



# **PERTANDINGAN JUNIORSKILLS MALAYSIA 2021**

**(WEB DESIGN AND DEVELOPMENT)**

**SOALAN PRAKTIKAL**

**PERINGKAT AKHIR**

**MASA: 10 JAM**

**NAMA:** \_\_\_\_\_

**No. KP:** \_\_\_\_\_

**JABATAN PEMBANGUNAN KEMAHIRAN  
KEMENTERIAN SUMBER MANUSIA**

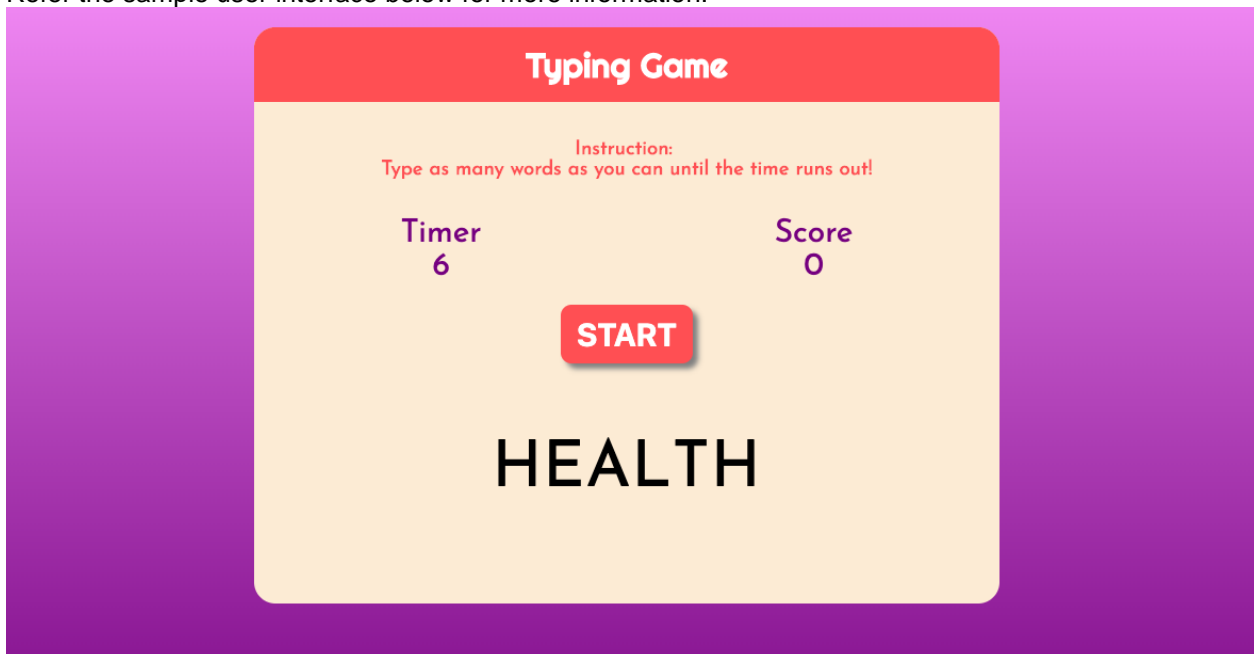
## MODULE A (5 hours)

### INTRODUCTION

Your teacher asked you develop a web-based typing game. This game requires players to type as many words as they can in a given time. After they have typed one word correctly, the other word will appear. You are free to design your game, but it must have these elements:

- Game name (Can be anything relevant)
- Brief instruction of the game
- Countdown timer
- Score
- Start button
- The word to type

Refer the sample user interface below for more information:






### DESCRIPTION OF PROJECT AND TASK

This project aims to assess your knowledge on HTML5, CSS, JavaScript, and your creativity. Utilize CSS to make your game looks more attractive.

Use the media files provided to make your game. The media files provided including:

- Background music (music.mp3)
- Correct answer sound effect (correct.mp3)
- A list of words (words.txt)

## Game Rules

1. Initial conditions of the game:
  - a. Score is 0.
  - b. Timer is 20.
2. When users press on “Start” button:
  - a. Play background music (music.mp3).
  - b. Timer starts to countdown in every second.
  - c. Show a word that is randomly picked from the list of words provided (words.txt).
  - d. Disable the button (so that it is not clickable).
3. When users start typing:
  - a. Apply certain background color to the character if it is typed correctly.
  - b. Do not apply any background color to the character if it is typed wrongly.
  - c. Do not apply any background color to the character if it is not the turn for the character to be typed (e.g., if the user is typing the first letter “A” in the word “ADDITIONAL”, apply a background color to the first letter “A” only [e.g.,  ADDITIONAL →  ], make sure another “A” in “ADDITIONAL” won’t be colored [e.g.,  ADDITIONAL → X ]).
4. After users typed a word correctly:
  - a. Add 1 to the score.
  - b. Play correct answer sound effect (correct.mp3).
  - c. Show another word that is randomly picked from the list of words provided (words.txt).
5. Repeat the steps 3 & 4 until the timer is 0.
6. When the timer is 0, instruct browser to prompt an alert message to notify the user that the game is over and show the user’s score.
7. When users click on the “OK” button in the alert message:
  - a. Reset the timer to 20.
  - b. Reset the score to 0.
  - c. Remove the random word shown.
  - d. Enable the “Start” button.

\* Refer to the attached video for more information.

## NOTE

Save the html game file as **index.html**. You are free to name CSS and JavaScript files which link to the index file but directory must be well organised.

Please stretch your capability and creativity to design your game. Your web page should follow W3C standard of HTML5 and CSS and also should contain no errors. For maintainability, you should use **proper indentation** and use **comments** appropriately.

You can make use of the media files provided during the competition. However, you are **NOT ALLOWED** to bring and use your own media files.

For assessment purpose, your website will be tested on Google Chrome, but must be compatible in Mozilla Firefox.

## INSTRUCTIONS TO THE COMPETITOR

Save all the files of your application in directory on your desktop computer "**CompetitorID\_Profile**", where **CompetitorID** is the ID assigned to you during the competition day.

## MATERIALS PROVIDED

ITEM	DESCRIPTION
Media files	Contain two sound files.
Text file	Contain one text file.

## MARKING SCHEME SUMMARY

SECTION	CRITERION	JUDGEMENT MARKS	MEASUREMENT MARKS	TOTAL
P1	Project General	0.0	3.0	3.0
P2	Best Practice	9.0	4.0	13.0
P3	Required Elements	0.0	3.0	3.0
P4	Functionalities	0.0	26.0	26.0
P5	Design Style and Overall Look	5.0	0.0	5.0
<b>Total</b>		<b>14.0</b>	<b>36.0</b>	<b>50.00</b>

## MODULE B (5 hours)

### INTRODUCTION

You are president of computer club at your school. You have been assigned a task by Head Master to collect information about all teacher's profiles in the school. The details about information are mentioned below.

You are free to decide and design how your website looks but it must be **single-paged** for 5 sections and search function. Your website **MUST** contain at-least 5 sections described as below:

- Basic Information
- Education Background
- Skills
- Working Experience
- Contacts

### DESCRIPTION OF PROJECT AND TASK

This test project aims to assess your knowledge on HTML5, CSS, JavaScript, PHP, MySQL and your creativity.

For the ease of access, your website should be able to access just by typing the directory name without specifying the filename. For example, if you save your website under directory "CompetitorID\_Profile", you should be able to access it through "http://localhost/CompetitorID\_Profile".

Each information in the section must be stored in the database and retrievable by search function using PHP server-side script. You have to create form(s) to store all the information which can be accessed only by admin.

There are several things that you should include in each section:

#### Basic Information

This section shows your basic personal information:

- Name
- Gender
- Age
- Photo of you (it can be any photo of people)

#### Education Background

This section shows teacher's education background. You should arrange this chronologically (from latest to previous) regardless when the data is keyed in.

Example of Education Background would look like this:

- 2012-2013 - Sijil Kemahiran, ILP Sungai Baru, Kuala Lumpur
- 2007-2011 - Sekolah Menengah Sungai Baru, Kuala Lumpur
- 2001-2006 - Sekolah Kabangsaan Sungai Baru, Kuala Lumpur

## Skills

This section shows what teachers are capable of. For instance, you can list down web development skills such as JQuery, PHP, HTML, etc. You can also mention languages and sports.

## Working Experience

This section shows teacher's working experiences. Working experience must include at least job title, recruitment year and company/agency name.

## Contacts

This section shows your contact information at least contact number, email and home address. You may also make use of the social network icons provided.

## Search Function

Search form must be located at the default/main page with the sections. The first appearance **must be** search area only without sections. The sections appear if results are returned after search is triggered. If there is no result after search is triggered, no section will be displayed with message "No Result Found" or any similar meaning. Search is by teacher's name only and at least 3 characters must be entered in order to trigger the search function with validation message. Total result is displayed.

## Admin Page & Form(s)

Admin page is separated page from the sections page to protect the forms from unauthorized access and must be authenticated via login and password. Admin page must be accessed through URL <http://localhost/mydirectory/admin>. You are free to design any kind of form as long as all required information are inserted through the form. All form only can be accessed by authorized admin which login information is stored in the database as well. Admin can logout and redirect to main page. The admin page must be logged in using email and password. Password is encrypted in the database.

Admin page also list all inserted basic information of teacher's profile. This page is used to edit and delete the teacher's profile with confirmation.

## NOTE

You can use true information or information that you make up to fill up each section. However, you are **NOT ALLOWED** to use placeholder text or any dummy text that are not readable in English.

Please stretch your capability and creativity to design your website. Your website should follow W3C standard of HTML5 and CSS and also should contain no errors. For maintainability, you should use **proper indentation** and use **comments** appropriately.

You can make use of the media files provided during the competition. You can edit, merge or resize the images as you wish. You are **NOT ALLOWED** to bring and use your own media files, however.

You are allowed to use JavaScript in your website to if necessary. jQuery library will also be provided. Enhance your website with **animation and transition** effects, which can be programmed using CSS3 or JavaScript.

For assessment purpose, your website will be tested on Google Chrome, but must be compatible in Mozilla Firefox.

## INSTRUCTIONS TO THE COMPETITOR

Save all the files of your application in a directory on your web root folder name "**CompetitorID\_Profile**", where **CompetitorID** is the ID assigned to you during the competition day. The default page must be named as **index.php**.

## MATERIALS PROVIDED

ITEM	DESCRIPTION
jQuery XAMPP	JavaScript library. Web server solution stack package.
Media files	Contain texts and photos.

## MARKING SCHEME SUMMARY

SECTION	CRITERION	JUDGEMENT MARKS	MEASUREMENT MARKS	TOTAL
P1	Project General	0.0	2.0	2.0
P2	Best Practice	6.0	4.0	10.0
P3	Project Requirements	7.0	0.0	7.0
P4	Functionalities	0.0	28.0	28.0
P5	Design Style and Overall Look	0.0	3.0	3.0
<b>Total</b>		<b>13.0</b>	<b>42.0</b>	<b>50.00</b>