code.sprint

TASK BOOKLET

- Qualifiers Round -

Post-Secondary Category 2022





Qualifier Round Schedule

Task Analysis (10 min)

Task Development (60 min)

Interval (15 min)

Continuation of Task Development (60 min)

Task Submission (5 min)

TOP 3 CODE SPRINTERS ANNOUNCED!

Malta SiNG (120 minutes)

Malta-SiNG is a new singing competition that will offer a platform for aspiring singers to showcase their talent. This competition is open to vocalists of all ages. Two judges will evaluate the songs during the show and each judge has an equal stake in the final result.



Develop a system which will simulate the registration, judging process, and issuing of result in the Malta-SiNG Contest.

Functionality #1: Main Menu

The system presents a menu with three options: 1) Singer, 2) Judge, and 3) Exit.

- **Singer:** singers who would like to participate in this competition may use this section to: 1) register for the competition, and 2) check the score board.
- **Judge:** judges should use this area to: 1) stop registration process, and 2) cast their votes.
- **Exit:** Quits the Main Menu and the program stops.

Functionality #2: Registration

- 1. To register, all participants should enter the singer name, song name, and song length in seconds.
- 2. A participant can register more than one song.
- 3. Song names should be unique.
- 4. The regulations of the Malta-SiNG Contest state that:
 - singer name and song name cannot be less than three characters, and
 - all songs must be between 1 minute and 3 minutes long.

Functionality #3: Judging

 There are two judges in this competition, who need to log in the system using the credentials on the right:

Username	Password		
kevinCassar	1KnowBest!		
saraVella	Am@21ng		

- 2. The judging process can only start when the registration process is stopped by at least one judge.
- 3. Each judge must assign a mark out of 100 to each song.
- 4. Each judge cannot assign identical marks to two or more different songs.
- 5. Each judge can only vote once.

Functionality #4: Score Board

- 1. The score board will only be visible once both judges have cast their votes.
- 2. The score board should display all songs ranked in ascending order by the average marks obtained.

Name the class containing the main method **RunApp**.

Submit your program in a folder named **Malta_Sing**

Functionality #5: Validation

To enhance the user experience, warning messages should be used and runtime errors avoided when invalid inputs or non-existing options are entered.

Assessment Rubric

Program Functionality	User-Friendly Interface	Proper use of Comments	Proper Conventions (Camel case, meaningful var names etc.)	Name of Folder & Class/es	User Input	Suitable Prompts / Messages displayed		
Scoreboard Sorting	Proper use of data structures and/or files	Modular Code	Code Efficiency	Other Features (Not listed in the task)	Maximum Score: 38 + 2 for every extra feature.			
Validations								
Options in Menus	Singer Name	Song Name	No duplicate Song Names	Song Length	Judges Points	Avoid Runtime Error (trycatch)		
0 – Not Satisfactorily 1- Partly Satisfactorily 2- Entirely Satisfactorily								





