CM10251B Research Write Up – Collated LG

FD, ED

A recurring theme throughout our research into personal informatics is the idea that the user must want to track their data, as well understand how to best make use of the system given to them. \cite{Rapp2014a} suggests that “common users” with little prior experience can suffer from problems with familiarity and motivation with the tracking of their personal data. They go on to suggest factors that affect self-monitoring such as “motivation for change” and “goal-setting feedback and reinforcement” should be kept in mind during the development of the program in order to maximise user interaction with the app. Through the factors given in this article, we should be able to increase the effectiveness of the user monitoring their own data, as well as collect accurate and important data.

This is supported by who studied the long-term effects of using personal informatics tracking devices such as Nike’s “FuelBand” which discovered many users experienced a short-term improvement to their health. This was due to the encouragement that users receive on such devices. This highlights the potential for long term health benefits to users that are motivated enough to continue monitoring their data over longer period. While this is not directly applicable to our proposed solution, it provides insight to the effects of personal informatics in the long and short-term. In a similar manner, being able to track what kinds of music make the user happier or focused may provide benefits to them in the long run as they listen to more of that type of music.

The idea of trust in a system is an important concept; a user’s trust in the system is important as that will affect their motivation, and their likelihood of continued use of the system. In the case that the program produces a result that either the user disagrees with or dislikes, this can lead to a loss in trust, and as a result, a loss of interest in the system. To increase this sense of trust, the user should be shown how the data is collected, and to provide them with an understanding of what the data means. In addition to this, meaningful data visualisation and explanation will help to provide this understanding to the user.[4]

[3] mentions five steps for developing personal informatics software being: preparation, collection, integration, reflection, and action. It should be a conscious decision to integrate these steps into our software as it will enable the users to not only flit back and forth between these stages with ease. This will also allow us to make as much of the program software driven in order to make it more reliable and through reducing the amount that the user must do/understand will help the user to monitor their own data with minimal effort.

[1] Fritz, T., Huang, E. M., Murphy, G. C., and Zimmermann, T. Persuasive technology in

the real world: a study of long-term use of activity sensing devices for fitness. In Proceedings of

the SIGCHI Conference on Human Factors in Computing Systems (2014), ACM, pp. 487–496.

[3] A stage-based model of personal informatics systems

[4] Increasing Trust in Personal Informatics Tools