Goals:

G1) Third parties are allowed to monitor the location and health status of individuals who gave the consensus to the treatment of their data;

G2) Third parties are allowed to access the anonymized data of groups of individuals which dimension is higher than 1000;

G3) The user is allowed to accept or refuse the requests concerning the treatment of his/her personal data by third parties

G4) The third party is allowed to subscribe to new data and to receive them as soon as they are produced

G5) The user can be recognized by providing a form of identification.

G6) The third party can be recognized by providing a form of identification.

G7) The user can decide which services to use at any time.

G8) The user can check the position of a runner at any time during a race.

G9) An ambulance is sent to the location of a user who needs it. OR. A SOS is launched when the user need help.

G10) A user can participate to a race.

Domain assumptions:

D1) Data related to the location and the health status of a registered user are acquired by smartwatches or similar devices used by the user himself.

D2) Data provided by users are correct.

D3) Data provided by third parties are correct.

D4) The measurements of the health status parameters are accurate and done every second.

D5) When an SOS is launched an ambulance is sent to the house of the user linked to the account that raised the SOS itself.

Requirements:

R1) Registered users, whose data are monitored by third parties, must have agreed to the treatment of their information.

R2) Users must provide their personal data to the application during the registration process, SSN (or fiscal code) included.

R3) The user can register to the application, by selecting a username and a password.

R4) The user can log in to the application by providing the combination of a username and a

password that match an account.

R5) Two different users cannot have the same username.

R6) The third party can register to the application, by specifying its (partita iva?) and a password.

R7) The third party can log in to the application by providing the combination of a (…) and a password that match an account.

R8) Two different third parties cannot have the same (…).

R9) The user can decide at any time if to activate or deactivate the optional service AutomatedSOS.

R10) The user must agree at least the treatment of his/her position and health status.

R11) The user can check the list of available races at any time.

R12) The user can join a race before the starting time.

R13) The user cannot join two different overlapping races.

R14) The user can watch the positions of runners participating at the race at any time.

R15) The user who wants to participate to a run must have activated the service Track4Run.

R16) The user that participates to a run is shown on the map in real time.

R17) The user who wants to receive assistance by an ambulance to his/her location must have activated the service AutomatedSOS.

R18) An SOS is sent within 5 seconds of measuring health status values below the threshold.