From:	UCAmI 2017 <ucami2017@easychair.org>
Sent:	16 June 2017 09:15
To:	Cleland, Ian
Subject:	UCAmI 2017 notification for paper 43

Dear Ian Cleland,

We are very glad to inform you that your submission number 43, entitled "A Holistic Technology-Based Solution for Prevention and Management of Diabetic Foot Complications ", has been accepted as a LONG PAPER for presentation at the 11th International Conference on Ubiquitous Computing & Ambient Intelligence (UCAmI 2017).

Please revise your paper carefully according to reviewers' comments, and upload the camera ready version via Easychair before JULY 15th. This deadline is non-extendable.

Make sure that the manuscript complies the LNCS FORMAT GUIDELINES:
http://mamilab.esi.uclm.es/ucami2017/cfp.html
Remember that your manuscript should not exceed the TWELVE PAGES LIMIT, including figures and appendices.

In order to include your paper in the Springer proceeding, we need that you carefully follow these 3 MANDATORY instructions:

1. UPLOAD the camera ready version of your paper. Camera ready papers will be uploaded as rtf, .doc or latex.

2. UPLOAD, as a separate file, the copyright form, filled in all its parts and signed by the corresponding author. Download the copyright form here:
ftp://ftp.springer.de/pub/tex/latex/llncs/LNCS-Springer_Copyright_Form.pdf
Please, fulfil all fields including:
- Title of the book: Ubiquitous Computing & Ambient Intelligence. Health, AAL, HCI, IoT & Smart Cities, Sensors & Sustainability.
- Volume Editors: S. Ochoa, P. Sing & J. Bravo

3. Complete the registration for the conference by July, 15th (at least one author per paper). Registration may be completed online from:
http://mamilab.esi.uclm.es/ucami2017/registration.html
You can find below the reviewer's comments.

Thank you for your cooperation, and do not hesitate to contact us for any further question.

Best regards,

* Please, do not reply to this mail account. You may contact General Chair (grupo.mami@uclm.es) for any question regarding UCAmI.

---------------------- REVIEW 1 --------------------
PAPER: 43
TITLE: A Holistic Technology-Based Solution for Prevention and Management of Diabetic Foot Complications
AUTHORS: Ian Cleland, Joseph Rafferty, Jonathan Synnott, Jill Cundell, Adele Boyd, Chris Nugent, Priyanka Chaurasia, Ken Armstrong, Godfrey Madill, Leeann Monk- Ozgul and Stephen Burns

Relevance to UCAmI Audience: 5 (excellent)
Technical Quality: 5 (excellent)

Literature Review: 5 (excellent)
Empirical Support: 5 (excellent)
Presentation: 4 (good)
Is the paper in LNCS format?: 1 (Yes)
Is the article acceptable as: 3 (Full Paper)
Originality: 5 (excellent)
Overall evaluation: 3 (strong accept)

----------- Overall evaluation -----------
The paper is excellent. There are only some mistyping errors, which should be corrected in the final version.

----------------------- REVIEW 2 --------------------
PAPER: 43
TITLE: A Holistic Technology-Based Solution for Prevention and Management of Diabetic Foot Complications
AUTHORS: Ian Cleland, Joseph Rafferty, Jonathan Synnott, Jill Cundell, Adele Boyd, Chris Nugent, Priyanka Chaurasia, Ken Armstrong, Godfrey Madill, Leeann Monk- Ozgul and Stephen Burns

Relevance to UCAmI Audience: 4 (good)
Technical Quality: 3 (fair)
Literature Review: 4 (good)
Empirical Support: 4 (good)
Presentation: 4 (good)
Is the paper in LNCS format?: 1 (Yes)
Is the article acceptable as: 3 (Full Paper)
Originality: 4 (good)
Overall evaluation: 1 (weak accept)

----------- Overall evaluation -----------
This paper presents a usability evaluation of a smartphone based solution for the management of diabetic foot disease. The solution combines novel thermal imaging with tailored educational content and gamification elements in an attempt to improve self-management of the condition. The authors present in a clearly way the clinical problems and the urgent needs to provide effective solutions. In this context, the idea is really valuable. However, the authors should improve their paper by integrating the following comments:

Could you add more details on the architecture? What about privacy issues? Everyone can access the web portal and the app?

You collected feedback from only 7 participants. You have to increase the number of subjects prior to being considered for a publication. Why did you choose participants aged from 30 to 64? I suggest to include in the study two population (healthy young subject VS elderly person). People aged 30 are quite different from people aged 64.

As described in the methodology section, you asked the participants to perform 2 tasks and then you asked "three" things: 1) a list of customized questions of the interface 2)SUS 3)a list of customized questions on the part related on the "scan your feet". Is that true? Could you improve the description of part 1) and 3)? For instance, what did you ask?

How do you choose the threshold for the SUS questionnaire? Could you cite some literature work which sustains your thesis?

Check English spelling and the paragraphs numbers.

----------------------- REVIEW 3 --------------------
PAPER: 43
TITLE: A Holistic Technology-Based Solution for Prevention and Management of Diabetic Foot Complications

AUTHORS: Ian Cleland, Joseph Rafferty, Jonathan Synnott, Jill Cundell, Adele Boyd, Chris Nugent, Priyanka Chaurasia, Ken Armstrong, Godfrey Madill, Leeann Monk- Ozgul and Stephen Burns

Relevance to UCAmI Audience: 4 (good)
Technical Quality: 4 (good)
Literature Review: 4 (good)
Empirical Support: 4 (good)
Presentation: 4 (good)
Is the paper in LNCS format?: 1 (Yes)
Is the article acceptable as: 3 (Full Paper)
Originality: 4 (good)
Overall evaluation: 1 (weak accept)

----------- Overall evaluation -----------
SUMMARY

The manuscript presents a system designed to support people with diabetes monitoring their feet. The system entails an application administring access to educational content, another application for taking thermal images of feet, and the required hardware for taking the thermal images. The authors conducted a workshop with seven participants to assess the systems' usability. Participants found the apps mostly useful but reported the need of assistance for taking the thermal images.

CRITIQUE

The manuscript succeeds in illustrating the problems people with diabetes face as they seek to monitor their health conditions. The authors propose a system with which they can take the monitoring into their own hands. This serves health care professionals by reducing costs and time. Therein, the manuscript focuses on Diabetic Foot Complications.

The use of thermal imaging to aid diagnostics for diabetes patients has been established, for instance, by Ring (2010). The manuscript extends this idea by proposing to use a thermal imaging device attachable to modern smartphones. Some participants of the workshop report that they failed to take proper images. The need for further assistance may counteract the reduced effort for health care professionals. The discussion pays mostly attention to findings related to the usability or educational material. The struggles to take the necessary thermal images should be discussed in greater details. They might grow to large obstacles for the application of the proposed system.
The system features elements of Gamification. While engaging users is necessary to assert the educational effect, research suggests that users react differently toward elements. Elements can increase engagement for a subset of users and leave others unaffected or even reduce the engagement of some users. The manuscript provide too few details to assess the expected effect of Gamification.

As the authors mention, the educational material would have to be tailored more specifically to mobile devices for users to actively engage with it.

There are two additional aspects worthy of discussion. First, the system is designed to use cloud services. This could potentially lead to privacy concerns by patients. Second, the economic value added through using the system instead of manual care could be estimated. This would help to assess whether competition is to be expected to establish a market.

Overall, I like the idea to include patients more into the health monitoring while using available technology. Still, I feel that the difficulties taking thermal images would be a knock-out criterion for marketing the system as it is.

SYNTHESIS

Patients difficulty taking thermal images could be overcome by adding the possibility to remotely trigger the process. Most modern smartphone come equipped with voice recognition capabilities. Perhaps, the device could be

put in the appropriate distance and the thermal image be taken as the patient says "take picture!" or similar commands. It may be necessary to provide a fixation to make sure that the thermal camera stays put.

Regarding the gamification, or alternatively to it, patients taking thermal images on a regular basis could be awarded with special services. Their efforts allow medical doctors to derive better diagnoses. Perhaps, they could be rewarded with shorter waiting times or similar advantages.

SUGGESTED ADJUSTMENTS

(§3) => the term "hotspot" may be ambiguously used by computer scientists and medical scientists and should be defined
(Figure 2) => the figure should have a better constrast between font and box colour
(§4.1) => "Seven participants (three female, four male), [...]"; do not start sentences with "7"
(§5) => "This content was repurposed from web-based educational resources [...]" instead of "wed based"
(References) => 1. Bakker, K., et al.; in the references, you should replace the "et al." with the complete list of authors, unless there are too many to reasonably include (applies also to 13, 15, 16, 17, 18, and 21)

REFERENCES

RING, Francis. Thermal imaging today and its relevance to diabetes. 2010.