



Developing A Comprehensive Tool to Support Requirements Analyst During Elicitation Interviews

Norah Jean-Charles

Advisor: Dr. Paola Spoletini

Department of Computer Science



KENNESAW STATE UNIVERSITY



National Science Foundation

ABSTRACT

- To address the issue of ambiguity between the requirements analyst and the stakeholder and to assist with gathering requirements, a proposition is to create a comprehensive tool for requirements analysts to be able to analyze and synchronize real-time data acquired from the E4 wristband and voice recording.
- The main questions: (1) How can a user-friendly application be designed to record voice and biofeedback data in real-time? (2) How can the biofeedback data be synchronized with the voice recording data?

BACKGROUND

- Stakeholders have been interviewed using different voice recording platforms and the Empatica E4 wristband to gather biofeedback data.
- Support the requirements analyst during an elicitation interview in order to eliminate any miscommunication or misunderstandings between the requirements analyst and the stakeholder due to ambiguity in questions, statements, and responses.
- A requirements analyst conducts elicitation interviews in order to gather requirements which is a highly difficult task.



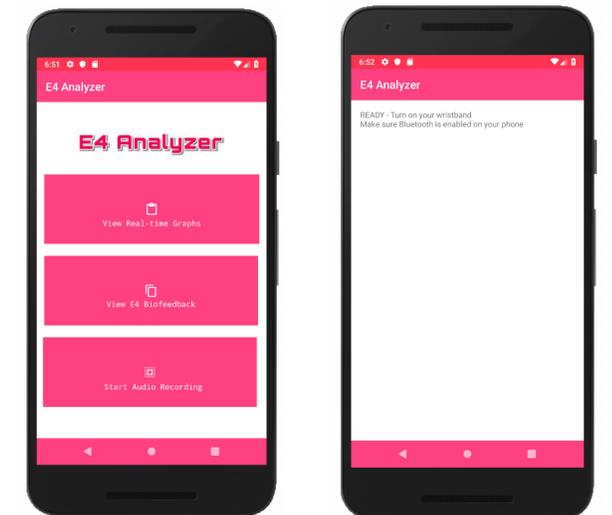
Mobile application replica of how receiving biofeedback data in real-time from the E4 wristband would look like

METHODS

- Used Android Studio framework to build app
- Programmed using Java and XML
- Cloned Empatica project from GitHub
- Created recorder and real-time graphs



Interface of mobile app



Left: Options to choose from
Right: Second option

CONCLUSION

A user-friendly application that synchronizes biofeedback and voice recording data was in the works of development. The app should be used to support a requirements analyst during requirements elicitation interviews and help the analyst identify problems or concerns in the communication to better assess and engage the stakeholder.

ACKNOWLEDGMENTS

This project is funded by NSF under grant CCF-1718377. Any opinions, findings, and conclusions or recommendations expressed in this material are those of author(s) and do not necessarily reflect the views of the National Science Foundation.