National University of Computer & Emerging Sciences

QuizMaster

Project Report

Programming Fundamentals

Section: F

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<u>Project Report</u>

Introduction:

We all have played many games and have tried theIQ games to check how good or smart we are. Almost all the IQ games available on the internet are not as efficient in computing precise IQ points and encouraging and engaging the player to develop their IQ. Alongside which there are games which do not save the user score to allow continuation at any other time. QuizMaster aims to solve all such problems.

Background:

We all have played games and so had experience in that area and we wanted to improve it and include features that most users want. We tried and played many different IQ and Question games on the Internet to find problems and think of features to solve those problems.

Project Specification:

Our project is called "Quiz Master". It is a quiz game with different subjects, and rounds and in it. You can test your knowledge with our Quiz Master.

Problem Analysis:

The problems we saw in other similar games out there were that many of these games only had one category of question, or the questions were repetitive, or the game wouldn't save your score.

Solution Design:

We have included many features in our Quiz Master to enhance user experience. We have included:

Different Subject (Categories) of question that you can select from.

Multiple rounds in those subjects with increasing difficulty.

Top 3 High scores.

You can reset those high scores.

Guidelines for better understanding of our game and its rules.

Implementation and Testing:

The project has been implemented using the C programming language. We have made use of multiple programming techniques to achieve the best possible outcomes. A major half of the implementation is based on functions and filing to store data for reusability. In the testing half we have tested a variety of test cases which include both normal and abnormal data. For example, we have tested the top 3 player's features alongside the

sorting algorithm. In contrast, we have tested a player which is unable to score any points as well. In addition, we have tested the filing techniques to assure the accessibility of data in whichever format it is stored in the file. In the case of abnormal, whenever an exception occurs, the program is able to reset to its last normal state.

Project Breakdown Structure:

Our project had multiple functions and we divided them amongst us.

choose();

playgame();

viewhighscore();

updatescore(int);

reset();

guidelines();

mainmenu();

The most important function of our project was choose() and updatescore() and those were the functions that we put our combined efforts on by meeting at university labs and libraries. The other basic functions we divided amongst ourselves.

The most basic functions like playgame() and guideline() were started early as it included things such as switch cases which we

had studied earlier. Other functions we did in the last 2 weeks of project submission.

Result:

All the features that we wanted to include were made possible and so we are satisfied with what we achieved. But we know we could have made it even better for users and included some more features.

Conclusion:

QuizMaster is successfully able to encourage and engage a player and boost his/her IQ using a variety of different questions from different fields of study. Due to this versatility of the program it is suited regardless of the age and interest. In sum, QuizMaster is able to achieve a much smarter and quicker strategy to promote IQ development for everyone.