

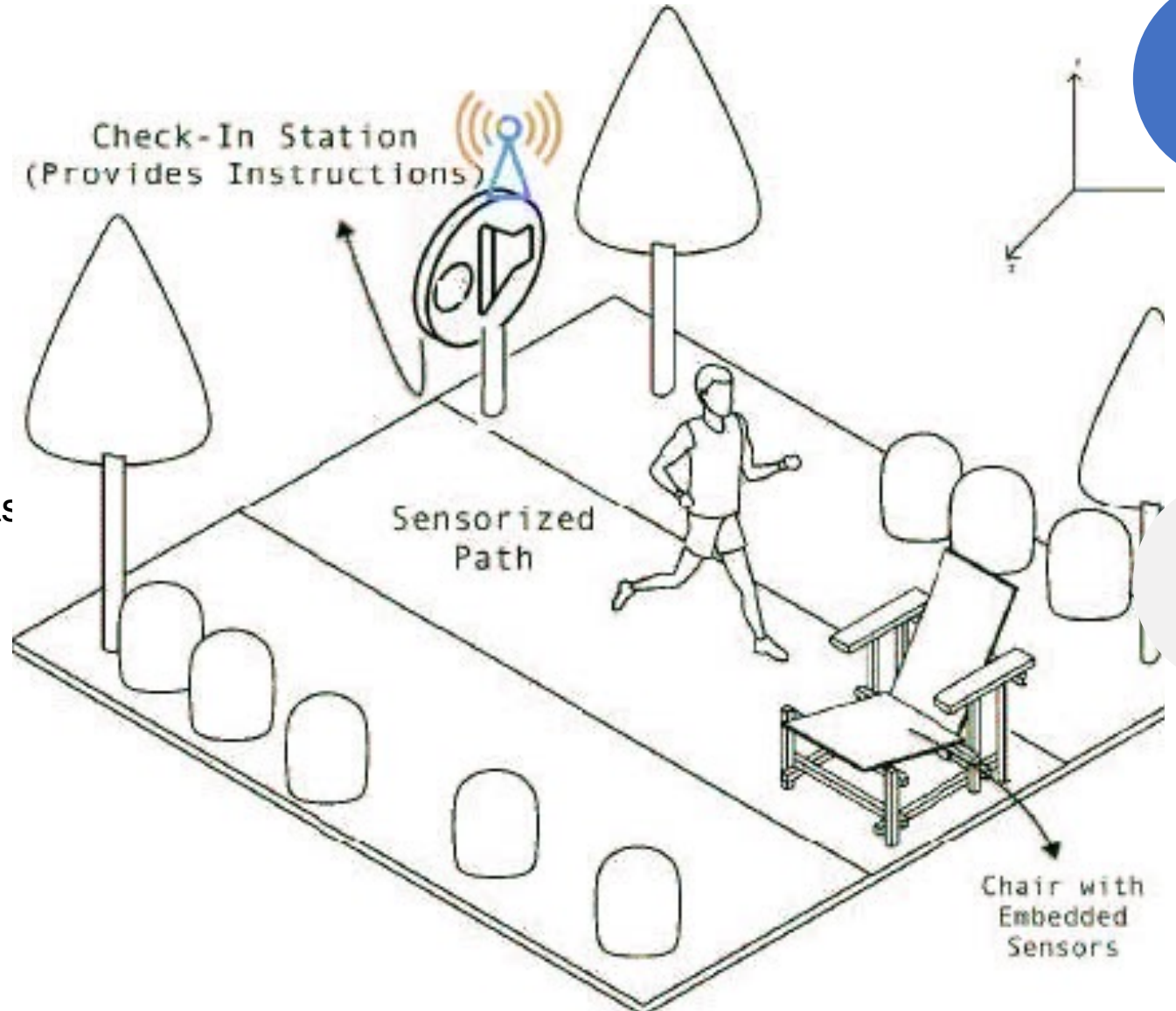
IoT Based Outdoor Landscapes for Effective Health Management of Elderly People

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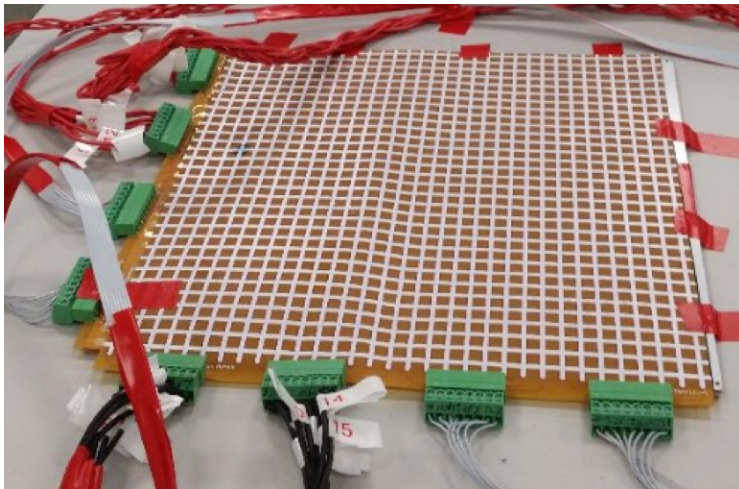
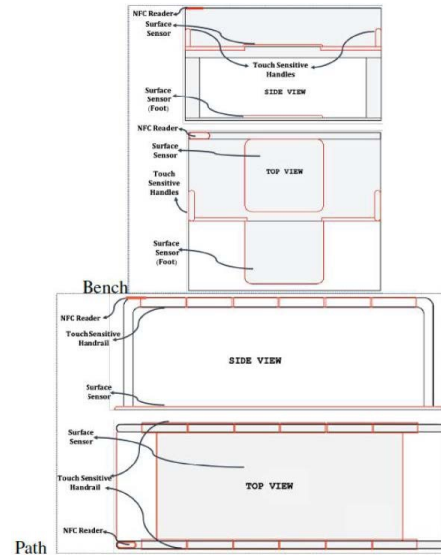


Introduction

- The aim of this project is to develop
 - ✓ An innovative smart Internet-of-Things(IoT) outdoor health monitoring system that unobstructively collects body physiological parameters
 - ✓ Analyse the overall gait of a person in an easy to access public-outdoor setting like parks, playgrounds.



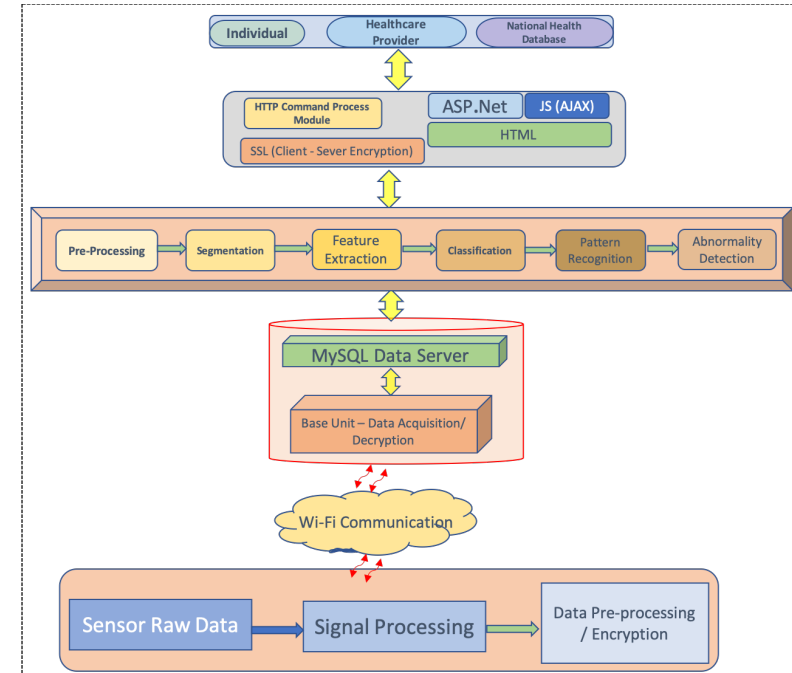
The Design



- The quantification of key data about an individual's posture and mobility, such as balance, gait and foot-ground interactions are the important characteristics for evaluating the quality of life of the people with any ongoing mobility issues.
- The system consists of two main components:
 - A smart sensory bench
 - A smart sensory path.

Data Analysis

- Data has been a driving force behind this project, with an established exercise providing a medium for doctors, health care providers to gain an initial insight into a patients gait.
- A mobile application is developed to render charts, information for the end user



Future Work

- From a technical perspective, there are numerous functions that could be created and improved easily due to the thorough infrastructure implemented.
- With healthcare being an established right within many developed countries, it is in the interest of researchers to develop economical methods to guide and aid the public in receiving adequate health care.
- Detecting gait disorders earlier will allow for functional relief to the healthcare system with the possibility of reducing the number and severity of gait disorders through early intervention.