Field Testing Report

NAME: NORHALIMAH BINTI MOHAMAD RAMLI MATRIC NO: 255227

LECTURER: <u>DR SYAHIDA BINTI HASSAN</u> GROUP: <u>D</u>

PROJECT TITLE: PHP CRUD GENERATOR

SUPERVISOR: DR AMRAN BIN AHMAD

1. OVERVIEW OF THE SYSTEM/APPLICATION

Developing a system is vital in any business or organization especially for handling data and information in a better way. As the user without any programming skills and how the web development works, they have to learn and understand it first. It is not easier to master it and take time and effort to understand completely. The developer also will consume more time to develop the prototype and present it to their customer.

PHP CRUD Generator will easy the end user to build their system step by step and implement four major functions which are create, retrieve, update and delete. It will also expose CRUD as education purpose for them and how web development works. PHP CRUD Generator also will help the developer to build rapid prototype for their customer. It will reduce development-time by simplifying CRUD operations.

2. EVALUATION METHOD

The field testing that has been conducted to evaluate the system. There are two methods to evaluate the system. Firstly, the user uses their own laptop to evaluate the system by downloading the system folder from the link given. Then, the user tests the system based on the test cases. Another method is the developer invites a few of user in certain online meeting to test the system. Then, the user controls the keyboard and mouse from the share screen from the developer. The end of testing, the user answers the post-task questionnaire in Google Form.

a. Type of Evaluation

The type of evaluation that the developer conducted to evaluate the system is usability evaluation is used to evaluate the system. It evaluates from the aspect of usefulness, ease of use, navigation and hyperlinks and satisfactions.

b. Objective of the Evaluation

The objective of the evaluation:

- 1. To test how easy the design is use on a user.
- 2. To test the system meets the user requirement.
- 3. To test how well users can learn and use a product to achieve their goals.
- 4. To improve the design and interface of the system.

c. Participants [If applicable]

There are 30 participants which are the end user of the PHP CRUD Generator. They are either female or male. Besides, the participants are grouping by the age between from 16-20 years old, 21-25 years old, 26-35 years old and 36 years old and above.

d. Materials

The instruments used for the evaluation are:

1. PHP CRUD Generator

PHP CRUD Generator is the system that will be evaluated by the participants. It accessed via local web hosting using Google Chrome browser.

2. Questionnaire

The post-task questionnaire distributed to the participants through the link of Google Form. The purpose of the questionnaire is to collect opinions from the participants on the interface, performance and usability of the PHP CRUD Generator. It had two sections. Firstly, Section A was about Demography and Background Information. For the second section was Section B about PHP CRUD Generator. Section B divided into some aspects such as useful, ease of use, navigation and hyperlinks and satisfaction of PHP CRUD Generator.

e. Procedure for Conducting the Evaluation

There were two methods to evaluate the system as mentioned in evaluation method section:

- 1. First method
 - 1) The participants sit individually with a computer/laptop connected to the Internet.
 - 2) The participants read the purpose and procedure.
 - 3) The participants read the information sheet and sign the consent form.
 - 4) The participants download the system through the link given and save the folder in htdocs(xampp).
 - 5) The participants interact with the system.
 - 6)The participants answer the post-task questionnaire.
- 2. Second method
 - 1) The participants sit individually with a computer/laptop connected to the Internet.

- 2) The participants invite online meeting through the link given.
- 3) The self-introduction about the developer and the project.
- 4) The developer shares share screen of the tester's laptop with the participants.
- 5) The developer appoints each participant to control the keyboard and cursor of the screen.
- 6) The participants interact with the system.
- 7) The developer shares the link of evaluation form to the participants.
- 8) The online meeting ended by the developer.
- 9)The participants answer the post-task questionnaire.

3. RESULTS AND FINDING

After the usability evaluation completed and the questionnaires answered by the participants, the results and finding were collecting and analyzing. Here, the results and finding from the usability evaluation:

Section A: Demography and Background Information

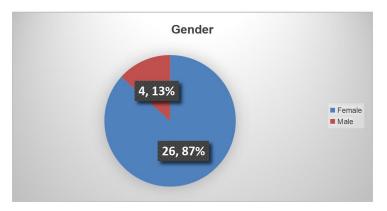


Figure 1:Gender of respondents

The Figure 1 shows the pie chart for gender of the respondents of the evaluation. Among the respondents, 26 (87%) were female respondents and 4 (13%) were male respondents.

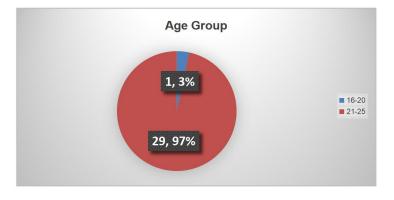


Figure 2: Age Group of respondents

The Figure 2 shows the pie chart for age group of the respondents of the evaluation. There were 29 (97%) respondents were between 21 to 25 years old and 1 (3%) respondent was between 16 to 20 years old.

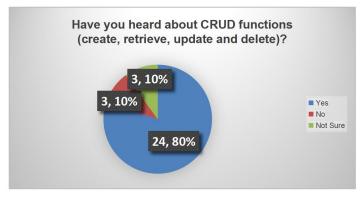


Figure 3: Have you heard about CRUD functions (create, retrieve, update and delete)?

The Figure 3 shows the pie chart for the respondents have heard about CRUD functions which were create, retrieve, update and delete. There were 24 (80%) participants heard, 3 (10%) respondents never heard and 3 (10%) respondents were not sure about it.

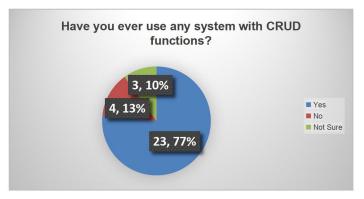


Figure 4: Have you ever use any system with CRUD functions?

The Figure 4 shows the pie chart for the respondents have ever use any system with CRUD functions. There were 23 (77%) respondents used, 4 (13%) respondents never use and 3 (10%) respondents were not sure about it.

Section B: PHP CRUD Generator

| Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------------------|----------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |

Figure 5: The rate their agreement with the following statements

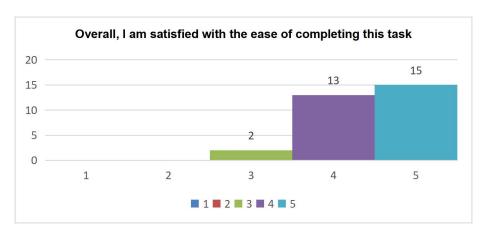


Figure 6: Overall, I am satisfied with the ease of completing this task

Most of respondents which were 15 respondents strongly agree on the statement in Figure 6. The least respondents (2) were neutral while 13 respondents agreed on the statement.

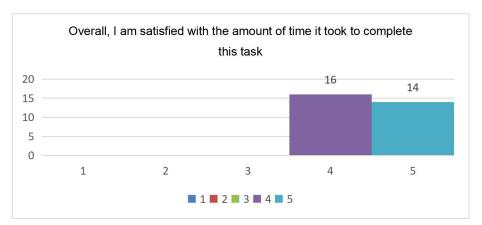


Figure 7: Overall, I am satisfied with the amount of time it took to complete this task

Based on Figure 7, 16 respondents agreed that they satisfied with the amount of time it took to complete the task. While, 14 respondents were strongly agreed with the statement.

<u>Usefulness of PHP CRUD Generator</u>

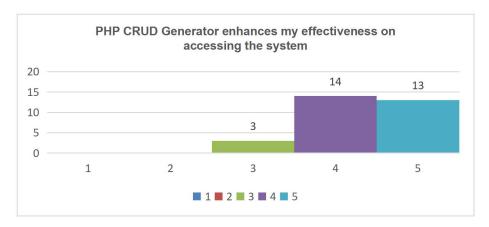


Figure 8: PHP CRUD Generator enhances my effectiveness on accessing the system

The Figure 8 shows 14 respondents agreed that PHP CRUD Generator enhances their effectiveness on accessing the system. Only 3 respondents were neutral and 13 respondents were strongly agreed with the statement.

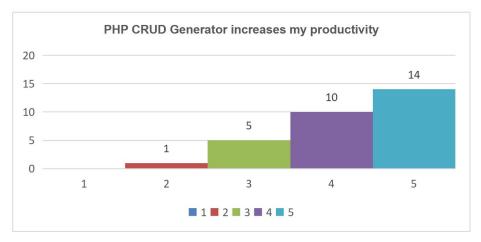


Figure 9: PHP CRUD Generator increases my productivity

The Figure 9 shows 14 of 30 respondents were strongly agree that PHP CRUD Generator increase their productivity. One of respondents disagree with the statement. While, 10 respondents agreed and 5 respondents neutral with the statement.

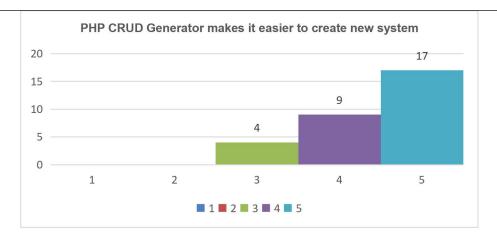


Figure 10: PHP CRUD Generator makes it easier to create new system

Based on Figure 10, most of respondents (17) were strongly agreed and the least of respondents (4) neutral said that PHP CRUD Generator made it easier to create new system. 9 respondents agreed with the statement.

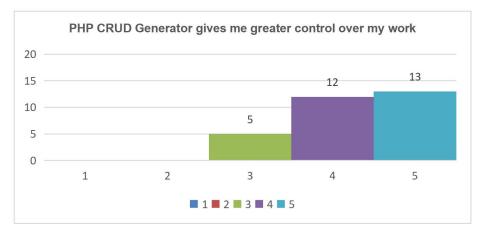


Figure 11: PHP CRUD Generator gives me greater control over my work

There were 13 respondents were strongly agreed that PHP CRUD Generator gave them greater control over their work. 5 respondents neutral while 12 respondents agreed with the statement in Figure 11.

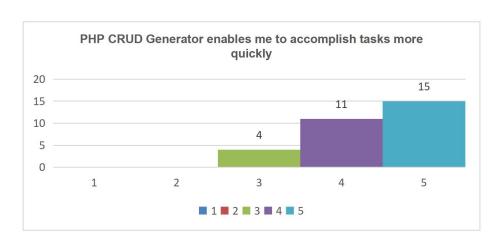


Figure 12: PHP CRUD Generator enables me to accomplish tasks more quickly

The Figure 12 shows most respondents (15) strongly agreed that PHP CRUD Generator enabled them to accomplish tasks more quickly. The least of respondents (4) neutral and 11 respondents agreed with the statement.

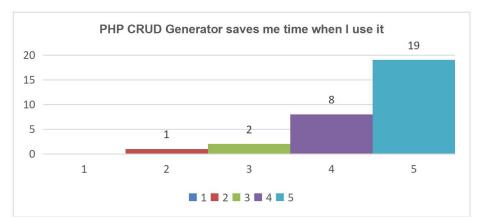


Figure 13: PHP CRUD Generator saves me time when I use it

In Figure 13, it shows 19 of 30 respondents strongly agreed with the statement. There was only one respondent disagreed that PHP CRUD Generator saved them time when they used it. While, 8 respondents agreed and 2 respondents neutral with the statement.

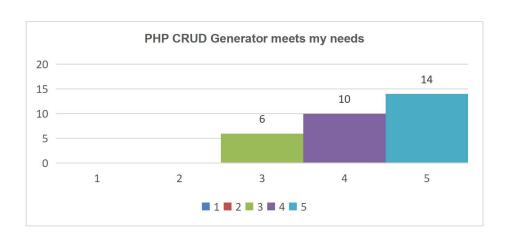


Figure 14: PHP CRUD Generator meets my needs

The Figure 14 shows that 14 respondents strongly agreed PHP CRUD Generator met their needs. 6 of 30 respondents were neutral and 10 of 30 respondents agreed with the statement.

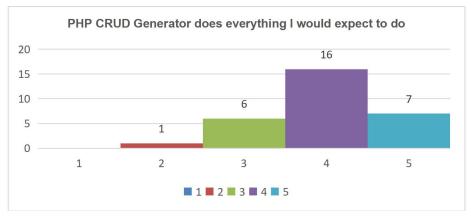


Figure 15: PHP CRUD Generator does everything I would expect to do

Most of respondents (16) agreed that PHP CRUD Generator did everything they would expect to do. Only one respondent disagreed the statement in Figure 15. While, 7 respondents strongly agreed and 6 respondents neutral with the statement.

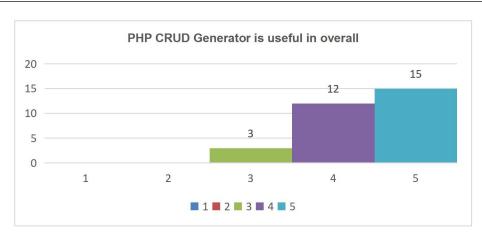


Figure 16: PHP CRUD Generator is useful in overall

Based on Figure 16, 15 respondents strongly agreed that PHP CRUD Generator was useful in overall. 3 respondents neutral and 12 respondents agreed it.

Ease of Use of PHP CRUD Generator

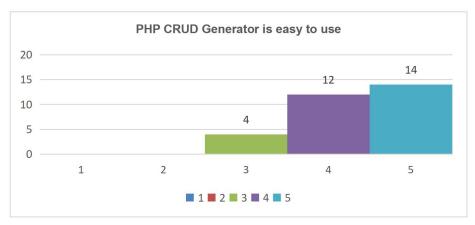


Figure 17: PHP CRUD Generator is easy to use

The Figure 17 shows 14 respondents strongly agreed that PHP CRUD Generator was easy to use. While, 4 respondents neutral and 12 respondents agreed it.

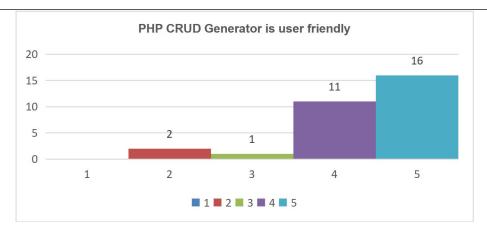


Figure 18: PHP CRUD Generator is user friendly

Based on Figure 18, 16 respondents strongly agreed that PHP CRUD Generator was user friendly. There were 2 respondents disagreed, 1 respondent neutral and 11 respondents agreed it.

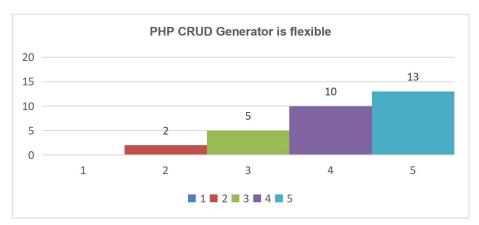


Figure 19: PHP CRUD Generator is flexible

The Figure 19 shows 13 respondents strongly agreed that PHP CRUD Generator was flexible. While, 2 respondents disagreed, 5 respondents neutral and 10 respondents agreed it.

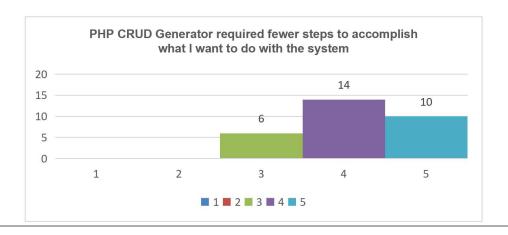


Figure 20: PHP CRUD Generator required fewer steps to accomplish what I want to do with the system

Out of 30 respondents, 14 respondents agreed that PHP CRUD Generator required fewer steps to accomplish what they want to do with the system. 6 respondents neutral and 10 respondents strongly agreed it based on Figure 20.

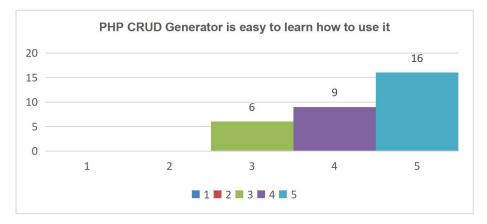


Figure 21: PHP CRUD Generator is easy to learn how to use it

The Figure 21 shows 16 respondents strongly agreed that PHP CRUD Generator was easy to learn how to use it. There were 6 respondents neutral and 9 respondents agreed with the statement.

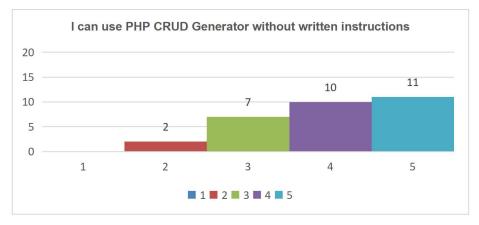


Figure 22: I can use PHP CRUD Generator without written instructions

Most of respondents (11) strongly agreed that they can use PHP CRUD Generator without written instructions. The least of respondents were 2 respondents disagreed. While, 7 respondents neutral and 10 respondents agreed it.

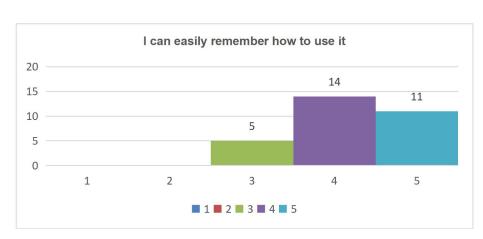


Figure 23: I can easily remember how to use it

Based on Figure 23, 14 respondents agreed that they can easily remember how to use it. While, 5 respondents neutral and 11 respondents strongly agreed it.

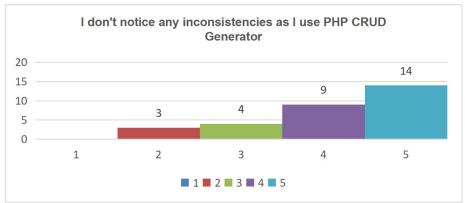


Figure 24: I don't notice any inconsistencies as I use PHP CRUD Generator

14 respondents strongly agreed that they did not notice any inconsistencies as they used PHP CRUD Generator. There were 3 respondents disagree, 4 respondents neutral and 9 respondents agreed it based on Figure 24.

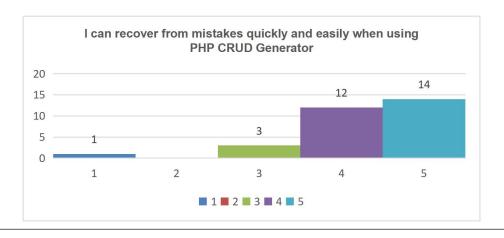


Figure 25: I can recover from mistakes quickly and easily when using PHP CRUD Generator

Based on Figure 25, 14 respondents strongly agreed that they can recover from mistakes quickly and easily when using PHP CRUD Generator. Only one respondent strongly disagreed, 3 respondents neutral and 12 respondents agreed it.

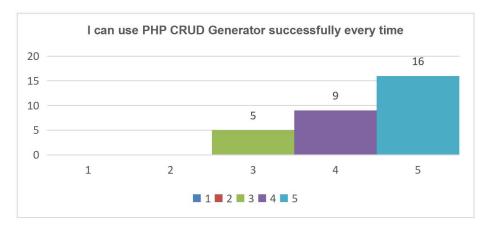


Figure 26: I can use PHP CRUD Generator successfully every time

Most of respondents (16) strongly agreed that they can use PHP CRUD Generator successfully every time. The least respondents were 5 respondents neutral while 9 respondents agreed it based on Figure 26.

Navigation and Hyperlinks of PHP CRUD Generator

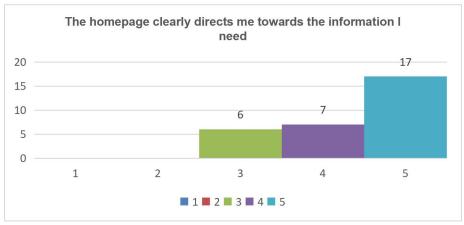


Figure 27: The homepage clearly directs me towards the information I need $\,$

Figure 27 shows 17 respondents strongly agreed that the homepage clearly directed them towards the information they needed. While, 6 respondents neutral and 7 respondents agreed it.

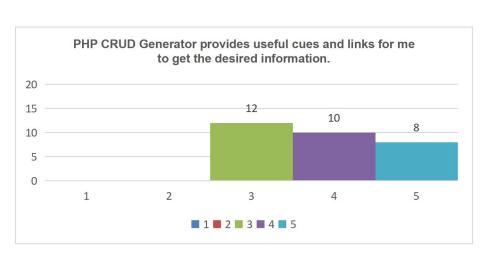


Figure 28: PHP CRUD Generator provides useful cues and links for me to get the desired information

Based on Figure 28, 12 respondents neutral that PHP CRUD Generator provided useful cues and links for them to get desired information. 8 respondents were strongly agree and 10 respondents agreed it.

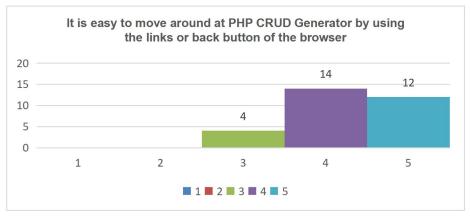


Figure 29: It is easy to move around at PHP CRUD Generator by using the links or back button of the browser

Based on Figure 29, 14 respondents agreed that PHP CRUD Generator was useful in overall. 4 respondents were neutral and 12 respondents strongly agreed it.

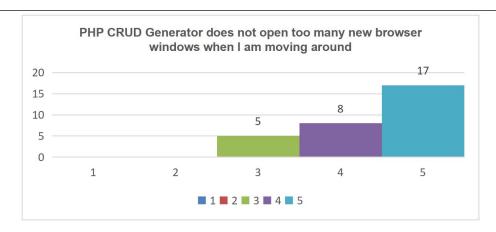


Figure 30: PHP CRUD Generator does not open too many new browser windows when I am moving around

The majority of respondents (17) strongly agreed that PHP CRUD Generator did not open too many new browser windows when they were moving around. The least respondents were 5 respondents neutral while 8 respondents agreed it.

Satisfaction of PHP CRUD Generator

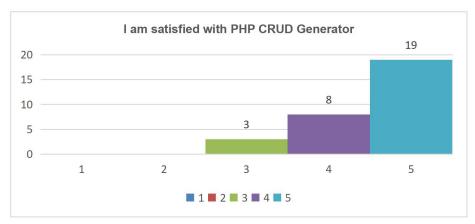


Figure 31: I am satisfied with PHP CRUD Generator

Based on Figure 31, 19 respondents strongly agreed that they satisfied with PHP CRUD Generator. While, 3 respondents neutral and 8 respondents agreed with statement.

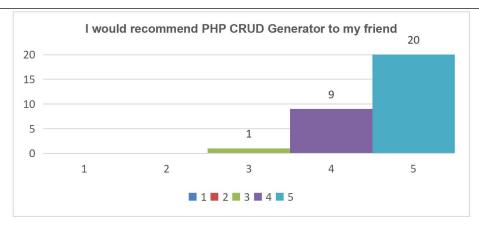


Figure 32: I would recommend PHP CRUD Generator to my friend

Based on Figure 32, 20 respondents strongly agreed that they would recommend PHP CRUD Generator to their friend. There was one respondent neutral while 9 respondents agreed with the statement.

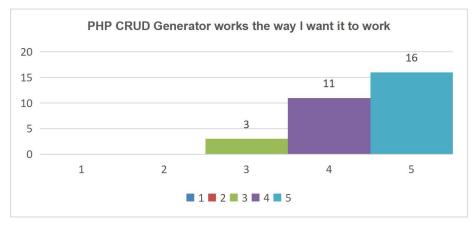


Figure 33: PHP CRUD Generator works the way I want it to work

Based on Figure 33, 16 respondents strongly agreed that PHP CRUD Generator worked the way they wanted it to work. 3 respondents were neutral and 11 respondents agreed it.

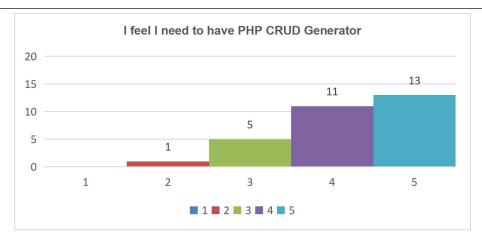


Figure 34: I feel I need to have PHP CRUD Generator

The Figure 34 shows 13 respondents strongly agreed that they felt they needed to have PHP CRUD Generator. While, one respondent disagreed, 5 respondents were neutral and 11 respondents agreed it.

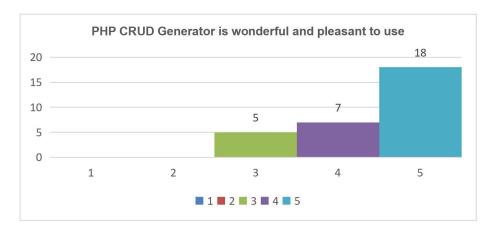


Figure 35: PHP CRUD Generator is wonderful and pleasant to use

Most of respondents (18) strongly agreed that PHP CRUD Generator was wonderful and pleasant to use. The least of respondents were 5 respondents neutral and 7 respondents agreed it based on Figure 35.

4. IMPLICATION OF THE RESULTS

Based on the results, the respondents can help to improve more the PHP CRUD Generator in the aspects of useful, ease of use, navigation and hyperlinks of it before implementing it in the future. Moreover, most of the respondents satisfied and pleasant to use the PHP CRUD Generator.

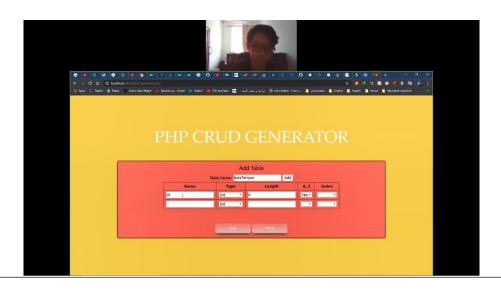
5. APPENDIX

Appendix 1: Visual Aids

There were evidence of field testing from online meeting:







| Student's Signature: <u>norhalimah</u> | Date: <u>23 May 2020.</u> |
|--|---------------------------|
| TO BE FILLED BY THE SUPERVI | SOR |
| Remark: | |
| Signature: | Date: |
| Name : Official Stamp: | |