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# System Requirements Specification Index

For

## Income Tax Calculator Console Application

Version 1.0

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# Income Tax Calculator Console APPLICATION

## System Requirements Specification

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### 1 PROJECT ABSTRACT

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**Income Tax Calculator Console** Application is a pure java application with Java collection, where it allows to calculate the income tax for an employee based on salary and standard exemptions.

### 2 COMMON CONSTRAINTS

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1. Take console input of number of Employee Details: (n)
2. Take input of details of each Employee and store them in a collection.
3. Take input of details of deductions to be made to calculate taxable salary (only 1 deduction at a time)
4. All the values like salary, PF, house rent, 80C to be considered annually.
5. Get the total deductions for an employee.
6. Get the total Taxable Salary
7. Get the Total Tax on an Employee
8. Get all the tax details
9. To calculate the Tax, use the below assumptions based on salary slabs:

Income Tax Slab	Tax Applicable as per New Regime
Rs.0 – Rs.2,50,000	Nil
Rs.2,50,001 – Rs. 5,00,000	5.00% (Exempted if salary less than 500000)
Rs.5,00,001 – Rs. 7,50,000	Rs.12500 + 10% of total income exceeding Rs.5,00,000
Rs.7,50,001 – Rs. 10,00,000	Rs.37500 + 15% of total income exceeding Rs.7,50,000
Rs.10,00,001 – Rs.12,50,000	Rs.75000 + 20% of total income exceeding Rs.10,00,000
Rs.12,50,001 – Rs.15,00,000	Rs.125000 + 25% of total income exceeding Rs.12,50,000
Above Rs. 15,00,000	Rs.187500 + 30% of total income exceeding Rs.15,00,000

10. An annual income of up to Rs. 5 lakhs for employees exempted from tax.
11. PAN number should be 10 digit number including characters

## 3 TEMPLATE CODE STRUCTURE

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### 3.1 PACKAGE: COM.IIHT.TRAINING.INCOMETAX.MODEL

#### Resources

Class/Interface	Description	Status
<b>Employee (class)</b>	This class contains all the properties of the Employee class.	Already implemented.
<b>Deductions(class)</b>	This class contains all the properties of the Deductions class	Already implemented.
<b>TaxDetails(class)</b>	This class contains all the properties of the TaxDetails class	Already implemented.

### 3.2 PACKAGE: COM.IIHT.TRAINING.INCOMETAX.CALCULATOR

#### Resources

Class/Interface	Description	Status
<b>TaxCalculator (class)</b>	This class contains all the methods which are used to write the business logic for the application.  You can create any number of private methods in the class	Partially implemented.

### 3.3 PACKAGE: COM.IIHT.TRAINING.INCOMETAX.EXCEPTION

#### Resources

Class/Interface	Description	Status
<b>InvalidPANException (Class)</b>	Custom Exception to be thrown when trying to add an Employee for which PAN number length is not 10.	Already created.
<b>PANAlreadyExistsException (Class)</b>	Custom Exception to be thrown when trying to save an Employee for which PAN already exists in the collection.	Already created.

<b>PANDetailsNotProvidedException (Class)</b>	Custom Exception is thrown when the Employee PAN number is null.	Already created.
<b>PANDoesNotExistsException (Class)</b>	Custom Exception is thrown when the Employee PAN number does not exist.	Already created.

### 3.4 PACKAGE: COM.IIHT.TRAINING.INCOMETAX.CONTROLLER

#### Resources

Class/Interface	Description	Status
<b>TaxCalculatorController (Class)</b>	This is the class which has the main method. All the business logic methods of the TaxCalculator class will be called from this class.	To be implemented

## 4 EXECUTION STEPS TO FOLLOW

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1. All actions like build, compile, running application, running test cases will be through Command Terminal.
2. To open the command terminal the test takers need to go to the Application menu (Three horizontal lines at left top) -> Terminal -> New Terminal.
3. This editor Auto Saves the code.
4. If you want to exit(logout) and continue the coding later anytime (using Save & Exit option on Assessment Landing Page) then you need to use CTRL+Shift+B- command compulsorily on code IDE. This will push or save the updated contents in the internal git/repository. Else the code will not be available in the next login.
5. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
6. To run your project use command:  
**mvn clean install exec:java -**  
**Dexec.mainClass="com.iiht.training.incometax.controller.IncomeTaxController"**
7. To test your project, use the command  
**mvn test**
8. You need to use CTRL+Shift+B - command compulsorily on code IDE, before final submission as well. This will push or save the updated contents in the internal git/repository, and will be used to evaluate the code quality.