**Project Synopsis.**

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**Subject:** Project Implementation.

**Project Name:** Step Tracker

**Subject Code: USCSP603**

**A Step Tracker/Counter generates an event each time a step is taken by the user.**

**Objective**

* As the current health concerns and increasing obesity everywhere which mainly because of poor eating choices and lack of physical activity.
* For reaching a physical activity goal, here I am building an Android based application which will help you to track your steps in a day, analyze a weekly average and also view a monthly statistical data.
* This will help you to motivate yourself and progress further in your fitness journey.
* Just as much as it’s easy to walk it’s that easy just to track it in this application.

**Benefits**

* **Low Impact:** As walking is Lower intensity activity you cannot fatigue as much as by other higher intensity physical activities.
* It is perfect at any AGE.
* No Equipment needed for; so no excuse of lack of time to go to gym and time spend on a gym membership etc.
* As you can modify the intensity, pace, and length of your walk to meet your current fitness level.
* You can analyze these into the application and your data is collected onto your device.

**Modules Used.**

1. **Step Tracker:** It uses sensors of your device to track your movement as per the algorithm is build and it analyzes the speed of the device movement throughout the time of start and until the end as you stop.

Some basic Sensors such as accelerometer, proximity, ambient temperature, Gyroscope, and light etc. Are built in for various reason of your device which acts as surrounding environment of your device and act accordingly.

We mainly need accelerometer for our Step Tracker application.

1. **Data analyzer:** This is to collect and gather data as you turn on the application and keep active until it is stop.

These data is analytically collected, statistics data is maintained from previous use of application.

In this a graph is displayed and some points may be given for your activity done and may help you reach your fitness goals.

A Database is maintained on your device so once you clear the data or uninstalled the application data will be automatically lost as it does not sync onto your personal e-mails for security purposes.

**Why you should be using the Step Tracker Application?**

* The application is used for physical activity just to make users to motivate themselves to do better every day by just progressing over time.
* By this application as it’s convenient to just keep your android device to your pocket or close to the body and just start and it will automatically start the step tracking.
* Best advantage is that you have all the data for the specific period of time in a statistical data so that you improve yourself in terms of pace as you walk, intensity, length of walking etc.
* It helps your physical fitness level to get better and be active all the time and make better choices over a course of days and weeks ahead.
* There are health benefits by using these simple step counter which inversely helps in your internal health as much as physical.

**Tools and Technology Used.**

Android Studio provides the fastest tools for building apps on every type of Android device.

Features about Android Studio are such as Visual layout editor, APK Analyzer, Fast emulator, intelligent code editor, Flexible build system, Real-time profilers.

**Working on the Android Studio software**

As its Interface is a User Friendly you can work efficiently and perform the tasks with proper help and gives suggestions for you code writing point to point as you work.

It gives a preview for interface as you design it layout by layout as specific components are placed as you progress, updates give you latest version of android operating system in the real world so it is compatible to most new devices.

**Requirements**

* **Hardware:** An Android Device.
* **Software:** Any Android Device with minimum android version v5.0 and over.

Note: With unknown sources checked for installation of Step Tracker application in your android device.