

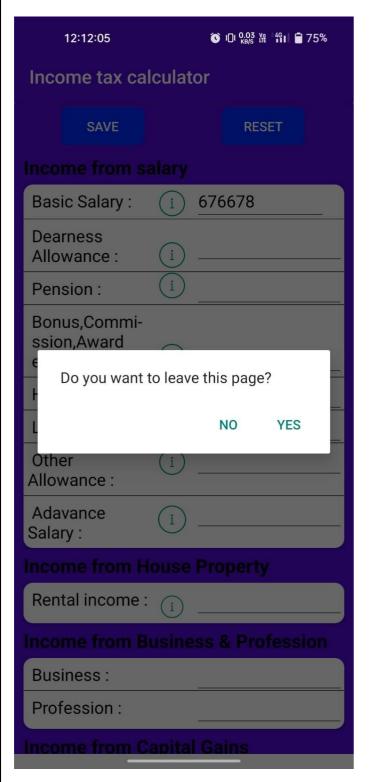
6.1 Graphical User Interface Design

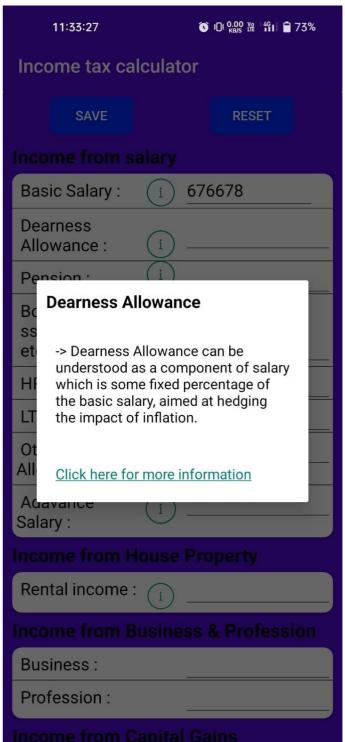






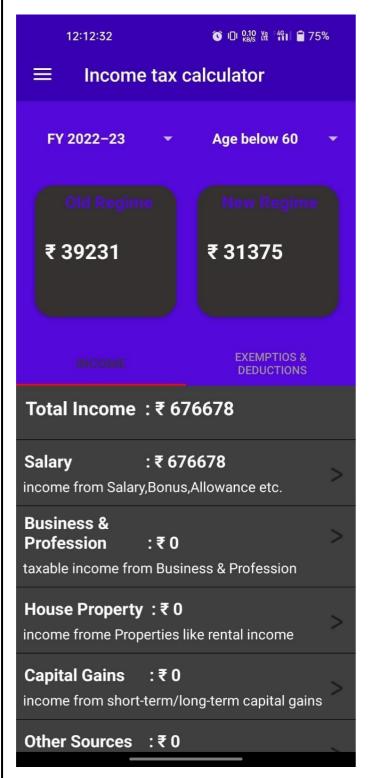


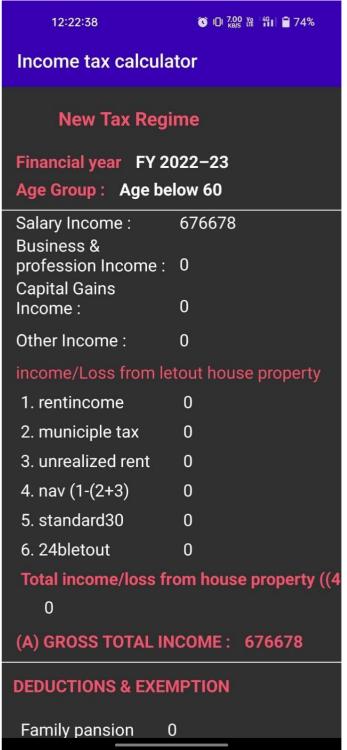




12:12:15 Income tax calculator **New Tax Regime** Financial year FY 2022-23 Age Group: Age below 60 Salary Income: 676678 **Business &** profession Income: 0 Capital Gains 0 Income: Other Income: 0 income/Loss from letout house property 1. rentincome 0 2. municiple tax 0 3. unrealized rent 4. nav (1-(2+3) 0 5. standard30 0 6. 24bletout Total income/loss from house property ((4 0 (A) GROSS TOTAL INCOME: 676678 **DEDUCTIONS & EXEMPTION** Family pansion 0







Tax Calculator

Chapter 7: Testing

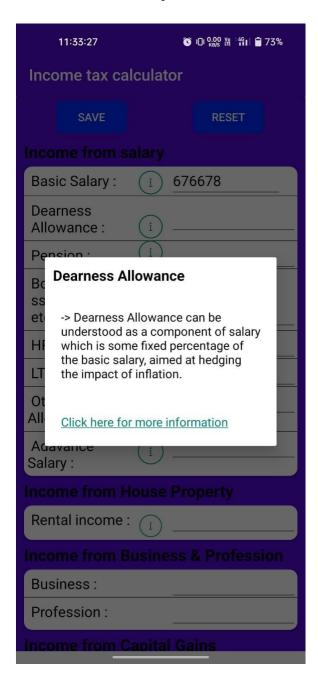
7.0 Testing

Tax Calculator Testing

7.0 Testing

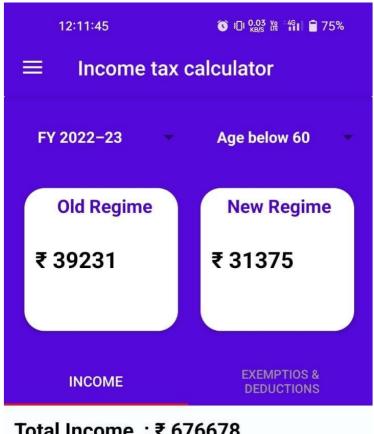
- **1. Functional testing**: does my app do what it's supposed to?
 - Functional testing in Android apps refers to the process of testing the various functionalities and features of an app to ensure that they are working as expected.

Provides information of every clause



Tax Calculator Testing

- **❖** Income Tax calculation
- ***** Income Tax comparison



Total Income: ₹ 676678

Salary : ₹ 676678 income from Salary, Bonus, Allowance etc. **Business &** > Profession :₹0 taxable income from Business & Profession House Property: ₹ 0 income Calls and notifications will vibrate Capital Gains : ₹ U

Other Sources : ₹ 0

income from short-term/long-term capital gains

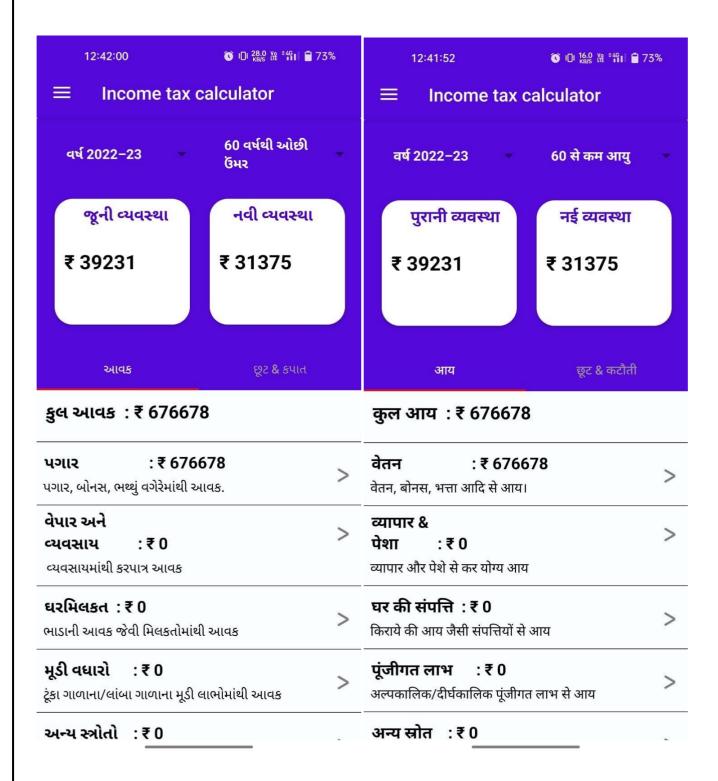
Tax Calculator Testing

\$ Generates a detailed report of tax calculation

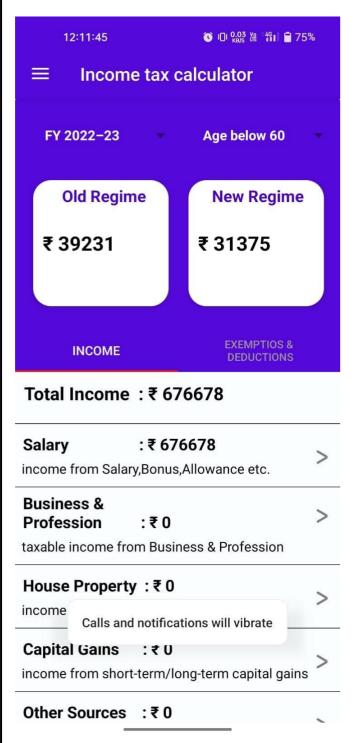
12:12:15	TO 10:0.00 We 441				
Income tax calcula	ntor				
New Tax Regime					
Financial year FY 2022-23					
Age Group: Age below 60					
Salary Income :	676678				
Business & profession Income:	0				
Capital Gains Income :	0				
Other Income :	0				
income/Loss from letout house property					
1. rentincome	0				
2. municiple tax	0				
3. unrealized rent	0				
4. nav (1-(2+3)	0				
5. standard30	0				
6. 24bletout	0				
Total income/loss fr	om house property ((4				
0					
(A) GROSS TOTAL IN	ICOME: 676678				
DEDUCTIONS & EXEMPTION					
Family pansion ()				

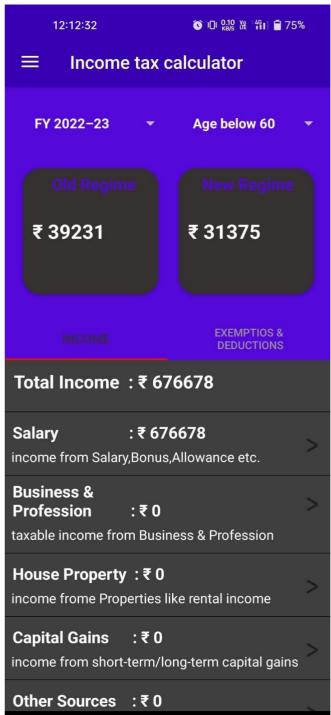
Tax Calculator Testing

❖ Multilanguage support



Theme(dark/light)





Tax Calculator Testing

2. Performance testing: does it do it quickly and efficiently?

- ➤ Performance testing in Android apps is the process of testing the app's ability to perform under specific conditions. This type of testing evaluates the speed, responsiveness, stability, and scalability of the app. The goal of performance testing is to identify any bottlenecks, performance issues, or potential problems that may affect the user experience.
- > The app's performance is stable.

3. Compatibility testing: does it work well on every device and API level?

- ➤ Compatibility testing in Android apps refers to the process of testing the app's compatibility with different devices, operating systems, and software configurations. This type of testing ensures that the app works as expected on a wide range of devices, from different manufacturers and with varying specifications.
- ➤ The app is supported in Android Nougat and higher versions.

Limitations of the system Tax Calculator **Chapter 8: Limitations of the system 8.0 Limitations of the system**

8.0 Limitations of the system

- > The app is available in only four languages.
- > The report cannot be saved.
- ➤ All deductions are not provided.

Chapter 9: Future scope of the system

Future scope of the system

9.0 Future scope of the system

- > The app can have more than four languages.
- > The app can have save report functionality.
- ➤ The app's UI can be more attractive.
- > The app calculation is updated through web each time the income tax calculation rules change.

Tax Calculator		References
	Chapter 10: References	
	10.0 References	

Tax Calculator References

10.0 References

- WsCube tech: https://youtu.be/HyU4vkZ2NB8
- CodewithHaííy: https://youtu.be/ntLJmHOJ0ME
- Stack overflow: https://stackoverflow.com/
- JavaTpoint : https://www.javatpoint.com/
- Geeksforgeeks: https://www.geeksforgeeks.org/
- Udemy : https://www.udemv.com/