**SCENARIOS**

1. **CASE OF EMERGENCY**

Gianni is a 76 years-old man and lives alone quite far from his daughter , Livia.

He suffers from hearts problems so Livia decides to enroll him to “AutomatedSos”. Then she downloads the app on the phone of her father and buys him a smart bracelet to connect to the system.

When registering Livia indicates its number as emergency number and she indicates, beyond the basics, some details about heart problems that his father has had in the past.

There is no problem connecting to the internet because in the home of Gianni there has been a Wi-Fi network for some years. Gianni also recharges the device every afternoon during the visits of his daughter so that battery is fully charged when he is alone at home.

A day Gianni has a heart attack while alone in the house, and then its heart values fall sharply below the thresholds laid down for him by the application.

So the system immediately sends an alarm to the companies offering the assistance service, together with the values of the heart rate and the position of Gianni’s home.

The Policlinico Hospital responds first to the warning relayed from system and takes charge of the emergency, which is then marked as *"handling*”.

[da approfondire la parte sulla parte terza, ma dopo aver deciso come funziona].

1. **APPLICATION BREAKDOWN**

Derek is a man in his fifties and for some years has installed on his smartwatch the application Data4Help, Data4Help, which helps him keep an eye on his health.

One day a friend told him about the service offered by AutomatedSos, that guarantee automated assistance, then Derek intrigued decides to add also AutomatedSos on his smartwatch.

He has already an account so he has just to add a phone number to contact in case of emergency and he gives his wife’s number.

During the week end Derek descends to the cellar to help his son to repair his bike and he forgets to set the app status manually "off", indeed the cellar, being underground, is not covered by your home Wi-Fi network.

The application then fails to send the data every hour and the server, not getting the back-up, sends a message to the emergency number to notify that the application is not working properly.

So the wife of Derek receives the message and then decides to go to the cellar in order to check that all is well and remember her husband to turn the application’s status “off”.

1. **SENSOR BREAKDOWN**

Anna is an elderly lady who is recently retired. Instead, her husband works all day outside the home then brought Anna to register to AutomatedSos to be quieter when he is not at home.

So she buys a small smartwatch on which she installs the application. She provides her data to and indicating the number of the husband as number of emergency.

She wears the smartwatch everyday while her husband is out and recharge it when he is at home.

Since wearing the watch every day one day you forget to take it off before you get into the bath and bathe completely, causing a sensor breakdown. Indeed the sensor is not able to send the data correctly.

The application, not receiving data for more than 1 mintues, sends a notification to Anna in order to know her health status.

Anna sees the message and confirms that she is okay but decides to manually disable the application, putting its status “off”, so that she can bring the smartwatch for repair, without alerting the number of emergency.

1. **DATA ANONYMIZATION**
2. **FAVOURITE QUERIES**

The municipal administration of Novate Milanese occurred to Data4Help before the last election by finding very useful and interesting some data to get an idea on health of citiziens.

In particular, it used the data provided by the application to propose some prevention programs or help for some diseases.

This year the Commissioner of education would allocate funds for a smoking-prevention program in schools of the municipality, because he suppones that more and more kids start smoking during the high school.

So he decides to take advantage of Data4Help and indicates as “favourite queries” data on blood saturation of teenagers between 14 the 18 years.

After 6 months the system notifies that the data regarding the “favourite query” have changed. Are therefore required new data that indicate a very likely increase in the number of guys who smoke in school age. Indeed the data …

so the administration decides to invest in prevention.