Glossary of the main terms of the projects included in the Civitas Mimosa project

Android
Android is an operating system for mobile devices consisting of software that includes an operating system and basic communications and applications. It has been successful because some versions have been open source and is based on Linux kernels.

App
Mobile applications or Mobile Apps are programs and software devised, studied and developed to ergonomically and functionally work with pocket-sized devices.

Best price
Best price means the automatic application of the best price for the customer upon invoicing, by selecting between the standard prices for the actual ride and the offer of an extended ride which is possible to have access to.
For example, a 9 hour ride is compared with the daily option and the best price is applied.

Bipower
Typology of vehicles whose fuel supply is based on both petrol and gas (methane or LPG) in order to optimize the car eco-friendliness.

Board computer
A device located inside the vehicle which allows to receive communications and bookings, make emergency calls and, through a touch screen keypad, the interaction between the customer and the vehicle, for example by entering a PIN.
The first version was BC2000.
The current one is "Cometa".

CALL CENTER
Call center (or **call centre** in British English) is the set of devices, IT systems and people aimed at managing, in an optimized way, telephone calls from and to a business. The activity of a call centre can be performed by specialized operators and/or automatic interactive voice response (IVR) systems. Operators and automatic voice response systems can provide information, activate services, supply technical assistance and booking services, allow purchases and organize promotional campaigns.

CAN-bus
The **Controller Area Network**, also known as **CAN-bus**, is a serial standard for field buses (mainly in the automotive industry), of multicast type, introduced in the eighties to connect different electronic control units (ECUs). The CAN was especially designed to work without problems even in environments highly disturbed by the presence of electromagnetic waves.

CAPTCHA
In the IT field, the English acronym CAPTCHA refers to a test consisting of one or more questions and answers aimed at ascertaining whether the user is a human being (and not a computer or, more precisely, a bot). The acronym comes from the English phrase "completely automated public Turing test to tell computers and humans apart".

 Example

CO$_2$ (Carbon Dioxide) emissions
In brief, the production of carbon dioxide, a non-polluting gas but at the origin of the greenhouse effect, is proportional to consumption; this is the reason why cars with lower consumption are more eco-friendly with reference to this gas.

GSM
In the telecommunication field, GSM, acronym of **G**lobal **S**ystem for **M**obile Communications (originally, «Groupe spécial mobile»), is the 2G standard (2nd generation) of mobile cellular telephony and currently is the most used in the world: over 3 billion people in 200 countries use GSM mobile phones through the cellular network with the same name.

GPRS
In the telecommunication field, GPRS (**G**eneral **P**acket **R**adio **S**ervice) is one of the mobile cellular telephony technologies. It is conventionally defined of 2.5 generation, i.e. a middle course between the second one (GSM) and the third one (UMTS).

GPS
The Global Positioning System (GPS) (in its turn, abbreviation of NAVSTAR GPS, acronym of NAVigation Satellite Time And Ranging Global Positioning System) is a system of satellite positioning and navigation that provides location and time information in all weather conditions, anywhere on or near the Earth, where there is an unobstructed line of sight to four or more GPS satellites.
The GPS system is ran by the government of the United States of America and is freely accessible by anyone equipped with a GPS receiver. Its current accuracy is about a few metres, depending on the weather, the availability and position of satellites to the receiver, the quality and the type of the receiver, the signal reflection and other physical factors.

ICS
ICS is a structure aimed at coordinating local entities operating in car sharing, promoted and supported by the Ministry with a financing of about Euro 9,000,000, in order to provide assistance to cities that intend develop car sharing systems with the purpose of establishing a national operative and technological standard, unified procedures in a unitary perspective and establishing the characteristics that an association shall have to successfully start a car sharing service.

Iphone
Iphone is the name of a family of <u>smartphones</u> with multimedia functions manufactured by Apple.

IVR

The **I**nteractive **V**oice **R**esponse system is a device able to provide information to a customer by interaction through a telephone keypad. Similarly, it is possible to talk about an IVR service or an IVR navigation tree.

More specifically, an IVR system usually allows to provide a set of pre-recorded messages and multiple-choice menus and record data entered through the keypad.

The most advanced IVR system include voice recognition, which allows to provide a service to customers by naturally recognizing spoken language.

One of the task of a IVR system is to lighten the load of calls to call centre operators by providing standard and frequently asked information (for example, opening and closing hours, service costs and addresses).

Car sharing card reader
A device connected to the board computer, mounted on the windscreen, which allows to unlock the vehicle (only the booked one) by using the car sharing card.

Mailing
Mailing means the sending of correspondence with an information, promotional and, often, advertising purpose. It is possible to use an address book or a mailing list.

MiMuovo
The card of the future will be similar to the MiMuovo card (contactless) of the Regione Emilia Romagna public transport, which integrates public transport, car sharing and other services.

Mobile App
Mobile applications or Mobile Apps are programs and software devised, studied and developed to ergonomically and functionally work with pocket-sized devices.

One way
"One way" is the type of service that allows to pick up a vehicle from a stall and return it in different one. Currently, the service is being tested in Venice and Bologna, also due to the numerous requests for it.

The service "limit" consists of the short-advance availability of the vehicle that, in case of booking in advance, would be held up until the end of the ride, being allowed its return in another stall.

Option "Pensieri Zero"
The option "Pensieri Zero" allows to set to zero the penalties charged to the customer due to car stop in case of accidents with fault.

Palmtops

A **palmtop**, often named with the English acronym **PDA** (**Personal Digital Assistant**), is a small-sized computer that can be hold on a hand palm (as shown by the term) and is equipped with a touch screen.

Penalty points driving-licence

The penalty points driving-license is a mechanism introduced in Italy on 1 July 2003 through which every vehicle driver is given a score (20 points at the beginning) which is then reduced in case of driving offences. If a driver loses the points necessary to keep the driving license, they shall pass again the theoretical and practical driving tests.

PIN

The PIN (Personal Identification Number) code is a sequence of characters normally used to ascertain that the person using a device, for example a mobile phone, or a service, for example a cashpoint card, is actually authorized to carry out the operation.

Buffer booking

The buffer booking or buffer separation time is a technique of system configuration which separates two bookings with the aforementioned time or booking.
The purpose is to prevent a minimum delay from generating inefficiencies and make it possible to pick up the car some minutes before the nominal time, if possible.

Quadricycle/three-wheeler

According to the Italian Highway Code, quadricycles are assimilated to any motorcycle or three-wheeler in spite of having four wheels. Indeed, they belong to category "L".
Cars belong to category M.

Power/weight ratio or maximum power for recently qualified drivers

Absolute power cannot exceed 70 kWatt (corresponding to almost 100 horsepower) for all category M1 vehicles (actually, motor cars and minibuses with maximum nine seats). Moreover, for any kind of motor vehicles there is a limit related to the ratio between maximum power and weight: 55 kWatt/ton. The weight used to calculate the aforementioned ratio is tare, as provided for by the new version of article 117 of the Italian Highway Code introduced by the reform.
The power limit for recently qualified drivers takes effect on 9 February 2011 and will be applied just to those who get their driving licence after that date.

RFID

RFID (o Radio Frequency IDentification) is a technology for automatic identification and/or data storage of objects, animals or people based on the data storage capacity of particular electronic devices (called tags or transponders) and their capacity to answer to remote "queries" from specially provided fixed or portable devices, simply called radio frequency "readers" (actually, they are also writers), by transmitting the information they contain. In a sense, they can be assimilated to wireless "reading and/or writing" systems with very numerous applications.

Scrapping

The Ministry of the Environment has financed scrapping incentives for polluting vehicles to replace them with subscriptions to the car sharing service.

Those who scraps their car and undertake not to purchase another car will be entitled to get a free subscription to the car sharing service for one year, a 50% discount on the subscription for the second year and a bonus of € 600.00 for the use of the service.
The bonus can be used within 2 years of the subscription issue date. All the operators belonging to the ICS circuit have adhered to the initiative.

Smartcard or contactless card
Smart cards are hardware devices with the size of a credit card with high safety data processing and storing functions. More generally speaking, the term smart card entails a set of technologies including integrated circuits, microprocessors, memories, antennas integrated into the same electric circuit to form a microchip which is the smart card "heart".
A smart card consists of a plastic support including a microchip connected to an interface, which can be a contact pad or an antenna. The microchip provides calculation and data recording functions; the contact pad or the antenna allow the microchip to dialogue with a special reading terminal.
The term contactless is used to refer to electronic technologies in which data transmission, for example the recording of goods in a warehouse or the payment of a rate upon passage of an individual in a certain place, is carried out without the need to physically touch the recording device with the support containing the individual/item identification code.
Contactless cards are an application of the RFID technology. Unlike traditional cards, equipped with a magnetic band or a microchip, they do not require the physical insertion of the card into a reader but it is sufficient to draw up them to it.
RFID (o Radio Frequency IDentification) is a technology for automatic identification and/or data storage of objects, animals or people based on the data storage capacity of particular electronic devices (called tags or transponders) and their capacity to answer to remote "queries" from specially provided fixed or portable devices, simply called radio frequency "readers" (actually, they are also writers), by transmitting the information they contain. In a sense, they can be assimilated to wireless "reading and/or writing" systems with very numerous applications.
The card of the future will be similar to the **MiMuovo** card (contactless) of public transport, which integrates public transport, car sharing and other services.

Smartphone
A smartphone is a portable device that combines the functions of a mobile phone and the personal data management ones

SMS
The term SMS (acronym of **S**hort **M**essage **S**ervice) is normally used to refer to a short text message sent from a mobile phone to another one. The correct term would be SM (Short Message), but it is common to use the name of the service to indicate a single message.

Emission standards pursuant to
EURO 0,1,2,3,4,5,6 regulations
European standards on polluting emissions are a series of limitations to the emissions of vehicles sold in the European Union Member States.
It is a series of standards, identified with a the abbreviation Euro- followed by a number, progressively introduced by the European Community with increasingly restrictive

characteristics and related to vehicle emissions, measured in g/kWh for heavy commercial vehicles and in g/km for the other vehicles.

From the moment one of these standards comes into force, car manufacturers must stop the sale of new vehicles compliant with previous standards.

Vehicles that comply with a certain standard are gradually introduced before the same standard comes into force.

Some cities may forbid vehicles under a certain standard to circulate.

Usually, exceptions actually allow the most recent vehicles and car sharing vehicles to circulate.

Buffer separation time

The buffer separation time is a technique of system configuration which separates two bookings with the aforementioned time interval.

The purpose is to prevent a minimum delay from generating inefficiencies and make it possible to pick up the car some minutes before the nominal time, if possible.

Local public transport

Local public transport refers to the set of different modes of public transport (bus, trolleybus, train) that, at a urban and suburban level, allow citizens to exercise their mobility right on a local scale.

UMTS

In the telecommunication field, UMTS, acronym of Universal Mobile Telecommunications System, is a 3G mobile cellular telephony standard evolved from GSM. This technology uses the most advanced basic standard W-CDMA as transmission interface for the radio access to the system, is compatible with the 3GPP standard and represents the European answer to the 3G cellular telephony system ITU.

WEB

The **World Wide Web**, (**WWW)**, often shortened to **Web**, is an Internet service that allows to browse and make use of a very large set of multimedia contents and other services accessible by anyone or a selected part of Internet users.

Window Mobile

The Microsoft operating system for smartphones.

Limited traffic zone (ZTL)

The limited traffic zone (ZTL) is a wide area inside the city centre of Bologna where the circulation of motor vehicles is subject to limitations in certain hours.

In Bologna, access to the ZTL is monitored by the "electronic traffic warden" Sirio.

Car sharing vehicles are allowed to enter this zone.