USE CASES

**DATA4HELP**

1. **Sign up to Data4Help**

|  |  |
| --- | --- |
| Name | Sign up |
| Goals and Requirements | [G1] [G1.1]  [R2] [R3] [R4] |
| Actor | User |
| Entry conditions | The User has installed the TrackMe’s application on his/her device |
| Event flow | 1. The User opens the app and clicks on “Sign in” button 2. The User fills the mandatory fields, providing his/her fiscal code, password and other necessary information 3. The User clicks on the “confirm” button 4. The system receives and saves the data |
| Exit condition | The User is successfully registered to the application and he/she is able to use it on his/her device |
| Exceptions | 1. The User provides inserts not valid data in one or more mandatory fields 2. The User’s fiscal code is already associated with a password   Both the exceptions are handled by notifying the User and taking him/her back to the point 1. |

1. **Sign up to Data4Help**

|  |  |
| --- | --- |
| Name | Sign up |
| Goals and Requirements | [G1] [G1.2]  [R2] [R3] [R5] |
| Actor | Third Party |
| Entry conditions | The Third Party have installed Data4Help web application on his/her device |
| Event flow | 1. The Third Party is on the homepage of the app and clicks on “Sign in” button 2. The Third Party fills the mandatory fields, providing his/her e-mail address, password and other necessary information 3. The Third Party clicks on the “confirm” button 4. The system receives and saves the data |
| Exit condition | The Third Party is successfully registered to the application and he/she is able to use it on his/her laptop |
| Exceptions | 1. The Third Party provides inserts not valid data in one or more mandatory fields 2. The Third Party’s e-mail address is already associated with a password   Both the exceptions are handled by notifying the Third Party and taking him/her back to the point 1. |

1. **Login to Data4Help**

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| --- | --- |
| Name | Login |
| Goals and Requirements | [G1] [G1.2]  [R1] |
| Actor | Third Party |
| Entry conditions | The Third Party have installed Data4Help web application on his/her device and is already correctly signed up to Data4Help |
| Event flow | 1. The Third Party opens the application on his/her laptop 2. The Third Party enters his/her credentials in “E-mail” and “Password” fields 3. The Third Party clicks on “Login” button 4. The Third Party is successfully logged, and he/she is redirected to the Data4Help’s homepage |
| Exit condition | The Third Party is successfully redirected to the Data4Help’s homepage |
| Exceptions | 1. The Third Party enters not valid e-mail 2. The Third Party enters not valid password   Both the exceptions are handled by notifying the User and taking him/her back to the point 2. |

1. **Login to Data4Help**

|  |  |
| --- | --- |
| Name | Login |
| Goals and Requirements | [G1] [G1.1]  [R1] |
| Actor | User |
| Entry conditions | The User has installed the TrackMe’s application on his/her device and is already correctly signed up to Data4Help |
| Event flow | 1. The User opens the application on his/her device 2. The User enters his/her credentials in “Fiscal Code” and “Password” fields 3. The User clicks on “Login” button 4. The User is successfully logged, and he/she is redirected to the homepage of the TrackMe’s application |
| Exit condition | The User is successfully redirected to the application homepage |
| Exceptions | 1. The User enters not valid fiscal code 2. The User enters not valid password   Both the exceptions are handled by notifying the User and taking him/her back to the point 2. |

1. **Access to personal data of the User**

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| --- | --- |
| Name | Access to personal data |
| Goals and Requirements | [G3]  [R6] [R10] |
| Actor | User, Third Party |
| Entry conditions | 1. The User is signed up and logged to the application 2. The Third Party is already signed up and logged to the application |
| Event flow | 1. The Third Party enters the User’s fiscal code on the research bar 2. The Third Party clicks on the “Get” button 3. The system receives the request 4. The system sends a message to the User with the information about the Third Party 5. The User receives the message and opens it 6. The User accepts the request and clicks on “ok” button 7. The system sends the data to the Third Party |
| Exit condition | The Third Party obtains personal data about a single User, with his/her permission |
| Exceptions | 1. The User does not respond to the system’s message   This exception is handled by sending another message to the User for a maximum of 3 times. If the User never responds the system notifies the Third Party that the data is not available. |

1. **Access to data of a group of pepole**

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| --- | --- |
| Name | Access to data of group of people |
| Goals and Requirements | [G4]  [R8] [R9] |
| Actor | Third Party |
| Entry conditions | 1. The Third Party is already signed up and logged to the application |
| Event flow | 1. The Third Party clicks on the “make a request” button of the main menu 2. The Third Party fills the fields about constrains and selects the button of the options 3. The Third Party clicks on the “Get” button 4. The system receives the request 5. The system anonymizes the data (removing the explicit references to the single User) 6. The system notifies the Third Party that the data are ready 7. The Third Party clicks on the “show” button 8. The Third Party sees the data on the screen |
| Exit condition | The Third Party obtains the data requested about a group of people |
| Exceptions | 1. The data cannot be anonymized (involving less than 1000 people)   The exception is handled sanding to the Third Party a warning communicating that data are not available because they cannot be anonymized (involving less than 1000 people) |

1. **Control the access to personal data**

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| --- | --- |
| Name | Avoid access to personal data |
| Goals and Requirements | [G2]  [R6] [R7] |
| Actor | User, Third Party |
| Entry conditions | 1. The User is signed up and logged to the application 2. The Third Party is already signed up and logged to the application |
| Event flow | 1. The Third Party enters the User’s fiscal code on the research bar 2. The Third Party clicks on the “Get” button 3. The system receives the request 4. The system sends a message to the User with the information about the Third Party 5. The User receives the message and opens it 6. The User accepts the request and clicks on “no” button 7. The system notifies the Third Party that User refuses the access |
| Exit condition | The User’s personal data are hidden to the Third Party, according to his will |
| Exceptions | 1. The User does not respond to the system’s message   This exception is handled sending another message to the User for a maximum of 3 times. If the User never responds the system notifies the Third Party that the data is not available. |

1. **Subscribe new data**

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| --- | --- |
| Name | Subscribe new data |
| Goals and Requirements | [G5]  [R13] [R14] |
| Actor | Third Party |
| Entry conditions | 1. The Third Party is already signed up and logged to the application |
| Event flow | 1. The Third Party clicks on “subscribe new data” option of the main menu 2. The Third Party fills the fields about constrains and selects the button of the options 3. The Third Party indicates some specials options for the data such as the time or the period during which collect the data 4. The Third Party clicks on the “Get” button 5. The system receives and saves request 6. When the data are ready the system sends a notification to the Third Party 7. The Third Party clicks on the notification and on “Show” button 8. The Third Party visualizes the data |
| Exit condition | The Third Party obtains new data after a certain period of time |
| Exceptions | 1. The data collected by the system during the period of time requested cannot be anonymized   The exception is handled sanding to the Third Party a warning communicating that data are not available because they cannot be anonymized (involving less than 1000 people) |

1. **Personalize requests**

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| --- | --- |
| Name | Personalize requests |
| Goals and Requirements | [G3] [G6]  [R11] [R15] [R16] [R17] |
| Actor | Third Party |
| Entry conditions | 1. The Third Party is already signed up and logged to the application 2. The Third Party is making a request of data |
| Event flow | 1. The Third Party expresses in which health’s information it is interested, selecting by the menu 2. The Third Party sets position, age, gender and similar constrains, clicking on dedicated button 3. The Third Party chooses, if it wants to, from statistical tools 4. The Third Party clicks on the “Get” button 5. The system receives the request 6. The system manipulates the data 7. The system notifies the Third Party that the data are ready 8. The Third Party clicks on the “Show” button 9. The Third Party sees the data on its screen 10. The Third Party chooses, if it wants to, the more comfortable tools to view the data 11. The Third Party that wants to save the data, clicks on “Download” button 12. The system sends the data |
| Exit condition | The Third Party visualizes and obtains the data required |
| Exceptions | 1. The Third Party gets wrong in clicking some buttons or in filling some fields   This exception is handled notifying the error at the Third Party and bringing it back to the previous step |

**AutomatedSos**

1. **Sign up to AutomatedSos**

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| --- | --- |
| Name | Sign up |
| Goals and Requirements | [G1] |
| Actor | The User |
| Entry conditions | 1. The User has installed AutomatedSos his/her device |
| Event flow | 1. The User opens the app and clicks on “Sign in” button 2. The User fills the mandatory fields, providing his/her fiscal code, password and other necessary information 3. The User provides a mandatory emergency number 4. The User clicks on the “confirm” button 5. The system receives data 6. The system elaborates data and calculates the threshold for the User 7. The system saves data |
| Exit condition | The User is successfully registered to the application |
| Exceptions | 1. The User provides inserts not valid data in one or more mandatory fields 2. The User’s fiscal code is already associated with a password 3. The User is already registered to data4Help   The exceptions 1 and 2 are handled by notifying the User and taking him/her back to the point 1.  The exception number 3 is handled redirecting the User at point 3. |

1. **Handle an emergency**

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| --- | --- |
| Name | Handle an emergency |
| Goals and Requirements | [G7]  [R18] [R19?] |
| Actor | Third Party |
| Entry conditions | 1. The Third Party is already signed up and logged to the application 2. The User is already signed up and logged to the application 3. The system has calculated the correct thresholds for the User 4. The GPS system and the connection work properly 5. The application status is “active” |
| Event flow | 1. The system registers a value that is under threshold 2. The system sends an alarm through the application 3. On the Third Party’s desktop appears a warning that there is a new emergency, the warning also contains all the information about the emergency (location, values, basic info about the User) 4. The Third Party clicks on the “handle” button |
| Exit condition | The emergency status is *“handling”* |
| Exceptions | Nessuno perchè supponiamo che qualcuno sempre la gestisca?? |
| Special  Requirements | The warning must be sent within 5 seconds after the values goes under threshold  (NB: dopo che il valore è registrato o dopo che va sotto soglia?) |

1. **Monitor User health status and position**

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| --- | --- |
| Name | Monitor User health status and position |
| Goals and Requirements | [G8] [G7]  [R20] [R21] [R19??] 🡪 manca un req? |
| Actor | Third Party, The User |
| Entry conditions | 1. The User is already signed up and logged to the application 2. The system has calculated the correct threshold’s values for the User 3. The internet connection and the GPS of the device work properly 4. The User communicates his values through the device |
| Event flow | 1. The system receives new data from the device 2. The system checks the values, comparing them with the threshold 3. The system records that User’s data 4. The Third Party accesses and requests data |
| Exit condition | the Third Party monitoring the User health status and position |
| Exceptions | 1. The values are under threshold 2. The User fails in communicating data   The management of the exception 1 is explain in the use case 11 (Handle an emergency)  The exception 2 is handled by sending the user a message asking him/her to confirm his/her state of health. If the User doesn’t confirm within 5 minutes, the system sends a message to the emergency number (use case 13, Detect a malfunction). |
| Special  Requirement | The system receives new data every 500 ms |

1. **Detect of malfunction**

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| --- | --- |
| Name | Detect of malfunction |
| Goals and Requirements | [G8]  [R20] [R21] [R22] |
| Actor | The User (in realtà il suo numero di emergenza) |
| Entry conditions | 1. The User is already signed up and logged to the application 2. The User fails in communicating data |
| Event flow | 1. The system does not receive back up after one hour 2. The system sends a message to the emergency number indicated by the User 3. The number of emergency receives a message with the information about the malfunction |
| Exit condition | The User’s number of emergency is alerted that the application does not work properly and has some information about the malfunction |
| Exceptions |  |
| Special  Requirement | The system usually receives back up in an hour |

1. **Set application’s state**

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| --- | --- |
| Name | Set the application’s state |
| Goals and Requirements | [G9]  [R23] |
| Actor | The User |
| Entry conditions | 1. The User is already signed up and logged to the application |
| Event flow | 1. The User opens the application on his smartphone/device 2. The User clicks on the “off”/ “on” button |
| Exit condition | The system status changes to “non-active”/ “active” |
| Exceptions |  |

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