Table 1 Schedule of activities

Activity	Week/Month																			
	Month 1				Month 2				Month 3				Month 4				Month 5			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Study of Literature	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨								
Collection Dataset					▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨				
Analisi Data													▨	▨	▨	▨	▨	▨	▨	▨
Report Elaboration																	▨	▨	▨	▨

Table 2. 1 Related
Research

	Paper 1	Paper 2	Paper 3	Paper 4
Research Title	User Experience Analysis of Paperless Health Center Information System Application using Usability Testing Method and User Experience Questionnaire (UEQ)	User Experience Evaluation at Edmodo and Google Classroom Using Technique for User Experience Evaluation in E-Learning (TUXEL) (Study at SMKN 5 Malang)	User Experience Evaluation of PUBG MOBILE Games Using Cognitive Walkthrough Method	User Experience Analysis on E-Village Applications Using Honeycomb UX Model
Year of Research	2019	2019	2019	2021
Research Object	Puskesmas Tarik Kabupaten Sidoarjo	SMKN 5 MALANG	Game PUBG *MOBILE*	E-Kelurahan Padang
Research Methods	Usability Testing and User Experience Questionnaire (UEQ) methods.	The method used by the author to evaluate user experience e-learning is technique for user eXperience evaluation in eLearning (TUXEL).	The study was conducted by the authors using the Cognitive Walkthrough method against respondents who were divided into two groups, namely 3 respondents who had never played PUBG MOBILE games and 3 respondents who often played PUBG MOBILE games and often played games of similar genres.	The methods used is Honeycomb
Data Collection Techniques	Literature studies and the dissemination of questionnaires to respondents	Literature studies and the dissemination of questionnaires to respondents.	Scenario and dissemination of questionnaires	Literature studies, interviews and questionnaire dissemination.
User Population	Paperless Health Center Information System Users	Students of SMKN 5 MALANG	PUBG MOBILE Game Users	People of Padang city
Sampling Techniques	Random Sampling Techniques	Random Sampling Techniques	Systematic Sampling	Convenience Sampling
Number of samples	25 Users	8 Respondents	6 respondents consisting of 3 respondents have never played PUBG MOBILE game and 3 people who often play PUBG MOBILE game	111 respondents from 10 sub-districts in Padang city
Research Results	The results of simple application user experience analysis using usability testing methods were	The results of this study on the aspect of general usability, Edmodo found 9 problems and Google	The results of the study concluded that evaluations in PUBG MOBILE games showed that problems	The results of this study showed that the average value of user experience in e-village applications as a whole

conducted on 3 respondents who produced effectiveness values of 100%, efficiency of 100% and satisfaction with System Usability Scale (SUS) 68.12. While the test with User Experience Quistionnaire (UEQ) was conducted on 25 respondents who produced an average score of 1,137 in perspicuity, dependability, attractiveness, efficiency, stimulation, and novelty (Febrianto, Putra, & Perdanakusuma, 2019).	Classroom 12 problems. In the pedagogical aspect of usability, Edmodo found 13 problems, and Google Classroom 15 problems. In the user experience aspect, Edmodo indicates the following code: (1) supports; (2) confusing; (3) Complicated. As for Google Classroom, indicates the following code: (1) practical; (2) Fun; (3) not meeting expectations; (4) Confusing. The conclusion that can be formulated is that Edmodo is suitable for learning processes that use e-learning fully, while Google Classroom is more suitable to be used as a support / complement to learning (Nurhayati, Az-Zahra, & Herlambang, 2019).	occurred a lot because of the difficult-to-understand display (text and icon) on the task when users learn about weapons in the game. However, the problem that arises is a mild problem and does not affect the main function in the game (Akbar, Az-Zahra, & Brata, 2019).	is 4.19, which means that e-village applications have been able to meet the expectations of their users, but still need improvements to be better. Of the seven VAARIABEL UX Honeycomb, it can be sorted variables that have the highest to lowest values as follows: usable variables have the highest average value, which is 4.29, followed by desirable variables (4.25), valuable and findable (4.20), credible and useful (4.14), while accesible variables have the lowest average value, which is 4.09. **Invalid source specified.**

Table 2.2 Comparison of Methods

	Assessment Aspects	Difference with UEQ
Honeycomb	accessible, credible, desireable, findable, usable, useful, dan valuable	There are some aspects of assessment that do not exist in UEQ such as, credible, findable, valueable. Honeycomb method is done by analyzing proposed value by analyzing the vision, mission, slogan, web official and advertising on an e-commerce. The results of the proposed values analysis are grouped by source and validated by experts.
Heuristic Evaluation Method	There are 15 principles of assessment in Heuristic Evaluation, Visibility of System Status, Match Between System and The Real Word, Error Recovery and Exiting, Consistency and Standards, Error Prevention, Navigation Support, Aesthethic, Help , Documentation, Interactvity, Message Design, Learning Design, Media Intergration, Instructional Assessment, Resource, Feedback	Heuristic evaluation is done using the help of an expert evaluator to find usability problems, evaluators will try the application first then record the problem, give suggestions for improvement, then give severity rating for each problem found. This method emphasizes the assessment of the usability of the system.
meCUE Questionnaire	Product characteristics (usefulness, usability, visual aesthetics, status, commitment), user emotions (positive and negative), consequences	In addition to some aspects of assessment, there are not many differences between this method and UEQ, both of which use questionnaires in the testing process.

	(product loyalty and intention to use), and the latter is the overall assessment of the product.	
Enhanced Cognitive Walkthrough	This method focuses on the ease of users in learning a system or application which is also known as the learnability aspect.	The enhanced cognitive walkthrough method is a usability evaluation method based on user experience. This method emphasizes more on the usability aspect. UEQ measures UX not only from the ease of using the system but also measures from aspects related to user emotions.

Table 3. 1 Scale and Value of UEQ Transformation

No	Scale	Transformation Value
1	7	+3
2	6	+2
3	5	+1
4	4	0
5	3	-1
6	2	-2
7	1	-3

Table 4. 1 Respondent's response

No	Items																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	4	5	2	2	5	4	6	5	1	6	5	1	6	5	6	6	5	4	2	3	6	4	2	4	4	5
2	3	3	4	2	2	5	5	4	3	2	7	1	7	7	3	6	2	2	4	4	2	5	2	1	6	4
3	4	3	6	6	3	4	4	4	5	3	4	4	4	4	4	4	4	4	4	4	3	4	3	4	4	4
4	5	3	3	3	3	4	4	4	4	3	4	3	5	5	5	5	3	1	1	5	3	5	1	1	1	5
5	6	4	1	2	3	4	6	5	1	1	6	2	3	4	4	5	1	1	2	5	1	4	5	2	1	1
6	4	3	2	2	2	6	5	6	3	2	6	2	5	5	6	5	2	2	1	5	2	5	1	1	1	1
7	4	5	3	2	3	5	4	5	2	1	5	3	6	5	2	6	2	2	1	5	1	5	2	3	1	1
8	4	3	2	1	1	5	5	5	1	2	5	2	6	6	5	5	1	1	1	6	1	4	1	2	1	2
9	6	6	2	2	2	6	6	6	1	2	5	2	6	6	2	4	2	2	1	6	2	4	3	2	2	2
10	5	6	2	2	2	6	5	5	2	2	5	2	5	6	2	6	2	2	1	6	1	5	1	1	1	1
11	4	5	2	2	3	6	5	6	2	3	3	2	3	6	6	5	2	2	1	5	4	4	2	2	1	1
12	5	5	1	2	3	6	6	6	2	2	2	2	6	6	6	6	2	2	1	5	2	4	3	2	1	1
13	6	5	2	2	2	5	5	5	3	3	4	3	5	5	2	6	1	1	1	6	1	6	2	1	1	1
14	6	5	1	1	1	6	6	6	2	2	1	1	6	6	5	5	2	3	1	6	2	6	2	2	2	3
15	5	3	3	1	2	6	5	6	2	2	2	2	6	6	2	6	2	2	2	4	1	6	2	2	2	3
16	5	3	3	1	3	5	5	6	2	2	2	2	6	6	2	5	3	3	2	3	2	5	2	2	2	2
17	5	5	2	3	2	5	5	5	2	2	5	2	6	5	5	5	2	1	1	5	1	3	1	1	1	1
18	4	4	3	3	3	6	5	6	2	2	6	2	6	6	2	6	2	2	1	5	1	6	2	1	1	1
19	5	5	2	2	2	6	6	6	1	1	6	1	6	6	2	6	1	1	1	4	1	5	1	1	1	1
20	5	6	2	1	1	1	7	7	1	1	7	1	7	7	1	7	1	1	1	4	1	7	1	1	1	1
21	6	4	2	2	3	6	6	6	2	1	1	1	6	6	1	6	2	1	1	3	2	4	1	1	1	1
22	5	6	1	1	1	7	6	6	1	1	6	1	6	6	6	6	1	1	1	3	1	3	2	1	1	1
23	6	5	1	1	1	6	6	6	1	1	7	1	7	7	1	6	1	1	1	4	1	4	3	1	1	1
24	5	4	1	3	2	3	5	6	1	1	7	1	7	5	5	4	1	1	1	5	1	6	1	1	1	1
25	5	6	1	2	2	5	5	6	1	1	6	1	5	5	4	4	3	2	1	6	2	5	2	2	1	1
26	5	5	2	2	2	6	6	6	2	2	6	2	6	7	1	7	2	1	1	5	1	7	1	1	1	1
27	6	5	1	1	1	6	6	6	1	1	6	2	6	5	4	5	3	2	1	4	2	4	2	1	1	1
28	5	7	2	2	2	6	6	6	1	1	6	1	5	6	2	6	2	2	1	3	1	3	2	2	2	1
29	5	4	3	3	3	5	5	6	2	2	6	3	5	5	2	5	2	1	1	4	1	5	1	1	1	6
30	6	6	2	2	2	6	5	5	1	2	6	2	6	6	6	6	2	2	2	3	2	4	2	2	2	2

Table 4. 2 Data transformation

No	Items																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	0	1	2	2	-1	0	2	1	3	-2	1	3	2	1	2	2	-1	0	2	-1	-2	0	2	0	0	1
2	-1	-1	0	2	2	1	1	0	1	2	3	3	3	3	-1	2	2	2	0	0	2	1	2	3	-2	0
3	0	-1	-2	-2	1	0	0	0	-1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
4	1	-1	1	1	1	0	0	0	0	1	0	1	1	1	1	1	1	3	3	1	1	1	3	3	3	1
5	2	0	3	2	1	0	2	1	3	3	2	2	-1	0	0	1	3	3	2	1	3	0	-1	2	3	-3
6	0	-1	2	2	2	2	1	2	1	2	2	2	1	1	2	1	2	2	3	1	2	1	3	3	3	-3
7	0	1	1	2	1	1	0	1	2	3	1	1	2	1	-2	2	2	2	3	1	3	1	2	1	3	-3
8	0	-1	2	3	3	1	1	1	3	2	1	2	2	2	1	1	3	3	3	2	3	0	3	2	3	-2
9	2	2	2	2	2	2	2	2	3	2	1	2	2	2	-2	0	2	2	3	2	2	0	1	2	2	-2
10	1	2	2	2	2	2	1	1	2	2	1	2	1	2	-2	2	2	2	3	2	3	1	3	3	3	-3
11	0	1	2	2	1	2	1	2	2	1	-1	2	-1	2	2	1	2	2	3	1	0	0	2	2	3	-3
12	1	1	3	2	1	2	2	2	2	2	-2	2	2	2	2	2	2	2	3	1	2	0	1	2	3	-3
13	2	1	2	2	2	1	1	1	1	1	0	1	1	1	-2	2	3	3	3	2	3	2	2	3	3	-3
14	2	1	3	3	3	2	2	2	2	2	-3	3	3	2	2	1	1	2	1	3	2	2	2	2	2	-1
15	1	-1	1	3	2	2	1	2	2	2	-2	2	2	2	-2	2	2	2	2	0	3	2	2	2	2	-1
16	1	-1	1	3	1	1	1	2	2	2	-2	2	2	2	-2	1	1	1	2	-1	2	1	2	2	2	-2
17	1	1	2	1	2	1	1	1	2	2	1	2	2	1	1	1	2	3	3	1	3	-1	3	3	3	-3
18	0	0	1	1	1	2	1	2	2	2	2	2	2	2	-2	2	2	2	3	1	3	2	2	3	3	-3
19	1	1	2	2	2	2	2	2	3	3	2	3	2	2	-2	2	3	3	3	0	3	1	3	3	3	-3
20	1	2	2	3	3	-3	3	3	3	3	3	3	3	3	-3	3	3	3	3	0	3	3	3	3	3	-3
21	2	0	2	2	1	2	2	2	2	3	-3	3	2	2	-3	2	2	3	3	-1	2	0	3	3	3	-3
22	1	2	3	3	3	3	2	2	3	3	2	3	2	2	2	2	3	3	3	-1	3	-1	2	3	3	-3
23	2	1	3	3	3	2	2	2	3	3	3	3	3	3	-3	2	3	3	3	0	3	0	1	3	3	-3
24	1	0	3	1	2	-1	1	2	3	3	3	3	3	1	1	0	3	3	3	1	3	2	3	3	3	-3
25	1	2	3	2	2	1	1	2	3	3	2	3	1	1	0	0	1	2	3	2	2	1	2	2	3	-3
26	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	-3	3	2	3	3	1	3	3	3	3	-3
27	2	1	3	3	3	2	2	2	3	3	2	2	2	1	0	1	1	2	3	0	2	0	2	3	3	-3
28	1	3	2	2	2	2	2	2	3	3	2	3	1	2	-2	2	2	2	3	-1	3	-1	2	2	2	-3
29	1	0	1	1	1	1	1	2	2	2	2	1	1	1	-2	1	2	3	3	0	3	1	3	3	3	2
30	2	2	2	2	2	2	1	1	3	2	2	2	2	2	2	2	2	2	2	-1	2	0	2	2	2	-2

Table 4. 3 Average scale of each respondent

Scale means per person					
Attractiveness	Perspicuity	Efficiency	Dependability	Stimulation	Novelty
1.00	0.75	1.00	0.75	0.25	0.75
1.33	1.50	1.00	1.25	1.50	0.25
0.00	-0.50	0.00	0.00	0.25	-0.25
1.67	0.50	1.25	1.00	1.00	1.00
1.67	1.00	0.75	2.00	1.50	0.75
1.67	1.00	1.50	2.25	1.75	0.75
1.33	2.00	1.50	1.75	1.00	-0.25

1.67	1.75	2.00	2.00	2.00	0.75
1.67	2.00	1.50	2.00	2.00	0.00
2.17	2.00	2.00	1.75	1.75	-0.25
1.67	0.50	1.25	1.50	1.50	0.50
2.00	1.75	1.00	1.25	1.75	1.00
2.00	1.75	1.75	1.75	1.75	-0.50
2.00	2.00	2.00	1.00	2.00	1.25
1.83	1.75	1.50	1.00	1.75	0.00
1.67	1.50	1.00	0.75	1.00	-0.25
1.83	1.75	1.25	1.75	1.75	0.50
2.00	1.50	1.75	2.25	1.50	-0.50
2.33	2.00	1.75	2.50	2.25	0.00
2.67	2.75	2.25	3.00	1.50	-0.25
2.50	1.50	1.00	1.00	2.00	-0.25
2.33	2.50	0.75	2.50	2.75	1.25
2.67	2.50	1.00	2.75	2.50	0.00
1.83	1.75	2.25	2.75	1.25	1.00
1.67	1.75	2.00	2.00	1.50	0.75
2.50	2.00	2.25	2.25	2.25	-0.50
2.00	2.00	1.25	2.00	2.25	0.75
2.00	2.25	0.75	2.25	2.00	0.00
1.67	1.25	1.50	2.25	1.50	0.75
2.00	2.00	1.00	1.75	1.75	1.00

Table 4. 4 Standard categories determine the mean

Category	Symbol	Value
Normal evaluation value	⇨	-0.8 until0.8
Positive evaluation value	⬆	>0.8
Negative evaluation value	⬇	<-0.8

Table 4. 5 Msl website UEQ value benchmark results

Scale	Mean	Comparisson to benchmark	Interpretation
Attractiveness	1.84	Excellent	In the range of the 10% best results
Perspicuity	1.63	Above Average	25% of results better, 50% of results worse
Efficiency	1.39	Above Average	25% of results better, 50% of results worse
Dependability	1.77	Excellent	In the range of the 10% best results
Stimulation	1.65	Good	10% of results better, 75% of results worse
Novelty	0.33	Below Average	50% of results better, 25% of results worse