# SYMBIOSIS INSTITUTE OF TECHNOLOGY (SIT)



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# Java Mini Project 2020 Batch 2018-22

# Software Requirement Specification (SRS) Document

# **MULTI-USER QUIZ**

<u>By:</u>

Aditi Goyal 18070122003 Sri Venkata Neelima Chinta 18070122070 Arundarasi Rajendran 18070122081

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### 1. Introduction

#### 1.1 Context & purpose

Through the ages our knowledge has been a very important aspect of growth and so has everyone been tested based on the natural equivalent of comparison i.e. information and so it becomes a compulsion to gather more information and this process soon becomes a serious thing. The software requirement specification of the following project is a detailed information about the first step toward the creation of a program that makes quizzing people a fun thing.

Topics that people relate to and have a good understanding can be chosen and people can have a nice time interacting with a program that questions their understanding about their favourite topic. As time passes the questions get more challenging and the player forgets the boredom he/she is surrounded with.

#### 1.2 Audience

The quiz is for all the age groups, starting from school-going kids to retired males/females. The variety of topics provided makes it fun for everyone. The program is for users to test their knowledge in a specific field and so can be played by everyone.

#### 1.3 Scope

Knowledge has no bounds, and so there's no end to the number of topics or questions which can be added to the quiz. Also, the quiz can be translated in different languages depending on the country and the audience. The purpose of this game is simply for entertainment purposes where ones that enjoy taking general knowledge quizzes at their leisure times can get their friends and play this game.

### 2. Project Requirements

#### 2.1 Software requirement:

- 1) Java development kit
- 2) Java virtual machine
- 3) Java runtime environment
- 4) Terminal and notepad
- 5) SQL (for database management)

#### 2.2 Hardware requirement:

1) Computer or Laptop or PC

#### 2.3 Skills required:

- 1) Basic knowledge of Java programming language
- 2) Knowledge on strings, switch case, comparator
- 3) Knowledge on graphical user interface

# 3. Project Design

#### 3.1. Inbuilt Features

The design of the project follows a simple structure. We will be using basic java syntax and some complex functions such as a comparator. The program provides the user with a choice of topic along with the level of difficulty he or she wants to play at. The program will produce a scoreboard where the score of each user is printed out on it. In order to display the scores, we have to first compare the scores of each user using a comparator. The scoreboard will be designed using a graphical user interface where we will add colours to it, so that it stands out.

#### 3.2. User Classes (prone to modifications)

- 3.2.1 Main Function
- 3.2.2 Input Class
- 3.2.3 Score Calculate Class
- 3.2.4 Player Class
- 3.2.5 Display Scoreboard Class

#### 3.3 Functions

#### 3.3.1 Choose a new game

Page where user chooses a new quiz and begins to play

#### 3.3.2 Login admin

Here as an admin user one can delete a user's score.

#### 3.3.3 Compare scores

Here the scores are stored and then they are compared and sorted in order of high score to low score. According to this sorting, the scoreboard displays the winner of the quiz

#### 3.3.4 Scoreboard

Displays all the scores of each user who played the quiz

## 4. Application Working

#### 4.1 User Interface

At first, the user is asked for his/her name(to be displayed on the scoreboard). When the user starts his or her new game they will not be able to see the program. What they'll see is the topic options and options for difficulty level. The user will be shown the scoreboard at the end of the game in order to know if they have won the game or not plus, the score of other users and their positions. The scoreboard declares the winner to the users.

#### 4.2 Inner working Interface

The program part of the quiz and the scoreboard of the quiz are all part of the inner working interface where only the programmer has access to it and it is not visible to the user. For the visual display of the scoreboard, we have used a graphical user interface. The working on the visual display is also hidden from the user.

# 5. Project Planning

#### 5.1 Team Coordination

Aditi Goyal - Coding, Research, Designing Algorithm

Sri Venkata Neelima Chinta - Coding, Research, Bug Fixes

Arundarasi Rajendran - Coding, Research, Improvements

#### **5.2 Projected Timeline**

Task	Duration	Start Date	End Date
Gather Requirements	3	15/02/2020	18/02/2020
Reseach on java concepts to be used	7	20/02/2020	27/02/2020
Design Algorithm	2	28/02/2020	1/3/2020
Coding	24	1/3/2020	25/03/2020
Test	1	25/03/2020	26/03/2020
Bug Fixes	2	26/03/2020	28/02/2020
Improvements	4	28/03/2020	1/4/2020
Final Testing	2	1/4/2020	3/4/2020
Submission	25	5/4/2020	30/4/2020

# 6. Flow Chart



