SENSOR DATA COLLECTION

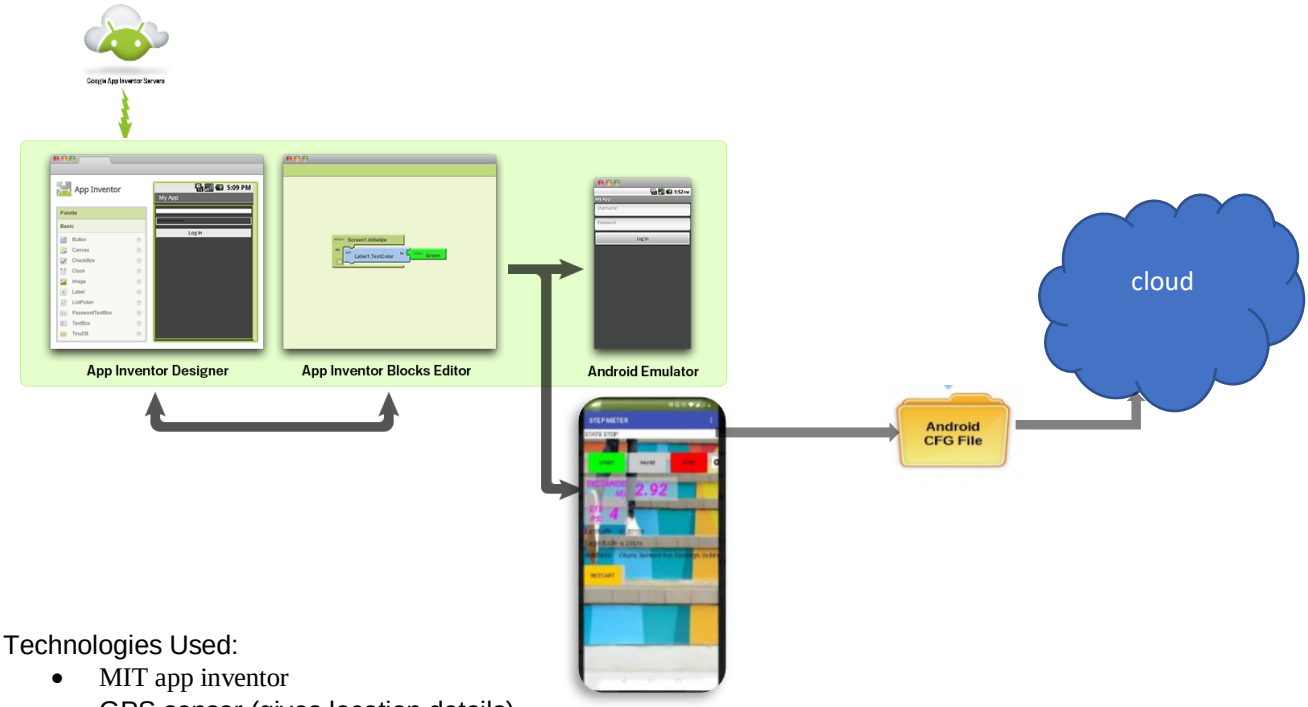
Description:

Smart cities of tomorrow will not only just involve government but citizens as well. With the present application, I can know about location information, check the distance needed to travel between two locations and number of steps taken. This data can be collected and used accordingly.

Part 1: Data Collection:

Smartphones have sensors such as GPS location sensor and pedometer which provides the precise location of the device and number of steps taken by the person between two locations, pedometer is also used for calculating distance.

Take few steps and stop the device, display shows the location of the device, number of steps taken, and distance travelled. This information is stored in a CSV file format in the background.



Technologies Used:

- MIT app inventor
- GPS sensor (gives location details)
- Pedometer (to know steps taken and distance)

Part 2: Data Challenges:

- The data collected is stored in mobile internal storage therefore there is a need to convince citizens to provide data.
- Inconsistency while collecting data
- We may face challenges with the accuracy, privacy and security of the data.

Effectively dealing challenges:

- We use cloud storage system which will store the data collected from the citizens, but before releasing the data it must be pre-processed.