

Manuscript: "Proposed Design of a Real-Time COVID-19 Pandemic Contact Tracing Using Mobile Phone"

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Peer review:

Reviewer 1: Hier, Daniel,

Missouri University of Science and Technology, Rolla MO USA

Reviewer 2: William Kemei,

Jomo Kenyatta University of Agriculture and Technology

Reviewer 3: Isaac Nwankwo,

Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

ESJ Manuscript Evaluation Form 2020

Reviewer Name: Daniel B. Hier MD	
University/Country: Missouri University of Scientific Country: Missouri University Office Country	ence and Technology, Rolla MO USA
Date Manuscript Received:	Date Review Report Submitted:
Manuscript Title:	
Design of a Real Time COVID-19 Pandemic	Surveillance System Using Mobile Phone
Design of a Real Time COVID-19 Pandemic ESJ Manuscript Number: 0924	
	-/20

Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

Questions	Rating Result [Poor] 1-5 [Excellent]
1. The title is clear and it is adequate to the content of the article.	3

The title does not explicitly indicate whether discussed system "has been implemented" or is simply a "hypothetical proposal" or a "Use Case description". Based on my reading the system has not been built or implemented and the title needs to be changed to reflect this. The discussion and references are not extensive enough to consider this article a "Literature Review".

2. The abstract clearly presents objects, methods and results.

The abstract states that "this research posed to investigate a surveillance a model for an interactive computer system using mobile phones and the internet for real-time collection and transmission of events related to COVID-19." If the authors mean by "research" a thought experiment in which a hypothetical system is built and evaluated, they should explicitly say so. More detail on the advantages and disadvantages and barriers to implementation is needed, even if it is a "thought experiment".

3. There are few grammatical errors and spelling mistakes in this article.

The writing style could be improved by eliminating excess wording. Clarity of the article would be improved by making the writing more concise and precise.

4. The study methods are explained clearly.

There are inadequate details in the METHODS section on who would use the system, what data would be collected, how the data would be integrated into a single usable database. Would the database be accessible by all users by mobile phone? Would mobile phones only be used for data contribution? The issues of case verification, case tracing, isolation, and quarantine as well as treatment seem unaddressed. The authors do not discuss issues related to contact tracing when names, addresses and contact information is not made easily available.

· .	<i>J</i>		
5. The body of the errors.	paper is clear and does	not contain	2

This paper has a METHODS section and a DISCUSSION section but no RESULTS

section. Although not explicitly stated, it appears that the authors have not actually implemented any working system and their paper is a description of how a hypothetical COVID-19 reporting system based on a mobile phone system would work. If this is the case, the authors need to take a different approach with regard to the paper title and organization. The title should explicitly state that it is a "Proposed design for...." and in place of missing RESULTS section the authors should provide a detailed USE CASE DESCRIPTION which indicates how a mobile phone system would function, where it would function, who would use it, and what type of information would be collected.

6. The conclusions or summary are accurate and supported by the content.

2

The authors have provided no data in support of their conclusion that "public health surveillance can be built using model phones...". Unless a system is actually built and proven feasible, all they can assert is that is possible to "design such a system"—feasibility depends on evidence-based implementation.

7. The references are comprehensive and appropriate.

2

There are inadequate number of references regarding surveillance efforts for COVID-19. Only one reference specifically addresses issues regarding COVID-19 which is the central theme of this article.

Overall Recommendation (mark an X with your recommendation):

Accepted, no revision needed	
Accepted, minor revision needed	
Return for major revision and resubmission	x
rectain for major to vision and resummission	

Comments and Suggestions to the Author(s):

- 1. Improve the conciseness and precision of the writing.
- 2. Avoid unnecessary wordiness where possible.
- 3. Explicitly state whether the system in question has "been implemented" or is "being proposed"
- 4. In place of a missing RESULTS section, insert a more detailed USE CASE DESCRIPTION of the proposed system.
- 5. In the discussion section, more thoroughly discuss the advantages and disadvantages of such a system. Some discussion of costs compared to other systems is needed. Who would use the system? What sort of data is collected? How is the data shared and distributed? What are barriers (especially privacy concerns)?

From WIKIPEDIA:

Use cases are a technique for capturing, modelling and specifying the requirements of a system. [10] A use case corresponds to a set of behaviours that the system may perform in interaction with its actors, and which produces an observable result that contribute to its goals. Actors represent the role that human users or other systems have in the interaction.

In the <u>requirement analysis</u>, at their identification, a use case is named according to the specific user-goal that it represents for its primary actor. The case is further detailed with a textual description or with additional graphical models that explains the general sequence of activities and events, as well as variants such as special conditions, exceptions or error situations.

According to the <u>Software Engineering Body of Knowledge (SWEBOK)</u>, ¹¹⁶¹ use cases belong to the scenario-based <u>requirement elicitation</u> techniques, as well as the <u>model-based analysis</u> techniques. But the use cases also supports narrative-based requirement gathering, incremental requirement acquisition, system documentation, and acceptance testing. ¹¹¹

ESJ Manuscript Evaluation Form 2020

This form is designed to summarize the manuscript peer review that you have completed and to ensure that you have considered all appropriate criteria in your review. Your review should provide a clear statement, to the authors and editors, of the modifications necessary before the paper can be published or the specific reasons for rejection.

Please respond within the appointed time so that we can give the authors timely responses and feedback.

NOTE: ESJ promotes peer review procedure based on scientific validity and technical quality of the paper (not perceived the impact). You are also not required to do proofreading of the paper. It could be recommended as part of the revision. ESJ editorial office would like to express its special gratitude for your time and efforts. Our editorial team is a substantial reason that stands ESJ out from the crowd!

Date Manuscript Received: 26 Sept 2020	Date Review Report Submitted: 19 th oct 2020	
Manuscript Title: Design of a Real Time COVID-19 Pandemic Surveillance System Using Mobile		
Phone		
ESJ Manuscript Number: 0924/20		
You agree your name is revealed to the author of the paper: No		
You approve, your name as a reviewer of this paper, is available in the published version of the paper: Yes		

Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

Questions	Rating Result [Poor] 1-5 [Excellent]
1. The title is clear and it is adequate to the content of the article.	3

(Please insert your comments)	
Tittle not rhyming with the body	
2. The abstract clearly presents objects, methods and results.	3
(Please insert your comments) Not clear. Does not capture all sections of the study	
3. There are few grammatical errors and spelling mistakes in this article.	3
(Please insert your comments) See the highlighted areas for grammatical corrections	
4. The study methods are explained clearly.	2
(Please insert your comments) No scientific methods , procedures or standards followed	
5. The body of the paper is clear and does not contain errors.	3
Body not explaining the expected content according to the	tittle and objective.
6. The conclusions or summary are accurate and supported by the content.	3
(Please insert your comments) Conclusion made has no relationship with the tittle, object No study findings are seen.	tive and discussions.
7. The references are comprehensive and appropriate.	3
(Please insert your comments) Not adequate, others available in reference but not in the	context

Overall Recommendation (mark an X with your recommendation):

Accepted, no revision needed	
Accepted, minor revisions needed	
Return for major revision and resubmission	X

Comments and Suggestions to the Author(s):

There was no research or study done here. Check for the correct definition of research then know how it's contacted and reported.

Tittle, objectives, discussion and conclusions not rhyming

ESJ Manuscript Evaluation Form 2020

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Reviewer Name: Asso. Prof. Isaac Nwankwo	Email:	
University/Country: Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.		
Date Manuscript Received:	Date Review Report Submitted:	
Manuscript Title:		
ESJ Manuscript Number:		
You agree your name is revealed to the author of the paper: Yes		
You approve, your name as a reviewer of this paper, is available in the "review history" of the paper: Yes You approve, this review report is available in the "review history" of the paper: Yes		

Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

Questions	Rating Result [Poor] 1-5 [Excellent]
1. The title is clear and it is adequate to the content of the article.	3
The title is ok.	
2. The abstract clearly presents objects, methods and results.	2
The abstract needs restructuring. Much abstract information is	lacking in it. Refer to

my comment on it for detailed information.	
3. There are few grammatical errors and spelling mistakes in this article.	4
Minimal grammatical expressions.	
4. The study methods are explained clearly.	3
The study method is not explained clearly. That is why the absany information on the research design.	tract could not carry
5. The body of the paper is clear and does not contain errors.	2
The body has no errors but basic information on COVID-19 is comment in-text.	absent in it. See my
6. The conclusions or summary are accurate and supported by the content.	3
The conclusion is ok. But the authors should add recommenda	tions to the work.
7. The references are comprehensive and appropriate.	4
Ok.	1

Overall Recommendation(mark an X with your recommendation):

Accepted, no revision needed	
Accepted, minor revision needed	X
Return for major revision and resubmission	
Reject	

Comments and Suggestions to the Author(s):

The abstract and body of the work need to be revisited. Add research methodology and basic knowledge of COVID-19.