

# Requirement Analysis Document

## Description:

The goal of this project is making analysis on zoom poll results based on quizzes and attendance polls. In this project we used Python as a script and several data science libraries such as pandas, numpy and matplotlib. The first phase of analysis consists of the results of each student in a certain zoom poll report. In the second phase, we have general statistics about student performance from variance quizzes. Additionally, the program will generate bar and pie charts for each question of the quizzes based on student choices.

## Glossary:

1. Answer key file: A file contains answers of specific poll
2. Attendance poll: Specific poll has only one question for taking attendance
3. Bar chart: A diagram in which the numerical values of variables are represented by the height or length of lines or rectangles of equal width.
4. Csv files: A comma-separated values file is a delimited text file that uses a comma to separate values. Each line of the file is a data record. Each record consists of one or more fields, separated by commas. The use of the comma as a field separator is the source of the name for this file format. and is used in this software as input files type
5. Global file: General analysis and statistics for each student including all quizz polls.
6. Histogram: A diagram consisting of rectangles whose area is proportional to the frequency of a variable and whose width is equal to the class interval.
7. Pie chart: A type of graph in which a circle is divided into sectors that each represent a proportion of the whole
8. Poll result: Results of votings after poll finished.
9. Poll: A voting mechanism usually created for taking attendance or making quizzes
10. Python: Python is an interpreted, high-level and general-purpose programming language.
11. Quiz poll: Specific poll may consist of single or many questions.
12. Student list: A list contains informations of students
13. Zoom poll report: Results of each quiz poll with statistics and charts.
14. Zoom: Zoom Video Communications, Inc. is an American communications technology company. It provides video telephony and online chat services through a cloud-based peer-to-peer software platform and is used for distance education.

# List of Functional And Nonfunctional Requirements

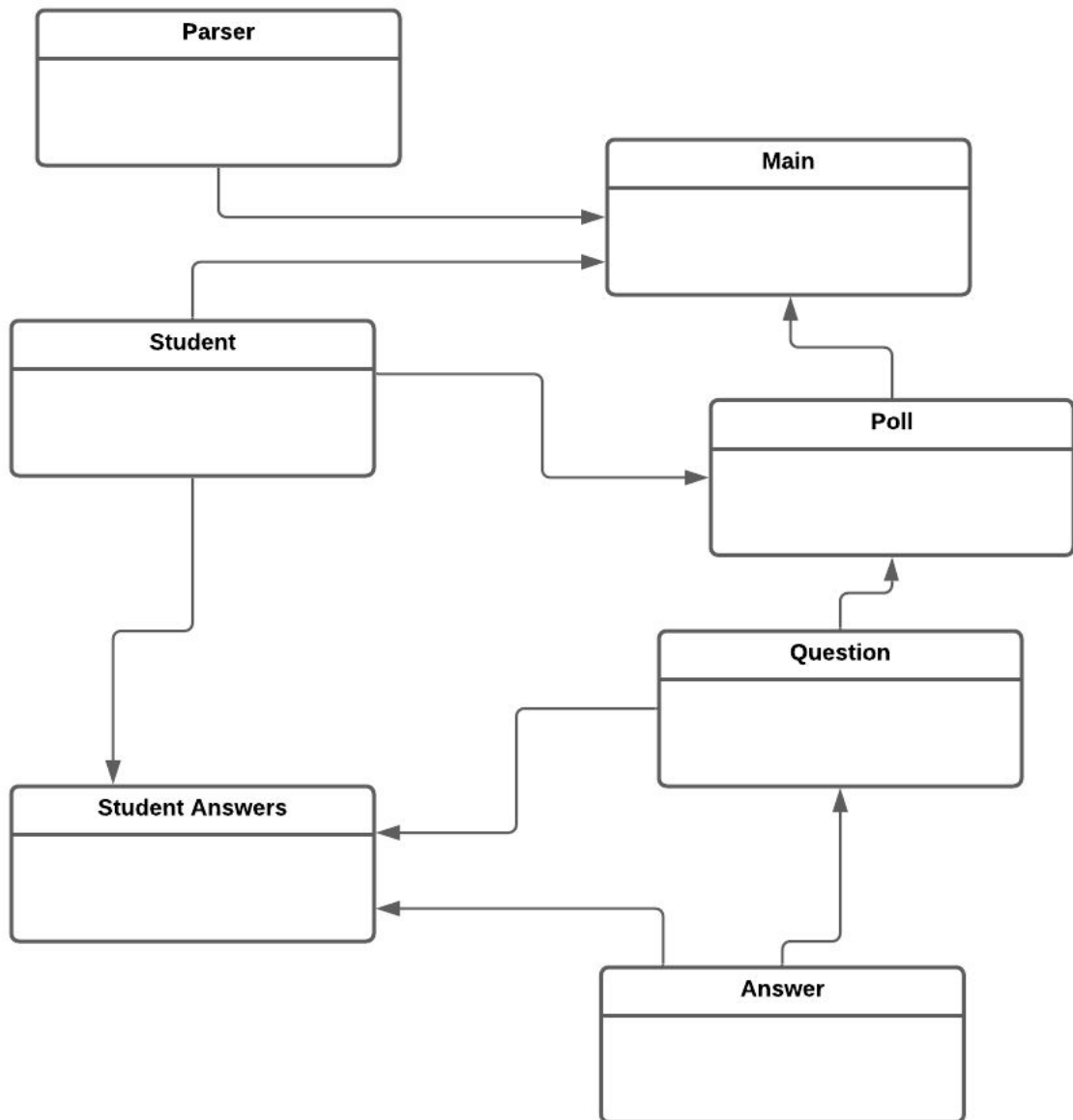
## Functional Requirements

- System calculates attendance percentage of each student
- Program should separate attendance poll from quiz polls
- Program should take all (initial and additional) polls into consideration.
- System calculates quiz results for each student
- System produces statistics for all students results
- System produces a global file that will keep all data from all the runs of the software
- System generates pie charts and bars for questions.
- System detects anomalies from zoom entries.
- System logs every process with an informative message.

## Nonfunctional Requirements

- Include attendance rate and attendance percentage for each user in the output file
- System should report each state to the user in the console.
- System output all statistics in a folder called as Statistics
- System should create a folder for each quiz poll and corresponding charts
- Program keeps found anomalies in a json file.

## Domain Model



# System Sequence Diagram

