A Solid-Powered Collaborative Rule Management Tool for Sharing Patient Data

Lokesh Selvakumar, Master of Science in Computer Science

University of Dublin, Trinity College, 2022

Supervisor: Dr David Lewis

The research of public mindset towards health information in Ireland revealed that there is a lack of awareness among patients concerning who has access to their health information. However, people believe that decisions involving access to their health information should be made in partnership with patients which forms the main motivation to carry out this research. The aim of the research is to transfer the power from the third parties to the patients who are the rightful owner of health information thereby offering a sense of data control to the patients. The research conducted proposes a Solid-powered collaborative rule management tool for sharing patient data which helps the targeted subjects (patient groups) to collaboratively agree on terms and conditions submitted by third parties in accessing their health information. This tool acts as an interaction medium between third parties and patient groups to collaborate and collectively decide the rules for accessing the patient data. Also, the same tool acts as a collaborative medium between patients to discuss and vote for the data access requests submitted by third parties. This research will benefit Patient groups where the individual data of the patients are stored in their Solid pods, which enables them to control who has access to their data and how their data is shared. Also, the Solid community will benefit from the collaborative rule management feature.