

0.0.1 Use Case Analysis

Name	User Sign Up
Actors	<i>User</i> , SafeStreets
Entry Conditions	<i>User</i> successfully installed SafeStreets application on the smartphone
Events Flow	<ol style="list-style-type: none">1. <i>User</i> taps on "Sign Up" button2. <i>User</i> fills the "email" and "password" fields3. <i>User</i> checks the "Accept terms and conditions" checkbox4. <i>User</i> taps on "Confirm" button5. SafeStreets saves <i>User</i> information
Exit Condition	<i>User</i> successfully registered on SafeStreets
Exceptions	<ol style="list-style-type: none">1. Inserted email already registered for another <i>User</i>2. Inserted password is not valid3. Not all required fields are filled in4. "Accept terms and conditions" checkbox is not checked5. <i>User</i> is already signed up <p><i>User</i> is invited to try again signing up, reporting which error they have committed.</p>

U₁

Name	User Login
Actors	<i>User</i> , SafeStreets
Entry Conditions	<i>User</i> successfully installed SafeStreets application on the smartphone and registered on SafeStreets
Events Flow	<ol style="list-style-type: none"> 1. <i>User</i> enters "email" 2. <i>User</i> enters "password" 3. <i>User</i> presses the "Confirm" button 4. SafeStreets checks <i>User</i> credentials
Exit Condition	<i>User</i> is successfully logged in
Exceptions	<ol style="list-style-type: none"> 1. Inserted "email" is not valid 2. Inserted "password" is not valid <p><i>User</i> is asked to try again to log into the system.</p>

U₂

Name	Municipality Login
Actors	<i>Municipality</i> , SafeStreets
Entry Conditions	<i>Municipality</i> is connected to the <i>Municipality</i> dedicated web site
Events Flow	<ol style="list-style-type: none"> 1. <i>Municipality</i> enters "Reference code" 2. <i>Municipality</i> enters "password" 3. <i>Municipality</i> presses the "Confirm" button 4. SafeStreets checks <i>Municipality</i> institutional credentials
Exit Condition	<i>Municipality</i> is successfully logged into the system
Exceptions	<ol style="list-style-type: none"> 1. Inserted "Reference code" is not valid 2. Inserted "password" is not valid <p><i>Municipality</i> is asked to try again to log into the system.</p>

U₃

Name	SafeStreets sends <i>User report</i> to <i>Municipality</i>
Actors	<i>User</i> , SafeStreets, <i>License plate recognition service</i> , <i>Municipality</i>
Entry Conditions	<i>User</i> successfully logged into SafeStreets and installed SafeStreets application on the smartphone
Events Flow	<ol style="list-style-type: none">1. <i>User</i> takes a picture of the <i>Traffic violation</i>2. <i>User</i> presses the “Confirm” button3. SafeStreets receive <i>User picture</i> and forward it to the <i>License plate recognition service</i>4. <i>License plate recognition service</i> sends back to SafeStreets a text representing the <i>Recognized license plate</i>5. <i>User</i> selects a <i>Type of violation</i> and presses the “Send” button6. SafeStreets stores the newly generated <i>User report</i> in its own Database7. SafeStreets sends <i>Municipality</i> the newly generated <i>User report</i>
Exit Condition	SafeStreets correctly collected <i>User report</i>
Exceptions	<ol style="list-style-type: none">1. <p>.</p>

U₄

Name	<i>Municipality answers to a User report</i>
Actors	SafeStreets, <i>Municipality</i>
Entry Conditions	<i>Municipality</i> successfully logged into SafeStreets
Events Flow	<ol style="list-style-type: none">1. <i>Municipality</i> presses “Reports” button2. <i>Municipality</i> select a <i>User report</i> to answer3. <i>Municipality</i> taps “Confirm” or “Discard” button (in the second case selects a reason as well) to generate the <i>Ticket feedback</i>4. SafeStreets receives the <i>Ticket feedback</i>
Exit Condition	<i>Municipality</i> correctly answered to the <i>User report</i>
Exceptions	<ol style="list-style-type: none">1. <p>.</p>

U₅

Name	<i>User visualizes Public statistics</i>
Actors	<i>User, SafeStreets</i>
Entry Conditions	<i>User successfully logged into SafeStreets</i>
Events Flow	<ol style="list-style-type: none">1. <i>User</i> presses “Public statistics” button2. <i>User</i> select a “period of time”, a “<i>Type of violation</i>” and a “specific zone”3. SafeStreets show the <i>User</i> the required statistics
Exit Condition	<i>User correctly visualizes the required Public statistics</i>
Exceptions	<ol style="list-style-type: none">1. <p>.</p>

U₆

Name	<i>Municipality visualizes Detailed statistics</i>
Actors	<i>Municipality</i> , SafeStreets
Entry Conditions	<i>Municipality</i> successfully logged into SafeStreets
Events Flow	<ol style="list-style-type: none">1. <i>Municipality</i> presses the “Stats” button2. <i>Municipality</i> select the parameters3. SafeStreets shows <i>Municipality</i> the required statistics
Exit Condition	<i>Municipality</i> correctly visualizes the required <i>Detailed statistics</i>
Exceptions	<ol style="list-style-type: none">1. <p>.</p>

U₇

Name	<i>SafeStreets</i> suggests <i>Possible interventions</i> to <i>Municipality</i>
Actors	<i>Municipality</i> , SafeStreets
Entry Conditions	<i>Municipality</i> grants SafeStreets access to its own <i>Accidents</i> Database
Events Flow	<ol style="list-style-type: none"> 1. A certain number of <i>User report</i> for a particular zone of the city is reached 2. SafeStreets identifies the precise area in which a <i>Possible intervention</i> could be carried out 3. SafeStreets send to <i>Municipality</i> the <i>Possible intervention</i>
Exit Condition	<i>Municipality</i> correctly receives the suggested <i>Possible intervention</i>
Exceptions	<ol style="list-style-type: none"> 1. <p>.</p>

U₈

Name	<i>User visualizes his/her contribution to SafeStreets</i>
Actors	<i>User, SafeStreets</i>
Entry Conditions	<i>User successfully logged into SafeStreets</i>
Events Flow	<ol style="list-style-type: none">1. <i>User</i> taps “My reports” button2. <i>User</i> chooses one of his/her previous <i>User report</i> to check3. <i>User</i> visualizes all the details about that particular <i>User report</i>
Exit Condition	<i>User</i> correctly visualizes the details about the chosen <i>User report</i>
Exceptions	<ol style="list-style-type: none">1. <p>.</p>

U₉