



INTEGRATED DESIGN PROJECT

CSE~460

Experiment Design

(GROUP ~HOTEL, SEC~A)

PREDICTIS

201814022: Kazi Rafid Raiyan.

201814026: Angshu Bikash Mondol.

201814029: Tashfia Tasnim.

201814033: Shutonu Mitra.

201814048: Asima Oshin Putul.

201814056: MM Rushadul Mannan.

Pre Questionnaires:

Participant 1:

Question	Answer	Participant name
Do you recommend using a system that predict your heart condition before you face any heart problem?	Yes	Bimol Krishna Mandol
Will you be comfortable to use a wareable device to collect some data for this prediction?	Yes	
Do you recommend any continuous monitoring process using this system?	Yes	
Do you recommend any emergency contact functionality in this system?	Yes	

Participant 2:

Question	Answer	Participant name
Do you recommend using a system that predict your heart condition before you face any heart problem?	Yes	Nuzhat Sultana
Will you be comfortable to use a wareable device to collect some data for this prediction?	Yes	
Do you recommend any continuous monitoring process using this system?	Yes	
Do you recommend any emergency contact functionality in this system?	Yes	

Participant 3:

Question	Answer	Participant name
Do you recommend using a system that predict your heart condition before you face any heart problem?	Yes	Kazi Md. Safiullah
Will you be comfortable to use a wearable device to collect some data for this prediction?	Yes	
Do you recommend any continuous monitoring process using this system?	Yes	
Do you recommend any emergency contact functionality in this system?	Yes	

Participant 4:

Question	Answer	Participant name
Do you recommend using a system that predict your heart condition before you face any heart problem?	Yes	Bichitra Rani Mandol
Will you be comfortable to use a wearable device to collect some data for this prediction?	Yes	
Do you recommend any continuous monitoring process using this system?	Yes	
Do you recommend any emergency contact functionality in this system?	Yes	

Experiment Conduction Data Sheet:

Task 1: Profile data collection

Task 2: Hardware device connection (Pulse module)

Task 3: Risk zone calculation (Prediction)

Participant Name: Bimol Krishna Mandol

Task NO.	Task Completion Time	Success/Fail	No. of Click Requires Vs Expected	No. of Attempts	No. of Asking Help
Task 1	66s	Success	Required: 14 Expected: 14	1	0
Task 2	108 s	Success	Required: 2 Expected: 2	2	1
Task 3	8 s	Success	Required: 1 Expected: 1	1	0

Participant Name: Nuzhat Sultana

Task NO.	Task Completion Time	Success/Fail	No. of Click Requires Vs Expected	No. of Attempts	No. of Asking Help
Task 1	58 s	Success	Required: 14 Expected: 14	1	0
Task 2	115 s	Success	Required: 2 Expected: 2	1	0
Task 3	5 s	Success	Required: 1 Expected: 1	1	0

Participant Name: Kazi Mohammad Saifullah

Task NO.	Task Completion Time	Success/Fail	No. of Click Requires Vs Expected	No. of Attempts	No. of Asking Help
Task 1	39 s	Success	Required: 14 Expected: 14	1	0
Task 2	122 s	Success	Required: 2 Expected: 2	1	0
Task 3	8 s	Success	Required: 1 Expected: 1	1	0

Participant Name: Bichitra Rani Mandol

Task NO.	Task Completion Time	Success/Fail	No. of Click Requires Vs Expected	No. of Attempts	No. of Asking Help
Task 1	44 s	Success	Required: 14 Expected: 14	1	0
Task 2	115 s	Success	Required: 2 Expected: 2	1	0
Task 3	8 s	Success	Required: 1 Expected: 1	1	0

Post Questionnaires:

Participant 1:

Question	Answer	Participant name
Do you think the app navigation was user friendly?	Yes	Bimol Krishna Mandol
Did you face any kind of trouble connencting the hardware devices?	No	
Do you think the prediction result and doctor's consultation was useful to you?	Yes	
Do you recommend others using this app besides doctor's supervision?	Yes	

Participant 2:

Question	Answer	Participant name
Do you think the app navigation was user friendly?	Yes	Nuzhat Sultana
Did you face any kind of trouble connencting the hardware devices?	No	
Do you think the prediction result and doctor's consultation was useful to you?	Yes	
Do you recommend others using this app besides doctor's supervision?	Yes	

Participant 3:

Question	Answer	Participant name
Do you think the app navigation was user friendly?	Yes	Kazi Md. Safiullah
Did you face any kind of trouble connencting the hardware devices?	No	
Do you think the prediction result and doctor's consultation was useful to you?	Yes	
Do you recommend others using this app besides doctor's supervision?	Yes	

Participant 4:

Question	Answer	Participant name
Do you think the app navigation was user friendly?	Yes	Bichitra Rani Mandol
Did you face any kind of trouble connencting the hardware devices?	No	
Do you think the prediction result and doctor's consultation was useful to you?	Yes	
Do you recommend others using this app besides doctor's supervision?	Yes	

Experimental analysis:

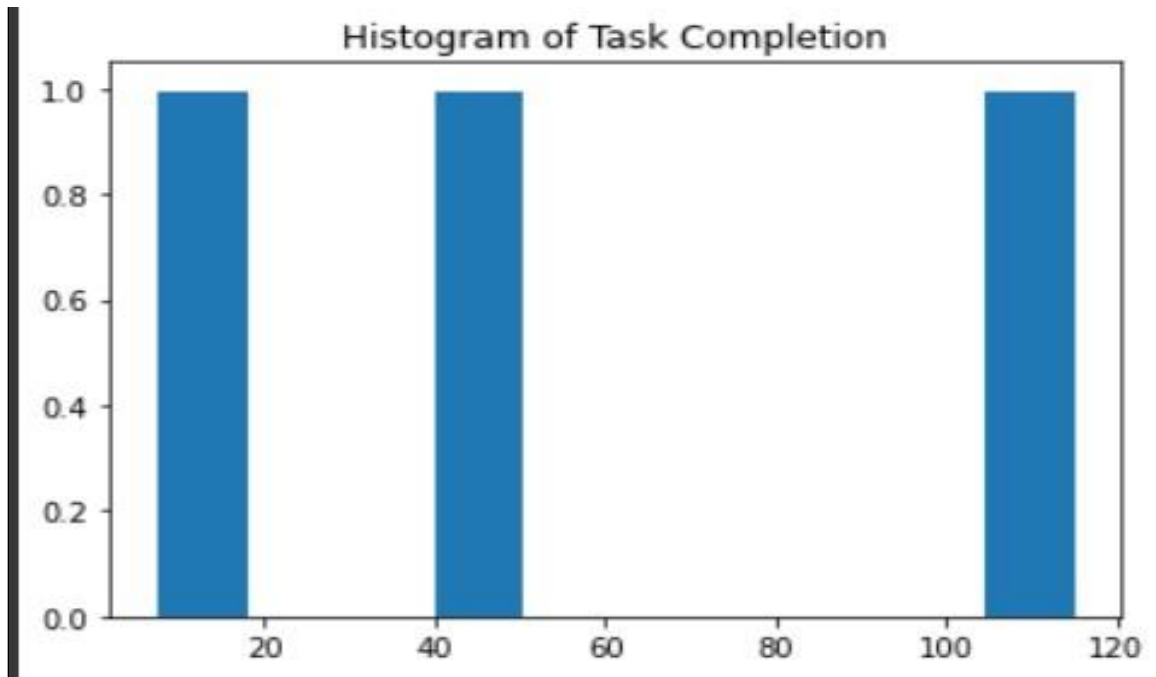


Fig1: Histogram of task Completion.

Experimental data:

Task NO.	Avg Task Completion Time	Avg Success/Fail	Avg No. of Click Requires Vs Expected	Avg No. of Attempts	Avg No. of Asking Help
Task 1	51.75s	Success	14	1	0
Task 2	115 s	Success	2	1.25	0.25
Task 3	7.25 s	Success	1	1	0

Experimental data:

Task NO.	STD Task Completion Time	STD Success/Fail	STD No. of Click Requires Vs Expected	STD No. of Attempts	STD No. of Asking Help
Task 1	10.77	Success	0	0	0
Task 2	4.94	Success	0	0.433	0.433
Task 3	1.29 s	Success	0	0	0

Result of evaluation study:

Task Name	Result of Task	Observational Time Period
Task 1: Profile data collection	100%	51±.75
Task 2: Hardware device connection (Pulse module)	95%	115 ± .00
Task 3: Risk zone calculation (Prediction)	100%	7 ± .25

Task	Number of attempt	Task completion time	Number of time asking help
Task 1: Profile data collection	1 ±0	51.75±10.77	0 ±0
Task 2: Hardware device connection (Pulse module)	1±.433	115 ± 4.94	0 ±.433
Task 3: Risk zone calculation (Prediction)	1±0	7.25 ± 1.29	0 ±0