

GUJARAT TECHNOLOGICAL UNIVERSITY



**Darshan Institute of
Engineering and Technology,
Rajkot**
(Affiliated with GTU)



A Mini Project Report on

“IELTS BAND SCORE CALCULATOR”

Under the subject

Summer Internship (3170001)

B. E. IV, Semester - VII

Department of Computer Engineering

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Academic Year

(2022-2023)

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DECLARATION

We hereby declare that the Report, submitted along with the **Summer Internship (3170001)** for entitled “**IELTS Band Score Calculator**” submitted in partial fulfilment for the degree of **Bachelor of Engineering in Computer Department** to Gujarat Technological University, Ahmadabad, is a record of the work carried out by **Darshan Institute of Engineering and Technology, Rajkot** under the supervision of **Prof. Chintan kanani** and that no part of any of report has been directly copied from any students’ reports, without providing due reference.

Name of the student

Bhimani Kruti



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DEPARTMENT OF COMPUTER ENGINEERING

CERTIFICATE

This is to certify that the mini project on **IELTS Band Score Calculator** has been satisfactorily carried by **Bhimani Kruti (190540107014)** under my guidance in the fulfillment of the course Summer Internship (3170001) work during the academic year 2022-2023.

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Thus, in conclusion to the above said, I once again thank the faculties and members of **Darshan Institute of Engineering & Technology** for their valuable support in completion of the project.

Thank You

Bhimani Kruti

ABSTRACT

International English language testing system (IELTS) is the world's most prominent English language testing system. It is an international standardized test of English language proficiency for non-native English language speakers. The pivotal purpose is to assess the English language proficiency. IELTS examination is crafted to evaluate English language proficiency over a wide range of levels. Final results are reported based on band scores on a scale from 1-lowest to 9-highest. This application is used to calculate overall band score of IELTS exam. We can even find reverse band score.

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1. Introduction

1.1 Purpose

The purpose of this project is to provide a friendly environment to calculate your IELTS exam band score. The main purpose of this project is to maintain easy calculation using system and to find you score between 1 to 9. This project describes the interface requirements using ER diagrams and UML diagrams.

1.2 Document Conventions

- Context: A broad level diagram of the project showing a basic overview.
- Use Case: summarizes some of the relationships between Cases, user, and systems.
- UML: Unified Modelling Language
- IELTS: International English language testing system

1.3 Intended Audience

The intended audiences for this document are:

- Software Developers
- Software Project Managers
- Software Engineers

1.4 Project Scope

IELTS is the world's most prominent English language testing system. It is an international standardized test of English language proficiency for non-native English language speakers. The pivotal purpose is to assess the English language proficiency. IELTS examination is crafted to evaluate English language proficiency over a wide range of levels. Final results are reported based on band scores on a scale from 1-lowest to 9-highest.

2. Overall Description

2.1 Product Perspective

IELTS Band Score Calculator is a local application that works without internet. The newly developed IELTS Band Score Calculator is a small footprint software that is perfect for users. You can calculate your band score and you can use reverse score calculator to determine what score you need in four categories to achieve your band score and you can also know the marks and score.

2.2 Product Features

There are three different users who will be using this product:

- Organisations that accepts IELTS Results.
- Member who are applying for IELTS exams.
- Other.

The features that are available to the IELTS exams are:

- There is two type of exam type: 1) General, 2) Academic.
- The test categorized in 4 parts :
 1. Listening (30 minutes + 10 minutes)
 2. Reading (60 minutes)
 3. Writing (60 minutes)
 4. Speaking (11-14 minutes)
- Total time is 2 hours and 45 minutes.
- The Listening, Reading and Writing tests are done in one sitting.
- The Speaking test may be on the same day or up to seven days before or after the other tests.
- Final results are reported based on band scores on scale from 1-lowest to 9-highest.
- The IELTS certificate is accepted for visa and employment purpose in countries such as the UK, Ireland, Australia, Canada and New Zealand.
- The IELTS test is recognized by over 9000 institutions worldwide.
- IELTS test score is valid for two years.

The features that are available to the Member are:

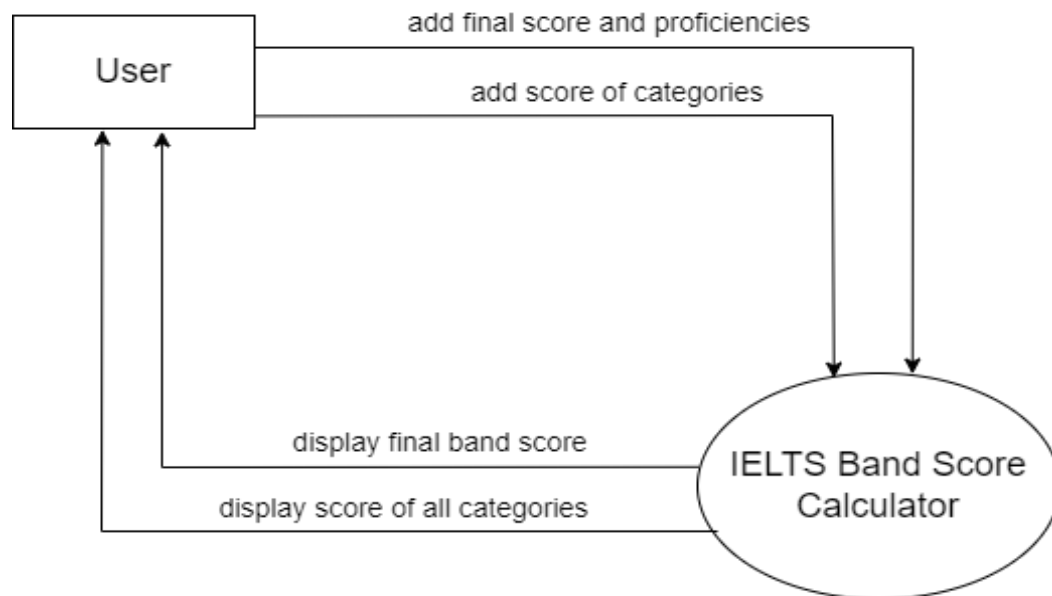
- Can view and select two types of exams academic and general.
- Can view and select calculator.
- Select score of 4 categories.
- Can select overall score and proficiency for reverse band score calculation.
- Can view marks related to it's score.

Cataloguing

You can create a catalogue of your scores and all similar collections using this module.

Circulation

Circulation module deals with issue.



(Fig 2.2 context diagram of IELTS Band Score Calculator)

2.3 User Classes and Characteristics

There are various kinds of user visits the product for different reason.

- **USERS:** The one who use the application for calculate the band score for their IELTS exams and can find reverse band score.
- **GUEST:** A guest who doesn't know what is IELTS they can come to see what is this.

2.4 Operating Environment

The product will be operating in windows environment for developer and mobile application will be operating in android environment for users. There is even no need of internet connection to operate this application.

User	Particulars	Client System	Server System
Developer (Windows Application)	Operating System	Windows	Windows Server
	Processor	Dual core (Minimum)	Pentium 4.0 GHz or higher
	Hard disk	123 GB (Minimum)	1 GB
	RAM	512 MB (Minimum)	80 GB
Members (Mobile App)	Operating System	Android 4.0 and Higher	
	Processor	Octa Core (Minimum)	
	Enteral Memory	512 MB (Minimum)	
	RAM	512 MB (Minimum)	

2.5 Design and Implementation Constraints

Design and Implementation can only be done by the developer side. User can not design or implement the application they can only use it.

2.6 User Documentation

There is no need for add user manually or to login to use this application. User can use this application without worry of leak their personal detail or email or password or anything .

2.7 Assumptions and Dependencies

- Internet is not needed.
- Librarian and Asst. Librarian must be use standalone application for manage resources.
- User need to enter required field with proper validation contains.

3. System Feature

3.1 Function Requirement

1) Input

- User need to enter the input for calculation so we need to add proper input field. In our application there is the select field so user need to select the input in order to find output.

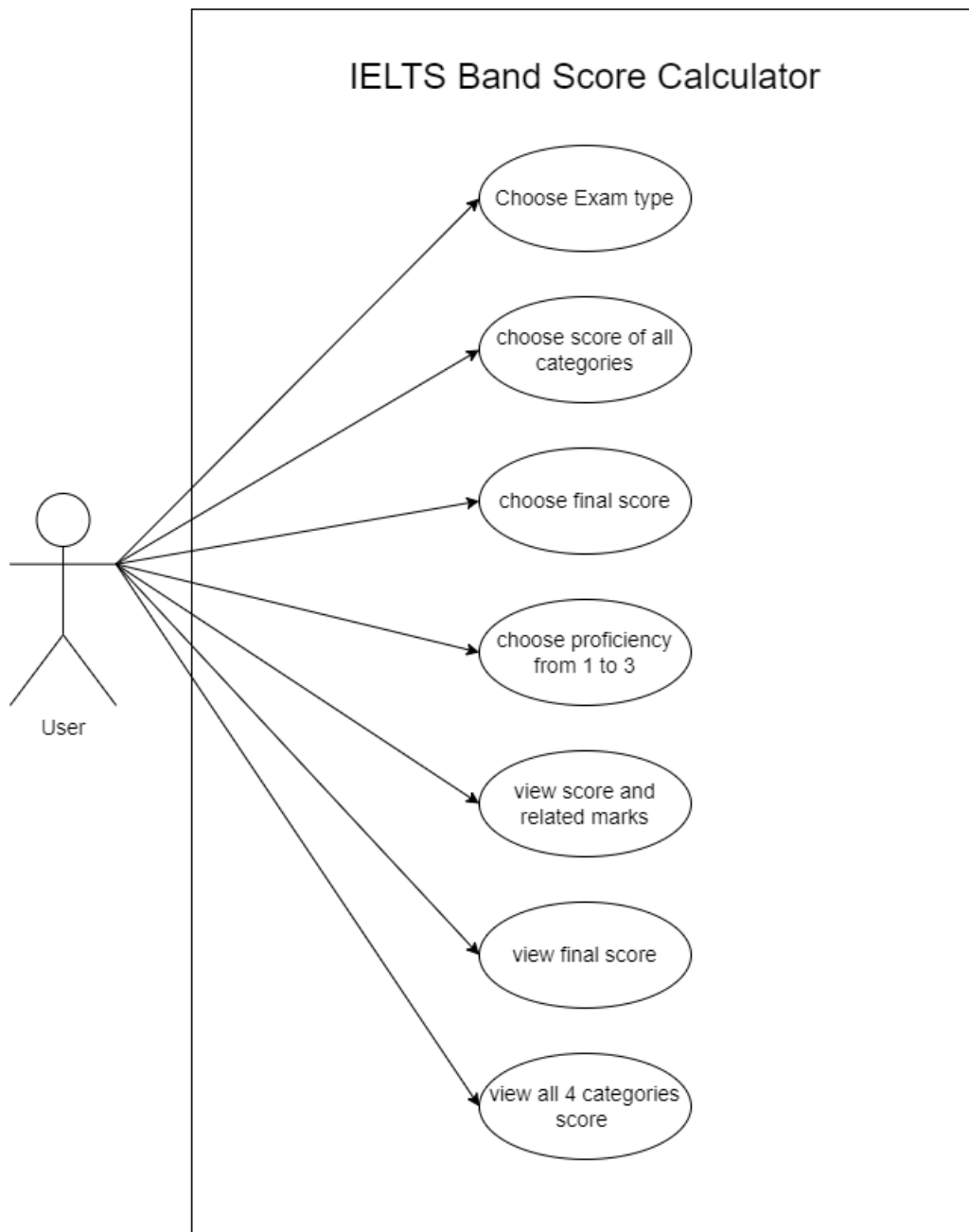
2) Calculation logic / operation

- In order to find band score for what user select score of 4 different categories we need to find perfect equation to apply. We need to check for every little possibility when it's come to calculation.

3) Output

- User wants an correct output so for that they need to enter proper input and calculation must be right in order to get proper output. And output must need to be display in under stable way for the users.

3.2 Usage Diagram



(fig. Use case diagram of IELTS band score calculator)

4. External Interface Requirements

4.1 User Interface

➤ Exam Type

Exam Type

- Academic
- General

➤ Calculate Score

Calculate Score

- Listening
- Reading
- Writing
- Speaking

➤ Find Score - Marks

Find Score – Marks

- Listening
- Reading
- Marks
- Band

➤ Reverse Score

Reverse Score

- Overall score
- Proficiency – 1
- Proficiency – 2
- Proficiency – 3

4.2 Hardware Interface

- Computer having 4GB RAM or above.
- Android or iphone phone 6.0 or above
- Intel i3 Processor or above

4.3 Software Interface**Server**

- Operating System: Windows
- Processor: Pentium 4.0 GHz or higher
- RAM: 1GB Mb or more
- Hard Drive: 80 GB or more

Client

- Operating System: Windows and Android
- Processor: Pentium III or 2.0 GHz or higher or Octa.
- RAM: 512 Mb or more

Database: No database

Development Tools: Android Studio

4.4 Communication Interface

No need of communication between server and application because there is no need of server so no need of internet connection. User can use this application without internet connection.

5. Non Functional Requirement

Performance

The performance of the application must need to be stable.

Quality

Quality must need to be good of an application.

Portability

Application must need to be portable for all kind of devices.

Maintainability

Application need to be maintainable.

availability

Application must need to be available in every kind of devices.

5. Implementation

1) Band score calculator

The image shows two side-by-side mobile app screens for the IELTS Band Score Calculator. Both screens have a red header with the title 'IELTS Band Calculator' and a settings icon. The left screen is for the 'Academic' exam, and the right screen is for the 'General' exam. Both screens display an 'Overall Score' of 9.0. Below the score, there are four tabs: 'Listening', 'Reading', 'Writing', and 'Speaking'. Each tab has a corresponding score range and a band score. For example, in the Academic section, the Listening score is 9.0 (39-40) and the band score is 9.0. In the General section, the Listening score is 9.0 (39-40) and the band score is 9.0. At the bottom of each screen, there are two buttons: 'Calculate Band Score from Marks' and 'Reverse Band Score Calculator'.

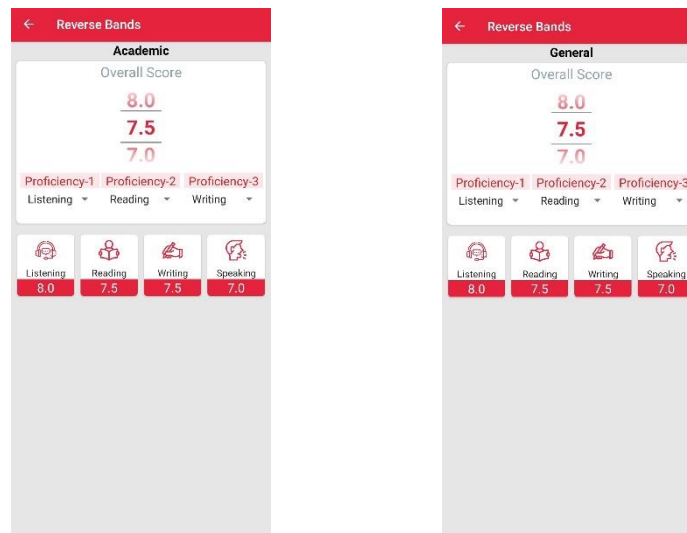
This is two exam type screens academic and general. In this screens users can select the Listening , Reading , Writing , Speaking score and find Overall band score user can even navigate to setting screen , band score – marks screen or reverse band score screen.

2) Band score – marks

The image shows two side-by-side mobile app screens for the IELTS Band Score Calculator, specifically the 'Conversion' screen. Both screens have a red header with a back arrow and the title 'Conversion'. The left screen is for the 'Academic' exam, and the right screen is for the 'General' exam. Both screens display a table with 'Marks' and 'Band' columns. In the Academic section, the Listening table shows a range of marks (39-40) corresponding to a band score of 9.0, and a range of marks (37-38) corresponding to a band score of 8.5. In the General section, the Listening table shows a range of marks (39-40) corresponding to a band score of 9.0, and a range of marks (37-38) corresponding to a band score of 8.5. Below the Listening table, there is a 'Reading' table with similar data. At the bottom of each screen, there is a large grey area.

This is two exam type screens academic and general. In this screens user can scroll down and select the marks or band and find the related score or marks. In IELTS exam user get marks in two categories, Listening and Reding.

3) Reverse band score calculator



This is two exam type screens academic and general. In this screens user can scroll down and select the overall band score that you wants to archive. Than select your proficiency form reading, writing, listening and speaking than you can view the score that you need to score to archive your goal.

4) About IELTS

←
About IELTS

International English Language Testing System

IELTS is the world's most prominent English language testing system. It is an international standardized test of English language proficiency for non-native English language speakers. It is jointly managed by the British Council, IDP:IELTS Australia and Cambridge Assessment English and was established in 1989. The pivotal purpose is to assess the English language proficiency. IELTS examination is crafted to evaluate English language proficiency over a wide range of levels. Final results are reported based on band scores on a scale from 1-lowest to 9-highest.

IELTS Test

The test is categorized in 4 parts:

- 1.Listening (30 minutes+10 minutes)
- 2.Reading (60 minutes)
- 3.Writing (60 minutes)
- 4.Speaking (11-14 minutes)

The total test time is 2 hours and 45 minutes. The Listening, Reading and Writing tests are done in one sitting. The Speaking test may be on the same day or up to seven days before or after the other tests.

IELTS Immigration

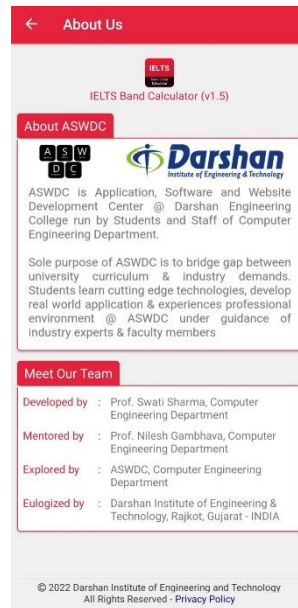
The IELTS certificate is accepted for visa and employment purposes in countries such as the UK, Ireland, Australia, Canada and New Zealand.The IELTS test is recognized by over 9,000 institutions worldwide.

IELTS Validity

IELTS test score is valid for two years.

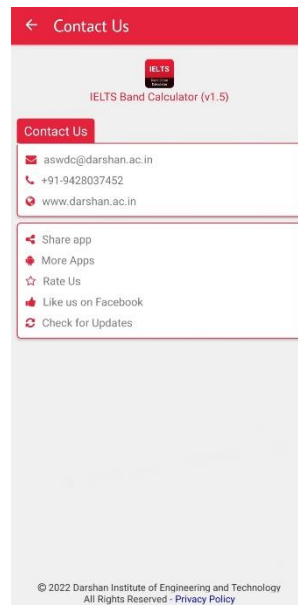
In this screen user can find important information about IELTS exams, timing, Score, validity and etc.

5) About Us



In this screen user can find information about us.

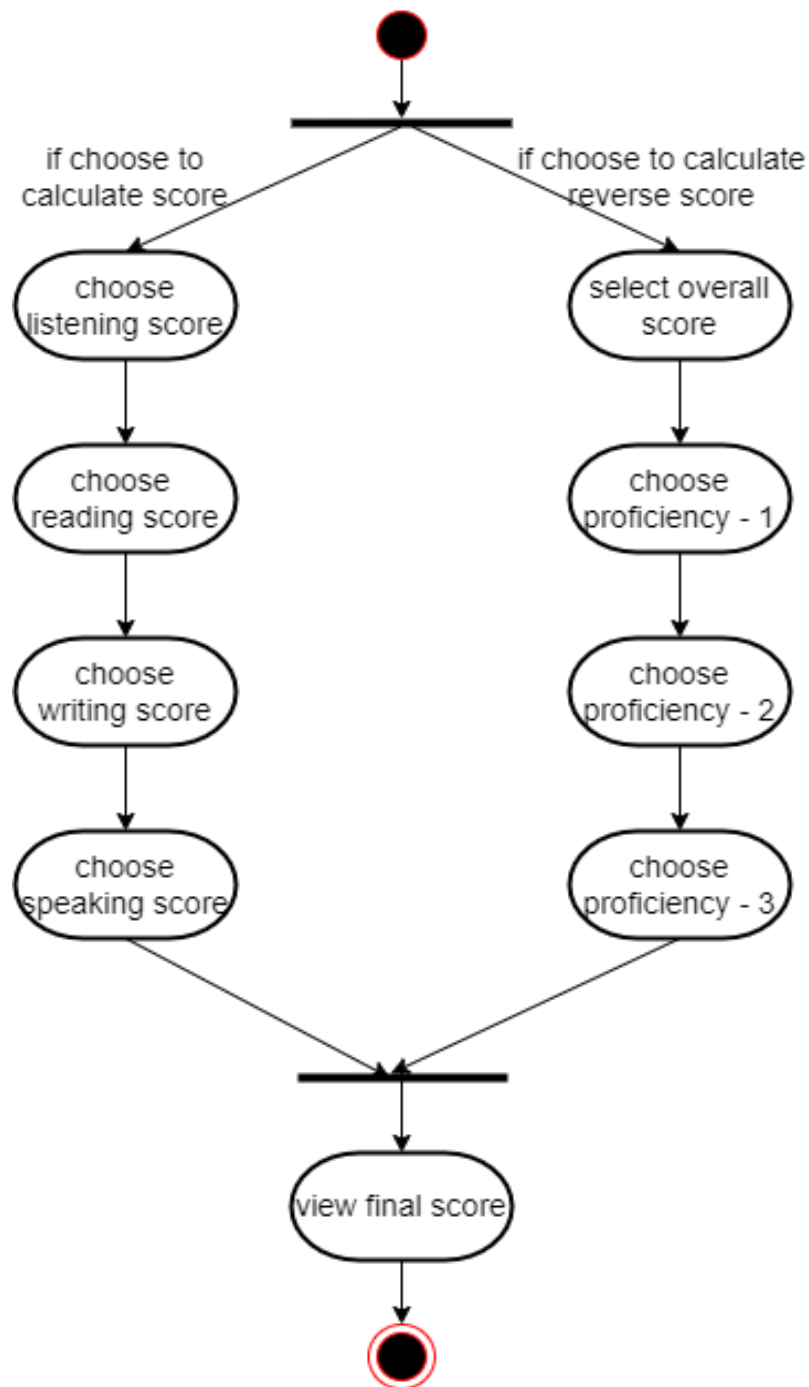
6) Contact Us

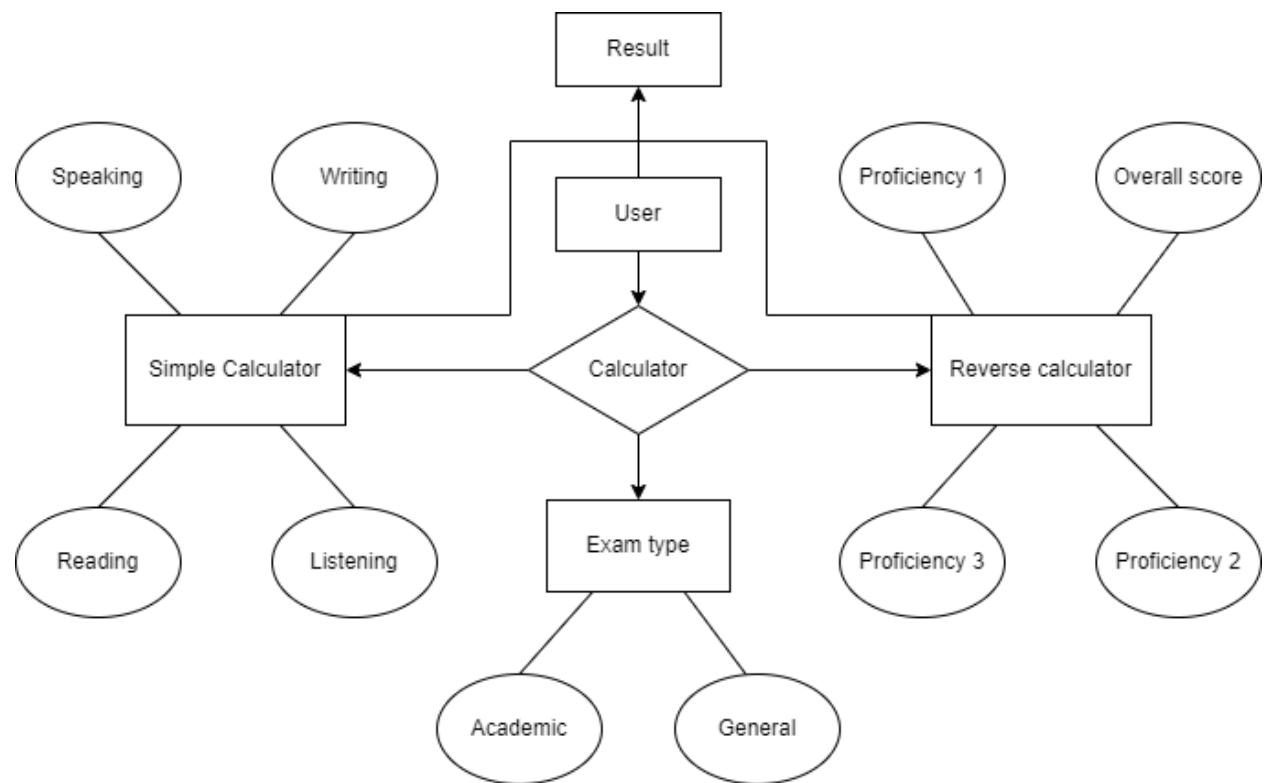


In this screen user can find information about how to contact us or source to contact us.

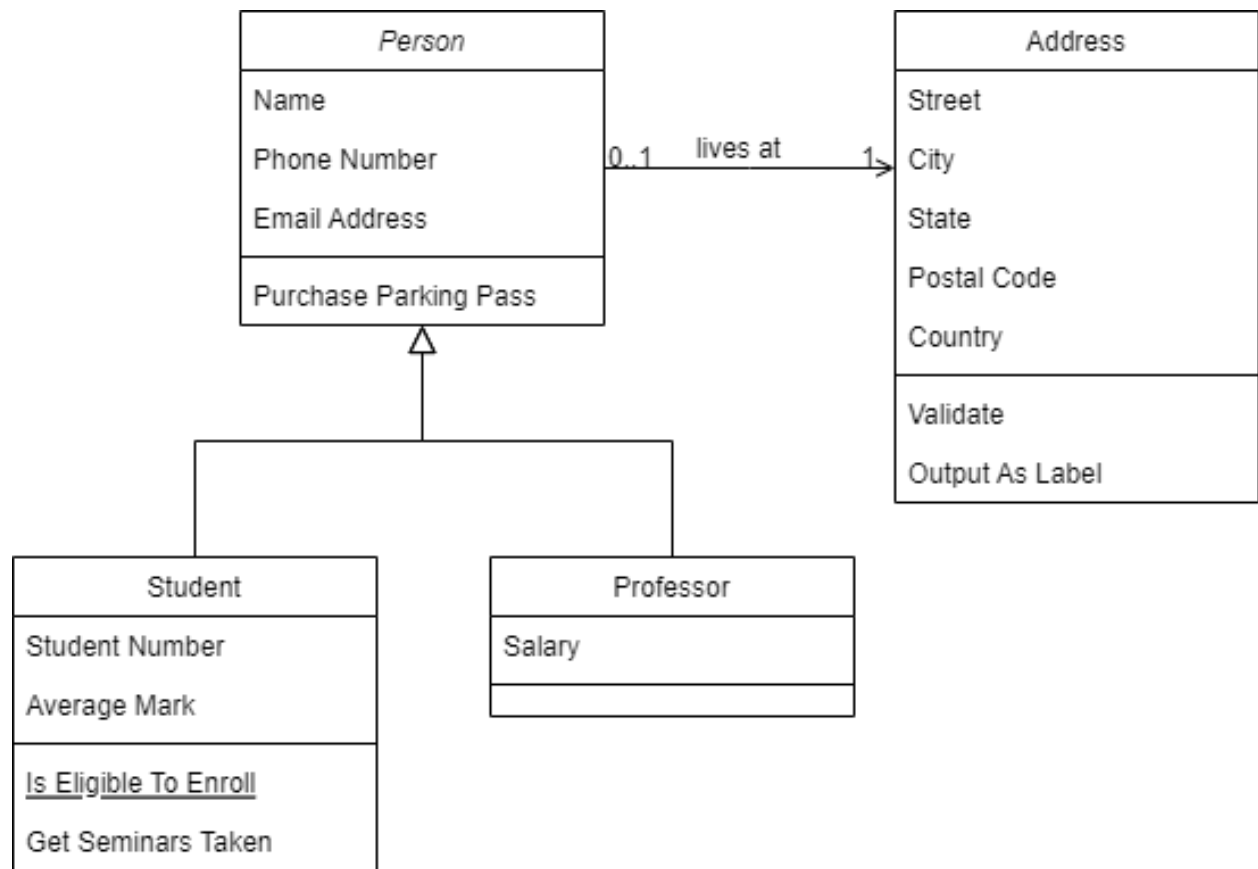
Appendices

A) Activity Diagram



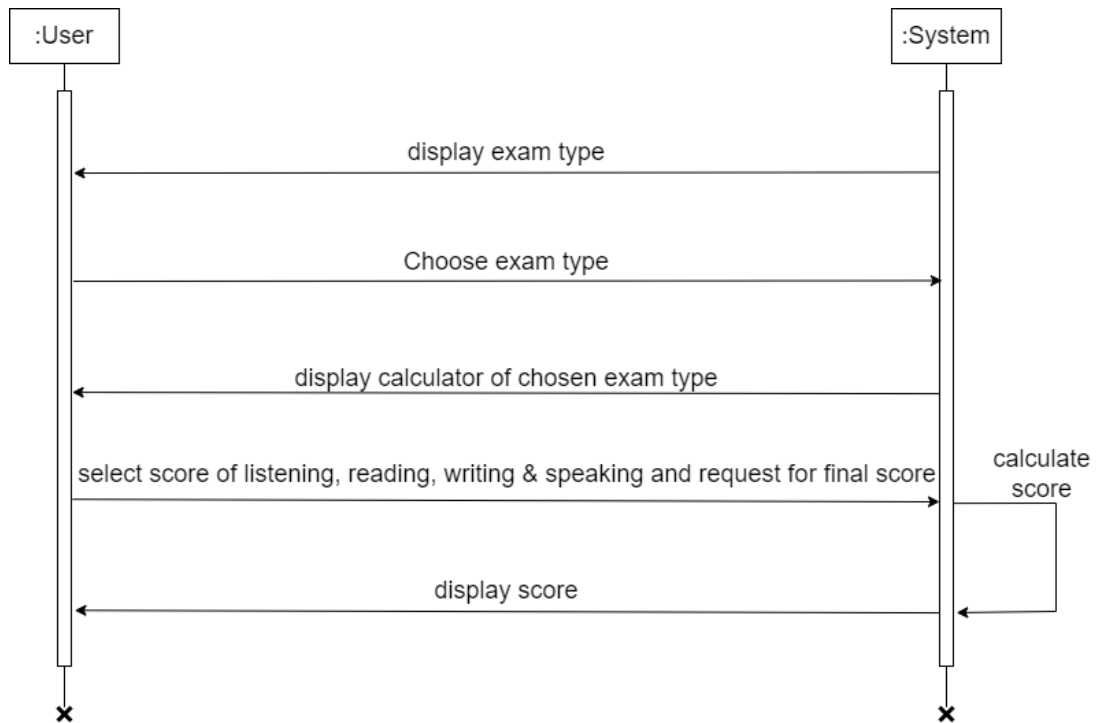
B) E-R Diagram

C) Class Diagram



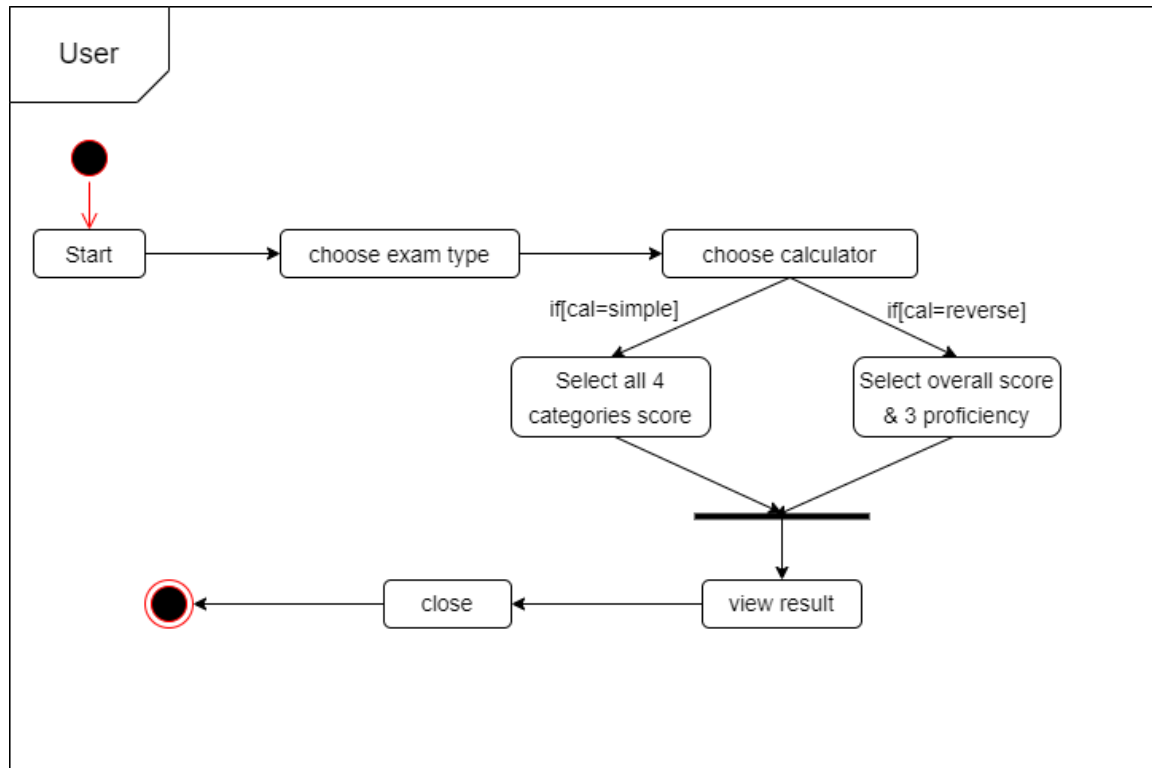
D) Sequence Diagram

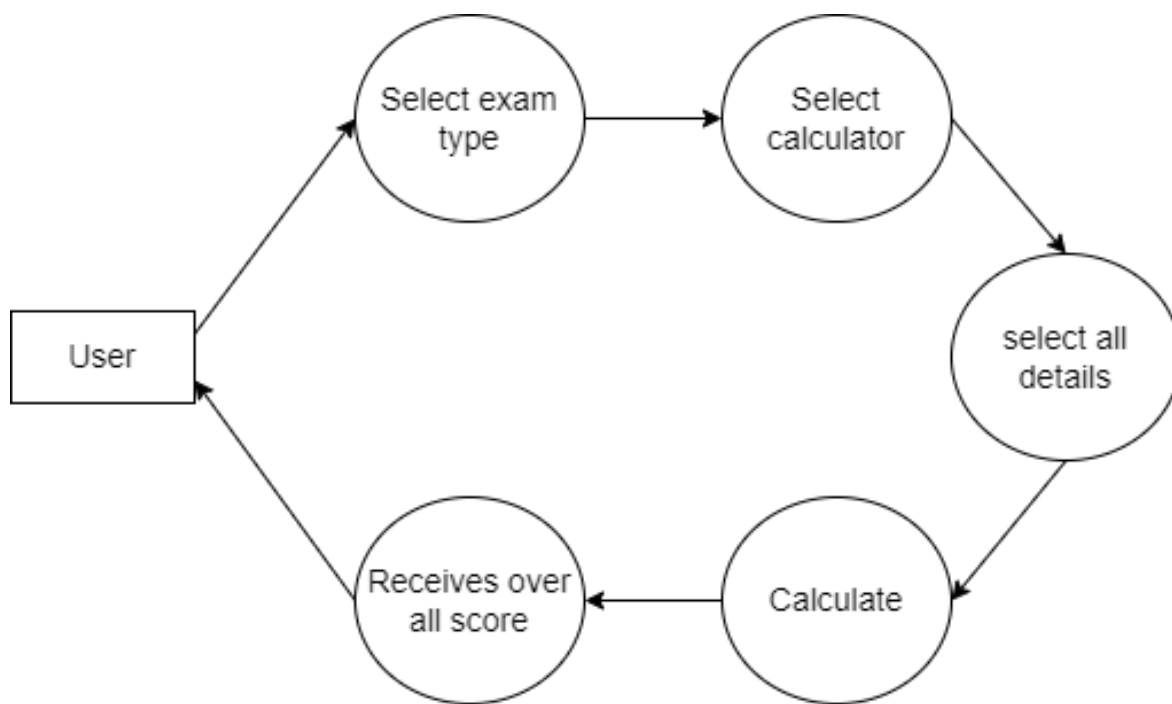
- Sequence diagram for calculation



E) State Diagram

- State diagram of User



F) Dataflow Diagram

References

- <https://flutter.dev/>
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- <https://pub.dev/>