SOEN 6481 - Software Requirement Specification

Delivery 1 - Task 1 (Team-18)

Questionnaire for the Stake Holders :

* Who are the stakeholders? What are the different age groups of stakeholders? Is there any kind of special needs for any stakeholder/s for disability of some kind?
* Are there any time and budget constraints associated with this project? If yes, What are those and what are the priority requirements in terms of features and devices of the stakeholder/s?
* What features are needed in terms of accessibility? What kind of devices are required to access the system like smartphones, tablets etc? What ecosystem is preferred if any like Apple, Amazon, Google for smart features in the home?
* Do you have any kind of existing automation installed in your home? If yes, what specific home features are controlled by it and do you need to replace it or integrate it along with the new ecosystem?
* For the purpose of security and privacy, which identification system is preferred for access to home entrance as well as access to the software module connected to the system, like Facial Recognition, Fingerprint Analysis, or some others?
* Do you need to incorporate sustainable energy practices like solar energy, solar heating, water harvesting?
* What features are needed in terms of environmental considerations like Efficient Garbage Categorization and Disposal**,** Smart Air/Water Filtration System?
* What features do you need in terms of Entertainment and Media consumption like Smart TV systems with Efficient energy consumption or Integrated Audio Systems with Voice Activation including the Infrastructure items like cloud storage, network specifications (Wifi, Fibernet) etc.?
* Is any kind of temporary guest login system is needed which can be used by certain essential people like housekeepers, maintenance guys, delivery guys?
* Smart home features mean compromises with privacy. So what are your privacy constraints? What all features are needed to protect the privacy of the stakeholders?

References :

1. Johnny, Wong & Leung, Jodith & Skitmore, Martin & Buys, Laurie. (2017). Technical requirements of age-friendly smart home technologies in high-rise residential buildings: A system intelligence analytical approach. Automation in Construction. 73. 10.1016/j.autcon.2016.10.007.

2. Beckel, Christian & Serfas, Heinz & Zeeb, Elmar & Moritz, Guido & Golatowski, Frank & Timmermann, Dirk. (2011). Requirements for Smart Home Applications and Realization with WS4D-PipesBox. IEEE International Conference on Emerging Technologies and Factory Automation, ETFA. 1 - 8. 10.1109/ETFA.2011.6059229.

3. Davies, E.I & Anireh, Vincent. (2019). Design and Implementation of Smart Home System Using Internet of Things. Advances in Multidisciplinary & Scientific Research Journal Publication. 7. 33-42. 10.22624/AIMS/DIGITAL/V7N1P4.

4. Abdulrahman, T.A. & Isiwekpeni, O.H. & Surajudeen-Bakinde, Nazmat & Otuoze, Abdulrahaman & Abdulrahman, Abdulhakeem. (2016). Design, Specification and Implementation of a Distributed Home Automation System. Procedia Computer Science. 94. 473-478. 10.1016/j.procs.2016.08.073.

5. https://www.otelco.com/resources/smart-home-guide/