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| Phenomena | Shared | Who Control |
| User sees a traffic violation | NO | World |
| User wants to notify authorities | NO | World |
| User launches the application and logs in | NO | World |
| SafeStreets software is loaded checking the role of the user (end user or authority) | NO | Machine |
| User inserts picture, date, time, position, type of violation (date, time and geographical position can be taken automatically from the device) | YES | World |
| SafeStreets asks to the user to insert again some wrong data | YES | Machine |
| User sends data | YES | World |
| SafeStreets receives a picture | NO | Machine |
| SafeStreets runs the algorithm to read the license plate | NO | Machine |
| The algorithm can’t read the license plate so SafeStreets asks to the user to insert it manually | YES | Machine |
| User inserts the license plate manually | YES | World |
| SafeStreets stores the retrieved information | NO | Machine |
| SafeStreets calculates the statistics | NO | Machine |
| User or authority mines the information | YES | World |
| SafeStreets receives data about accidents from municipality | YES | World |
| SafeStreets identifies unsafe areas | NO | Machine |
| SafeStreets suggests interventions | YES | Machine |
| SafeStreets goes out of service | YES | Machine |

G1: A person (end user) sees a traffic violation and wants to notify authorities by using SafeStreets app.

G2: A person (end user) wants to be a user of SafeStreets app.

G3: An authority wants to be a user of SafeStreets app.

G4: All the data inserted by the user must be correct.

G5: An authority wants to see the recent traffic violations.

G6: A user wants to see the statistics regarding traffic violations.

G7: Municipality wants to collaborate with SafeStreets in order to know the unsafe areas of its territory and the possible interventions.

D1: A person (end user), that knows the traffic rules, is near a traffic violation and he can see it.

D2: A person (end user) knows that he can notify the authority if there is a traffic violation.

D3: A person (end user) has a phone with a camera, internet connection and GPS, he knows SafeStreets app and he has SafeStreets app on his phone.

D4: A user of SafeStreets has a username, a password and a type, that are decided during the registration.

D5: The user type can be end user, authority, or municipality.

D6: For being an authority, a person must have a special code given to authorities from SafeStreets.

D7: Data sent by the end user is composed by license plate, date, time, position, type of traffic violation.

D8: Some data inserted by the end user can be wrong.

D9: An authority can see the traffic violations sent by the end users.

D10: An authority have a device on which there is SafeStreets software.

D11: An end user or a municipality user cannot see the traffic violations sent by the other end users.

D12: A user can see the statistics regarding traffic violations.

D13: A municipality can decide to collaborate with SafeStreets.

D14: A municipality knows the accidents that occur on his territory.

D15: Data regarding an accident is composed by date, time, position, description of the accident.

D16: A municipality can know the unsafe areas of his territory.

D17: A municipality can know possible interventions to do in order to improve the unsafe areas.

D18: For being a municipality user, it necessary to have a special code given from SafeStreets.

D19: A municipality has a device with SafeStreets software.

D20: An authority or an end user cannot see the unsafe areas and the possible interventions.

R1: SafeStreets app has to allow an end user (a person with SafeStreets app on his phone) to notify the authorities if he sees a traffic violation by launching the app, logging in it, inserting the license plate, specifying the type of violation and finally sending data through internet connection.

R2: When SafeStreets app is launched, the user can log in with his username and password if he is already registered, otherwise he can register himself by deciding a username, a password and the type, and then log in.

R3: If a user wants to register himself as an authority, during the registration he must insert the special code given by SafeStreets.

R4: The license plate can be inserted by taking a picture (in which the license plate is visible) of the car that commits the traffic violation or by writing it in a form if the algorithm that automatically reads the license plate from the picture doesn’t work. Therefore, the app must have a tool that gives the possibility to the user to take a picture.

R5: When an end user sends data from the app, the app takes automatically the date, the time and the position. The position is taken from the GPS of the phone.

R6: The type of traffic violation is a description of the rules that are not respected by a car.

R7: If data inserted from the user are wrong, the app asks to the user to insert again data, specifying which data was wrong and why. If data are all correct, SafeStreets stores the retrieved information.

R8: If an authority logs in from his device, SafeStreets has to allow him to see the traffic violations sent by the end users. Therefore, there has to be a section in the app in which an authority can see all the traffic violations and their data.

R9: If an end user or a municipality user logs in, SafeStreets must not allow him to see the traffic violations sent by the other end users.

R10: SafeStreets app has to calculate statistics regarding traffic violations and to allow the user to see them when he wants. Therefore, the app must have a section in which the statistics are displayed.

R11: If a municipality user wants to register, during the registration he must insert the special code given by SafeStreets.

R12: If a municipality decides to collaborate with SafeStreets, SafeStreets has to allow the municipality to send data regarding accidents of its territory from his device. Data must be composed by date, time, position and description of the accident.

R13: If a municipality wants to see the unsafe areas of its territory, SafeStreets has to show it. Therefore, there has to be a section in the software that displays the unsafe areas.

R14: If an end user or an authority logs in, they must not see the section that displays the unsafe areas.

R15: For each unsafe area, SafeStreets must say to the municipality the possible interventions that can be done in order to improve the unsafe area.