# Marmara University

## Department of Computer Science and Engineering

## CSE3063 Object Oriented Software Design



## Requirement Analysis Document

150116020 - Muhammet Kürşat Açıkgöz

150116024 - Ahmet Elburuz Gürbüz

150117013 - Mehmet Ali Yüksel

150117018 - Ahmet Önkol

150117023 - Anıl Şenay

150117030 - Beyza Aydoğan

150117072 - Bilgehan Geçici

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# Requirement Analysis Document

## About Project

In recent months there are many people using Zoom application for education purposes. Zoom application allows the host (in this case it is the instructor) to make polls to attendees (in this case they are students). Host of the meeting can get poll results as .csv formats. This project aims to get the results of the polls that were made in a Zoom meeting and make analysis of the results of the polls. System gets poll reports and also gets each student that enrolled in the course. Makes calculations for each student. Calculates the grade and attendance percentage of the student. Also makes analysis for questions and polls. Finds the amount by which the answer to a question has been selected. Calculates the number of questions, success percentage in the poll.

## Requirement Specification Vision (Purpose)

This requirement specification system document describes the functions and requirements specified for this Zoom Poll Analysis project. The purpose of this project is to make an analysis  of  the Zoom poll results. Calculates student grades, attendance percentages for each student, number of choice selections for each question, number of questions, success percentage in each poll. By observing the set of results from a given Zoom poll, calculations will be made. This document is intended for both the stakeholders and the developers of the system.

## Problem Statement

Survey analysis refers to the process of analyzing results of polls of students (and other people). This can, for example, be Zoom Poll surveys that students send them to instructors.

Data on its own means nothing without proper analysis. Thus, we need to make sure our Zoom poll analysis produces meaningful results that help instructor to evaluate our results.[1]

## Scope

Survey analysis is the process of identifying results and adding one or more meaningful and informative analyzes to provide context of results so that instructors can view and grade them.

The goal of the survey analysis system is to reflect the results of the questions. It will help instructors to administer the appropriate questions to the right target groups.

In the first iteration, results of the poll questions will be reported by percentages of choices and overall grades for every student along with attendance information.

## System Constraints

Will run as a console application on any device that has Python installed.

## Stakeholders

- o   Murat Can Ganiz: Customer
- o   Lokman Altın: Customer
- o   Muhammet Kürşat Açıkgöz
- o   Ahmet Elburuz Gürbüz
- o   Mehmet Ali Yüksel
- o   Ahmet Önkol
- o   Anıl Şenay
- o   Beyza Aydoğan
- o   Bilgehan Geçici

## Glossary of Terms

**Student**: Person who takes Zoom polls.

**Poll:** Polls are raw data that contains question answers with student information and it is taken from Zoom for examining results for grading purposes

**Answer Key:** File that contains poll name, question and correct answer of the question.

**Attendance Poll**: Poll for attendance  tracking purposes.

**Question:** Core poll component for reflecting poll results.

**Poll Result:** Spreadsheet file(.xlsx, .xls or .csv) that contains results of every poll.

**Poll Attendance Result:** Spreadsheet file (.xlsx or .ods) that contains  attendance information.

**Score:** Individual overall grade for every student depending on correctness of choices for poll questions given instance.

# Proposed System

## 1. Functional Requirements

- Zoom poll analysis system can be used for resulting poll, student, question information.

- The system gets poll reports as a .csv format.

- A question can have more than one correct answer.

- Poll results are obtained by calculating each question's results as a whole.

- The score of the individual students is obtained by correctness of choices by them.

- Number of questions in a poll must be calculated.

- Attendance percentage of a student must be calculated.

- Question results are obtained by calculating the number of correct choices divided by total choices made.

## 2. Non-Functional Requirements

### Usability

- ❖ Project should be user-friendly.

### Reliability

- ❖ Project must keep the user's data safe.

### Performance

- ❖ Project must read and implement the input file in a short time.
- ❖ Zoom poll analysis system must work and give output in a reasonable time and format.
- ❖ Poll analysis mechanism shouldn't slow down the system.

### Supportability

- ❖ Project must be platform independent.
- ❖ Project should be able to run on any Python based.

### Implementation

- ❖ Project will be implemented in Python.
- ❖ Input and output files must be in .xls or .csv format.

## Use Case Model

| Case | Reading poll reports correctly |
|---|---|
| Actor | System |
| Description | System gets the results of the polls that were made in the Zoom meeting. |
| Condition | • Reports should be in .csv format |
| Flow of Events | • System takes the report name, if it is in the correct format then starts reading. |

| Case | Processing poll reports correctly |
|---|---|
| Actor | System |
| Description | System itself is calculating poll results. |
| Condition | • Poll reports should be in valid format and individual results are founded correctly. |
| Flow of Events | • System will count the number of questions for later usage when getting the overall success rate.<br>• System is calculating results for every student individually.<br>• System will get the date information. |

| Case | Processing question results correctly |
| --- | --- |
| Actor | System |
| Description | Calculating question results depending on students' choices. |
| Condition | • Getting individual choices of the students successfully. |
| Flow of Events | • Receiving choices of students individually.<br>• Counting the number of choices for every answer.<br>• Resulting percentages for each answer of the question. |

## Project Plan & Deadlines

▪ Iteration 1- January 16
▪ Iteration 2- January 30

## References

• **[1]https://getthematic.com/insights/analyze-survey-data-survey-analysis/**