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A picture containing food

Description automatically generated

RASD Document

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# 1.INTRODUCTION

## 1.1.PURPOSE

This document represents the Requirement Analysis and Specification Document (RASD). Goals of this document are to completely describe the system of an application in terms of functional and nonfunctional requirements.

This document has a detailed analysis about the domain of the system, goals, assumptions, and then requirement themselves, which is followed by a graphic representation.

We will also analyze the real needs of the customer in order to model the system, show the constraints and the limit of the application and indicate the typical use cases that will occur after the release of the software. This document is inscription to the software developers who have to implement or execute the requirements and bring it out as a real-world application.

## 1.2.SCOPE

Description of the given problem

Epicollect5 is a mobile & web application for free and easy data collection.

It provides both the web and mobile applications for the generation of forms (questionnaires) and freely hosted project websites for data collection.

Projects are created by using the web application at five.epicollect.net then downloaded to the device to perform the data collection.

Data are collected (including GPS and media) using multiple devices and all data can be viewed on a central server (via map, tables, and charts).

Data can be exported in csv and json format.

A **San Silvestre Geography IA 2020** is the gathering of accurate information on the Location (including date and time) and based on different climatic conditions getting results for actual conditions. Based on location we can collect different parameters about location like: What is average of noise level, average of light intensity, wind direction, wind speed, cloud cover, cloud type, visibility, traffic count, air pollution etc. You cannot manage the climatic conditions effectively if you do not know their condition in different weather conditions.

During this project which is done by a group of Geoinformatics Engineering Students of Politecnico di Milano, after acquisition of data **San Silvestre Geography IA 2020** available on [Epicollect website](https://five.epicollect.net/project/asm-su19-trees/data), these data with 451 entries need to be treated in order to understand, and use them. So, we are required to design a web application which follows these **goals**:

* Retrieving the data using the Epicollect5 REST API.
* Processing and exposing on the Web the data through the use of some original manipulation strategy, by leveraging both the geographic content (map-based views) as well as attributes (interactive exploratory graphs).
* Allowing users to extract custom views of the data, leave comments, and eventually discover how to contribute to the data collection.

# 2.OVERALL DESCRIPTION

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