Analysis MeetDurian

1.0 Methodology

In order to fit the findings and analysis into the allocated five pages, the following methodology and equation was designed to analyse the individual questions and summarise them into easy to understand measurement and graphs.

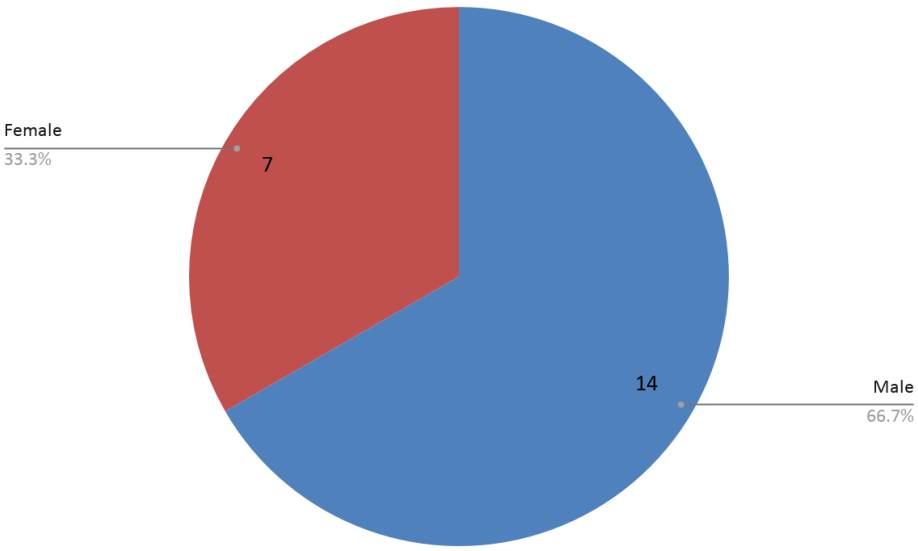
The equation for finding the weighted response % is as follows:
SUM(Response Values)/Number of Responses*Max Value

This allows for all of the answers to be measured by the same % positive or negative response. Any reading above 50% is closer to the positive and anything less than 50% is closer to the negative answer.

2.0 Questionnaire

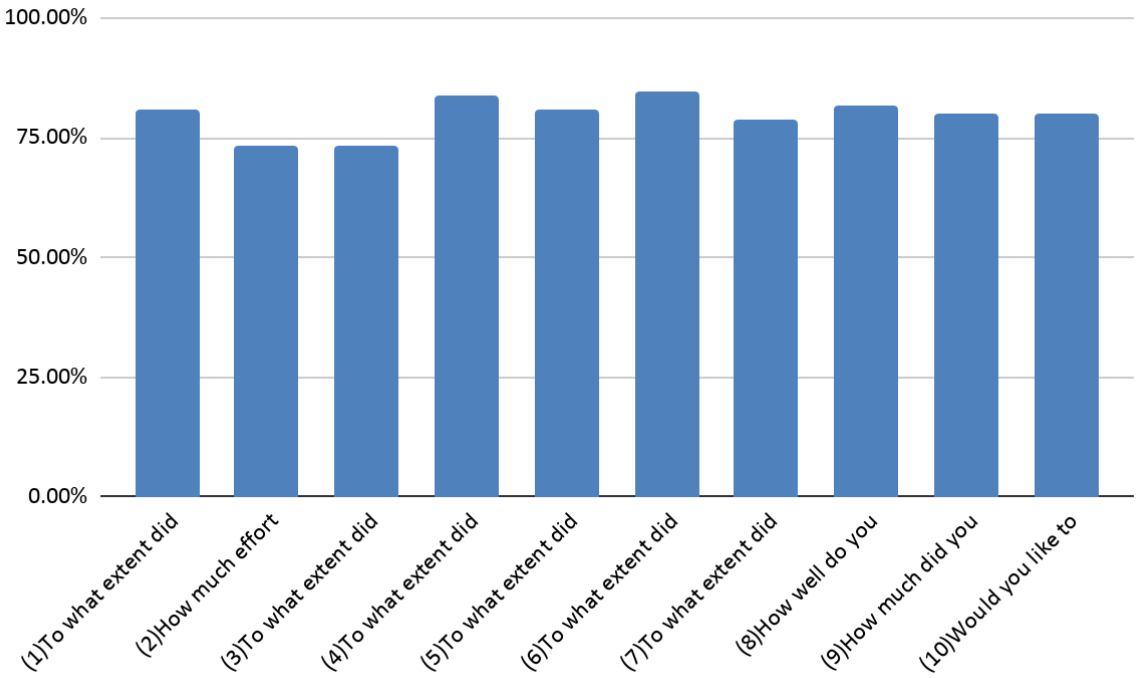
Below you will find the questionnaire respondent outcomes, visualised and analysed with the weighted methodology that was explained in the previous section.

2.1 Respondent Demographics



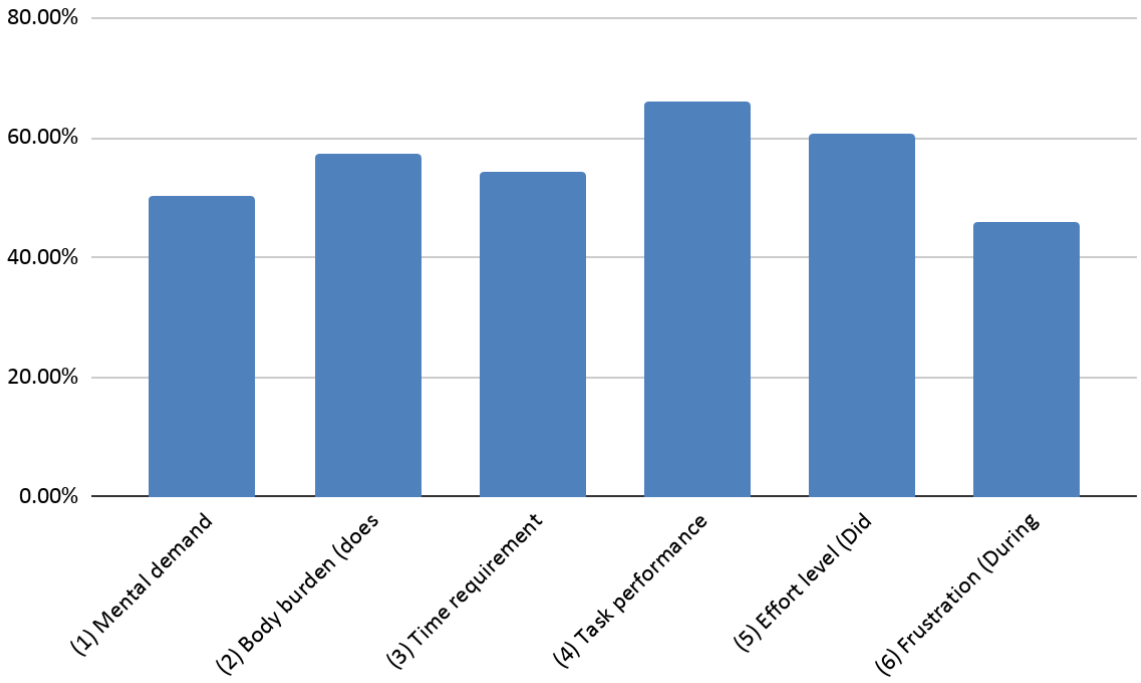
The questionnaire had 21 respondents with a varied age group of between 18 and 43 years old, the average age was 22.67 years old. The gender breakdown is 14 for males to 7 for females, meaning a heavy lean towards male demographics.

2.2 User Immersion



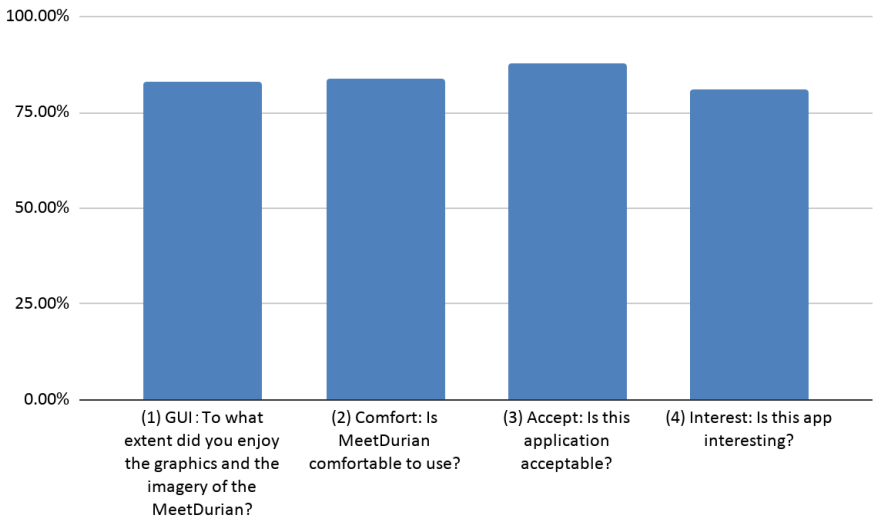
The game scored consistently high with all of the Immersion questions and maintained a positive response rate above 73% on all questions. This translates into the lowest reading of 73.33% on questions two and three and the highest of 84.76% on question six.

2.3 User Workload



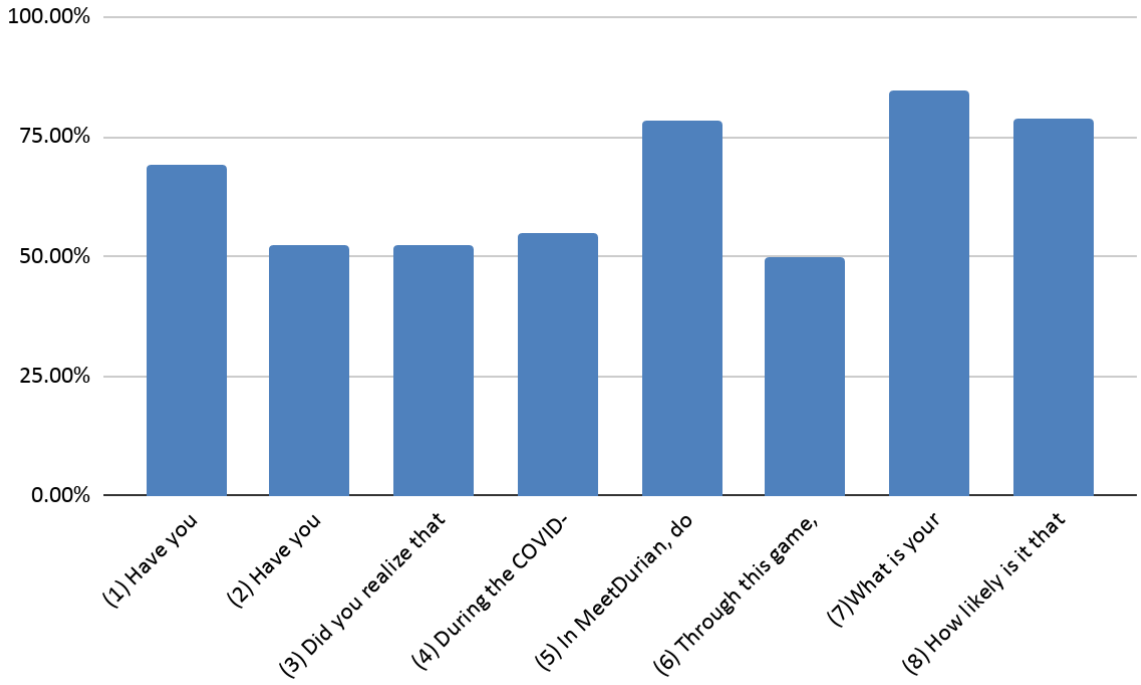
The workload perception is verified depending on the questions. The users did not find the game too mentaly demanding with a value of 50.34%. Only 57.37% felt physically tired. On average users spent 11 minutes 43 second on the game and felt the achievement was 66.21% satisfying. Users felt that they used only 60.77% of their potential effort and felt only 46.03% frustration while doing so.

2.4 User Satisfaction



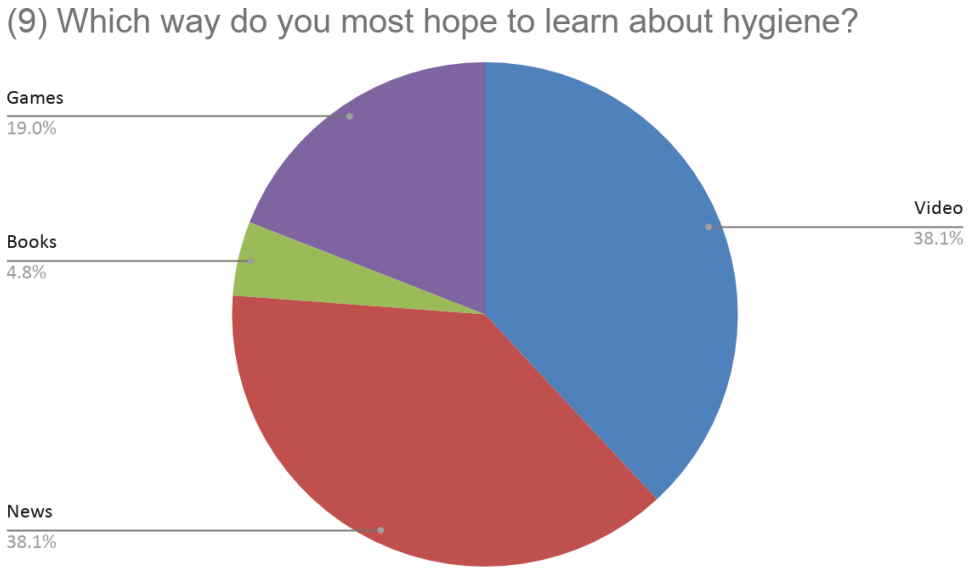
Users were very satisfied with the game and consistently gave it an above 80% positive response. The game scored 82.86% for Graphics, 83.81% for comfort, 87.26% for App acceptance and 80.95% for it being Interesting.

2.5 User Learning Outcomes



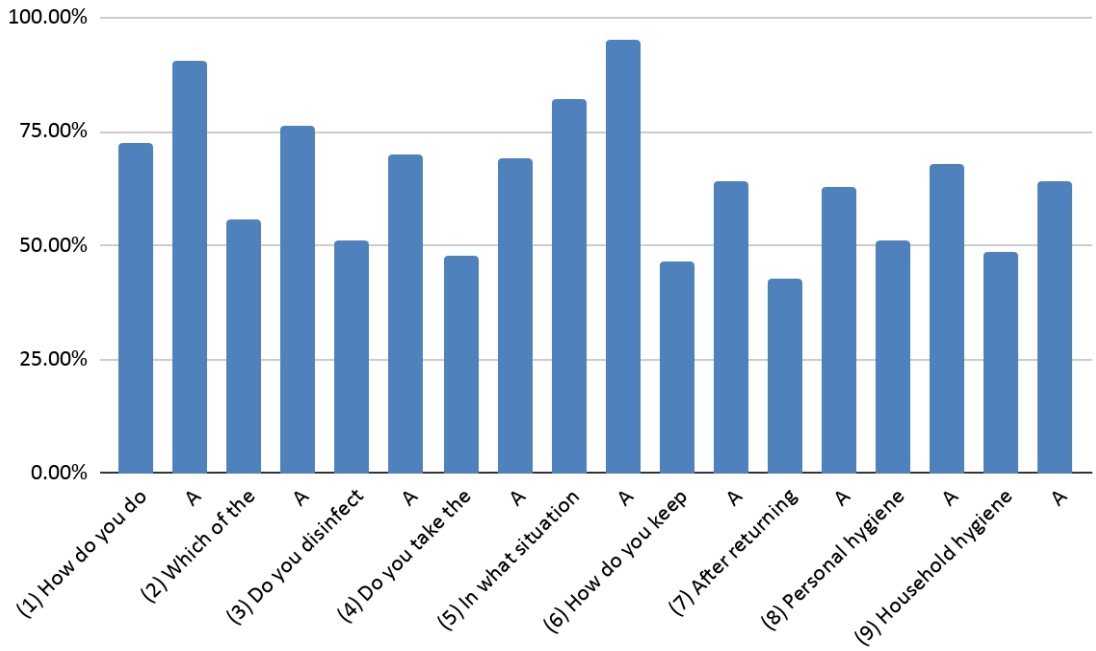
For questions one to six in this section, a binary answer of yes or no was provided and 50% means a unanimous yes, while 100% means everyone answering no. Eight people did not participate in a health quiz before. A single person did not understand the importance of wearing masks and that same person did not know that they needed a mask when going out. Only two people did not feel comfortable when seeing people without a mask outside. Nine people doubted their knowledge of

epidemic hygiene habits. All of the users stated that their interest in learning more about personal hygiene increased after the game. Respondents have an 84.52% weighted positive understanding of epidemic prevention and control.



Eight hope to learn though video, eight through news, one through books and four through games.

2.6 User Behavioral Changes



All of the users expressed that they will exhibit behavioral changes after the game on each of the questions. The handwashing quality increased from 72.62% to 90.48%.

Average social distancing increased from 2.24m to 3.05m. The rate of phone disinfecting increased from 51.19% to 70.24%. Rate of personal belongings disinfection rose from 47.62% to 69.05%. Mask wearing increased from 82.14% to 95.24%. Belongings cleaning increased from 46.43% to 64.29%. Cleaning after returning from outdoors increased from 42.86% to 63.10%. Personal Hygiene increased from 51.19% to 67.86%. Household hygiene and cleanliness increased from 44.81% to 64.29%. We can see that all of the categories saw a major improvement of around 20% on average.

3.0 Conclusion and Recommendations

From the respondent findings we can see that the respondents found the game very immersive. They found that it required a satisfactory level of workload and found it interesting and engaging and did not require too much time or make them frustrated. The user satisfaction was consistently high with all of the application aspects. The users had a pretty good understanding of the pandemic and generally followed the rules and regulations and wanted to learn more through a range of different methods. When comparing user behaviour before and after the game, all saw a major increase in their pandemic safety measures awareness and implementation.

Unfortunately the report size does not allow for an expanded analysis of responses to each question due to size constraints. A more detailed breakdown of the results and analysis can be found on the expanded worksheet.

Due to the relatively small sample size it would be advisable to run a secondary questionnaire with a larger sample size to reinforce the findings. It would also be advisable to allow for more open questions to gage if the data can be enriched with additional respondent opinion based data.

4.0 Independent Samples T-Test（For Q5）

Independent Samples T-Test								
						95% CI for Cohen's d		
Variables	t	df	p	Mean Difference	SE Difference	Cohen's d	Lower	Upper
Q5.1	-1.640	48	0.108	-0.560	0.342	-0.464	-1.023	0.101
Q5.2	-2.385	48	0.021	-0.640	0.268	-0.675	-1.242	-0.101
Q5.3	-1.795	48	0.079	-0.560	0.312	-0.508	-1.069	0.058

Independent Samples T-Test								
						95% CI for Cohen's d		
Variables	t	df	p	Mean Difference	SE Difference	Cohen's d	Lower	Upper
Q5.4	-2.737	48	0.009	-0.720	0.263	-0.774	-1.346	-0.195
Q5.5	-1.627	48	0.110	-0.320	0.197	-0.460	-1.020	0.104
Q5.6	-2.766	48	0.008	-0.520	0.188	-0.782	-1.355	-0.203
Q5.7	-3.564	48	< .001	-0.680	0.191	-1.008	-1.593	-0.414
Q5.8	-4.033	48	< .001	-0.600	0.149	-1.141	-1.735	-0.536
Q5.9	-3.517	48	< .001	-0.520	0.148	-0.995	-1.579	-0.401
Note. Student's t-test.								
Evaluation results: Levene's test is significant ($p < .05$), suggesting a violation of the equal variance assumption								
The Cohen'd represents the size of the effect amount, taking its absolute value								

Enclosure：Value meaning of the Cohen'd

Effect quantity	**Cohen'd**
Small effects	**0.15≤d＜0.4**
Medium effect	**0.4≤d＜0.75**
High effect	**d＞0.75**