

American International University-Bangladesh (AIUB)  
**Department of Computer Science  
Faculty of Science & Technology (FST)**

**PROJECT TITLE**

**Income Tax Return Assessment Software**

A Software Engineering Project Submitted

By

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| --- | --- | --- | --- | --- |
| **Semester: Summer** | | **Section:A** | **Group Number: 7** | |
| SN | Student Name | Student ID | Contribution (CO1+CO2) | Individual Marks |
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The project will be Evaluated for the following Course Outcomes

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| --- | --- | --- |
| CO1: *Analyze* the impact of software engineering models over various context of software development to assess societal, health, safety, legal and cultural issues. | Total Marks | |
|  | |
| Project Background Analysis and feasibility (needs, goal, benefits, etc.) | [5 Marks] |  |
| Analysis the impact of societal, health, safety, legal and cultural issues | [5Marks] |  |
| Review of existing Studies and Relevant Example | [5Marks] |  |
| CO2: *Explain* appropriate software engineering model, project management roles and their skills in the context of professional engineering practice and solutions to complex engineering problems in a software development environment. | Total Marks | |
|  | |
| Appropriate Process Model Selection and Argumentation with Evidence | [5Marks] |  |
| Evidence of Argumentation regarding process model selection | [5Marks] |  |
| Submission, Defense, Completeness, Spelling, grammar and Organization of the Project report | [5Marks] |  |

Description of Student’s Contribution in the Project work

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| --- |
| Student Name:  Student ID:  Contribution in Percentage (%):  Contribution in the Project:   * Contribution Description 1 * Contribution Description 2   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
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# PROJECT PROPOSAL

## Problem Statement

A civil person is required to file their tax return each year. Currently, the process is analog in our nation. Therefore, it is too difficult for many people to complete this process. This hassle's primary causes include corruption and a drawn-out process. Since this process is still analog, the general public has little understood of it. This issue is crucial since taxes are crucial to the national economy and must be processed.

**Existing Platform:**

* **e-TIN.[1]**
* **NBR Taxation System.[2]**

**Project Objective:**

The objective of the "Income Tax Return Assessment Software" project is to develop a software solution that automates the process of assessing income tax returns. The software will allow users to input their financial data, including income, deductions, and credits, and generate a tax return based on the current tax laws and regulations. The software will also include features such as error checking, audit trails, and the ability to file returns electronically. The goal of the project is to create a user-friendly and efficient solution that simplifies the tax assessment process for both individuals and businesses, while ensuring accuracy and compliance with tax laws.people can pay their tax from home without any hassle and without getting trouble of corruption.

## Solution to the Problem

The software we're developing for this project will analyses income tax returns and offer a simple solution to the aforementioned issue. The program we are developing will offer a simple and quick solution to finish the income tax return process. This software will enable system transparency and, as a result, reduce corruption. This approach is workable since all the information would be recorded and available to both the tax-paying public and the income tax officers. With the help of the software's functionalities, the taxpayer will be able to offer accurate documentation of his assets and income. On the other hand, the rates and percentages of tax assigned to various types of assets and income ranges are predetermined by the income tax officials. The software will calculate the entire amount of tax due and transmit it to the taxpayer so they can pay it online making the best use of state-of-art technologies. General citizens, income tax attorneys, and income tax government authorities will all utilize this program. With the help of this software, the average person will be able to calculate their tax amount very easily, a lawyer can assist a client using it, and an income tax official will use it to speed up the process and keep track of each payer's payments, including when they were made, how much was paid, and when they will need to make another payment, among other information. The existing software solutions for tax return assessment in Bangladesh include e-TIN, NBR Taxation System, and Bangladesh National Board of Revenue (NBR) Online Tax Filing System.

Our proposed solution can extend these existing solutions by incorporating advanced features such as real-time tax calculation, personalized recommendations, integration with financial management tools, improved data security, and a user-friendly interface. Additionally, we can provide real-time support to users and help them understand the process more easily. By providing a comprehensive solution that covers all aspects of tax return assessment, our proposed software can provide significant value to users.

# BASIC FUNCTIONALITIES:

**1.Sign Up**

1.1 Taxpayer Sign Up:

1. Name: Firstly, Taxpayer will provide his/her first name and last name as per his NID
2. Date of Birth:
3. Address:
4. Email:
5. Phone:
6. NID: User needs to Enter his/her NID number.
7. Upload NID
8. TIN: User needs to Enter his/her TIN number
9. Upload TIN
10. Passport Number (Optional):
11. Upload Passport (Optional):
12. Driving License (Optional):
13. Upload Driving License (Optional):

1.2 Lawyer Sign Up:

Lawyer will provide above information. After these they needs to provide some must information

1. Lawyer License ID:
2. Upload Lawyer ID:

1.3 Income Tax official Sign Up:

Their Sign-up information will be generated by admin.

**2.Sign In**

NID/Lawyer License Id: User need to enter their NID / Lawyer License Id number in the user text field. (For official login unique id will be provided)

Password: User need to enter their password in the “Password” text field.

2.1 Sign In/Login will be based on Authentication and Authorization login.

2.2 The software will allow users to login with their given username and password.

2.3 The login credentials (username and password) will be verified with database records.

2.4 If the login successful the home page of the user account will be displayed.

2.5 If the username and/or password has been inserted wrong, the random verification code will be generated and sent to the user’s email address by the system to retry login.

2.6 If the number of login attempt exceed its limit (3 times), the system shall block the user account login for one hour.

**3.Sign Out:**

User can sign out from this software anytime after a successful login.

**Target Audiences:**

**USER1. Taxpayer:**

After a successful login user can perform the following actions.

* Edit Login Information

1. User can edit login info for example: change password.
2. User can save the changes after editing.
3. User can apply 2-factor authentication for which a phone number or email id needs to be provided.
4. Software will send a verification code to verify the phone number/ email id.
5. On verification 2- factor authentication will be activated

* Show Notification

1. User will have a notification icon.
2. User can view notifications shown in a list by clicking on the icon.
3. On clicking a specific notification, the user can view the detailed information of the notification.
4. Notifications regarding recent update on the tax law, user’s assessment status, deadline, verification of documents, answers of queries, Lawyer request approval

* Information Update

1. User can update documents of their assets.
2. System can import/export data from the documents.
3. System will verify the documents submitted by the user.

* Calculate Tax

1. System will calculate tax based on the assets and documents given by the user.
2. Not done..

* Submit Tax

1. System generates a unique assessment number to the user.
2. User can pay tax online via online banking/mobile banking/bank challan using the assessment number.
3. System will verify payments/transactions.
4. User will receive a payment receipt.
5. Payment receipt will be stored in transaction history.

* Track Assessment Status

1. User can track if the tax submission is approved by officials.

* Transaction History

1. Tax payment histories can be viewed by the user.
2. Lawyer payment histories can be viewed.
3. Payments of the previous year will be stored.
4. Virtual assistant payment histories can be viewed.
5. Receipt of previous payments can be extracted.

* Download Assessment Certificate

1. User can download approved assessment certificates.
2. Previous assessment certificates can be viewed and downloaded.

* Ask Query/ Help

1. Users can ask tax related queries.
2. Answers of FAQs would be given.
3. Answers apart from the ones in FAQs are received from officials later.
4. User can view answers of previously asked questions.

* Lawyer Request

1. In case of any legal issues user can request a lawyer
2. User can view different lawyer profiles.
3. User can communicate with lawyer via the software.
4. User can book physical appointments if necessary.

* Lawyer Payment

1. System generates a unique assessment number to the user.
2. User can pay tax online via online banking/mobile banking.
3. System will verify payments/transactions.
4. User will receive a payment receipt.
5. Payment receipt will be stored in transaction history.

**Users2. Income Tax Officials**

* Answer Query
* Verify Client Assessment
* Update Tracking
* Block Tax payer

**User3.Lawyer:**

* -Edit Login info - Lawyer will be allowed to edit his login info by clicking on edit info after successful login

.Email: Lawyer can add new email or change  email  address for verification.

Password: Lawyer can edit his login password  through email verification.

* Info Update- Lawyer can update his legal documents or certificates.
* Client request - Lawyer accepts taxpayer request and assist individuals.
* Client Personal Info -: Lawyer can access tax payers legal documents and personal information.
* Client Assessment info - Lawyer will be allowed to conduct tax payer assessment information.
* Client Legal Issues - Lawyer will be the legal representative of tax payer and observer of legal issues.
* Submit Client Tax - Lawyer can pay taxes on client behalf.
* Work as a virtual Lawyer

**Conclusion:**

In conclusion, the "Income Tax Return Assessment Software" project holds great potential to revolutionize the way income tax returns are assessed. By automating the process, the software aims to provide efficiency, accuracy, and a user-friendly experience for taxpayers. It addresses the challenges of manual assessment, such as time-consuming processes, errors, and compliance issues. The project's objectives align with the goal of simplifying the tax assessment process, ensuring compliance with tax laws, and providing significant benefits to both taxpayers and tax authorities. With its focus on efficiency, accuracy, enhanced user experience, cost savings, and data security, the project proposal sets the stage for a comprehensive software solution that can have a positive impact on the tax assessment process.

**References:**

1. e-TIN- <https://secure.incometax.gov.bd/TINHome> [Accessed on - 09-06-2024]

2. NBR taxation System- <https://nbr.gov.bd/> [Accessed on- 09-06-2024]