MARMARA UNIVERSITY
FACULTY OF ENGINEERING

DEPARTMENT OF
COMPUTER ENGINEERING

Processing and Analyzing Zoom Poll Report

CSE3063 Object Oriented Software Design

Team
Group Number: 2
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1. Introduction

Vision: The objective of the project is the implementation of a processing and analyzing zoom poll report with Python based object-oriented software design approach. The project is designed and developed by a team of 6 members.

Scope: Processing and Analyzing Zoom Poll Report

Special Requirements

- Python
- Git
- Xlwt Library
- Xlrd Library
- Pandas Library
- Openpyxl Library
- Xlswriter Module
- Os Module
- Csv Library
- Logging
- Visual Studio

Stakeholders

- Murat Can Ganiz (Customer)
- Lokman Altın (Customer)
- Gökberk Çelikmasat
- Şeref Kutay Akgün
- Kadir Acun
- Merve Rana Kızıl
- Zeynep Ferah Akkurt
- Erhan Yalnız

2. Requirement Specification

2.1 Functional Requirements

2.1.1 Must Have Requirements

- Libraries like xlwt, xlrd, pandas, openpyxl, csv and logging.
- Modules like xlswriter and os.
- Detecting and separating different poll results from given files.
- Detecting poll names in report files according to matching texts.
- Detecting and defining particular polls which are given to the students more than once in different dates. Furthermore, separating them from each other by naming.
- Calculating attendance by looking attendance poll and participating of other polls.
- Printing output of attendance to an excel file with additional required fields for each student.
- Printing output of each poll by calculating each metric for each student to an excel file.
- Printing general statistics in class to an excel file.
- Creating histogram and pie chart for general statistics of questions and answer pairs.
- Creating a global file that will be maintained between different runs of program and printing all the files with additional required columns in this excel file.

2.1.2 Could Have Requirements

- Improved model of processing and analyzing operations of Zoom reports.

2.2 Non-Functional Requirements

- Performance
- Portability
- Availability
- Security
- Safety
- Maintainability
- Reusability

2.3 Simulation Rules/Specifications

This is an insight into the way the group aims to achieve the implementation of the processing and analyzing zoom report system. This system provides information about the attendance of the students of a course to the lesson and their answers to the polls in the lesson. In this way, " How many students attend to the class?" and " How interested are students in the course?" gives answers to your questions. This system may provide an information about how to enhance and upgrade the processing and analyzing mechanism.

2.3.1 Simulation Guidelines

- The system starts to execute all operations with reading files.
- After the program reads files, starts to assigning of questions, answer keys and polls by looking the answer keys and initialize all of these. Furthermore, according to student list, information about students are initialized.
- After the program reads report files, the program looks for students-questions pairs and assign polls to the students which are matching each other.
- By looking answer keys, the correct answers are also defined and set.
- Required comparison operations are executed and outputs are printed to the files which contains individual statistics and global file which contains all statistics.
- This statistics that we mentioned above are contains answers(correct or false), number of attendances, success rates of students in the course.
- This program also creates a histogram and a pie chart graph for the statistics of the answers of questions that given in the polls.
- When the program ends, it gives answers for questions such as " How many students attend to the class?" and " How interested are students in the course?". Furthermore, it gives us information about class-course pairs.
- In the lecture, for attendance, host assigned a poll for students. By looking this attendance poll, attendance of the students are measured. If a student was late for this poll but he/she give an answer for other polls, the system considered him/her to attend the lecture at the same time. Briefly, to attend for the lecture, answered one poll is required.

3. Glossary

- PollSystem: A system which hold all operations for the system.
- Student: Holds required information about students separately for all.
- Question: Question texts which holds in poll.
- Poll: Questions which used to measure the success of the students.
- AnswerKey: Answers for questions that asked for students in polls.
- Metric: Statistics for the courses, polls and students.
- Attendance: Participation of the students in the course.

4. Domain Class Diagram