Salute Trasparente

Version:

2.0

Date:

05/01/2018

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CONTENT 2

INTRODUCTION

Document description

The objective of this document is to provide guidance on the design architecture of the “Salute Transparente” application. It also aims to specify the ways in which the functionality of the application will come implemented.

Document structure

- **Glossary**: it is a detailed list of terms of technical use used in the document, useful to ensure the understanding of the text by any type of user.

- **Flowchart diagrams**:the purpose of this diagram it to provide us with a graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. In fact, activity diagrams are intended to model both computational and organizational processes.

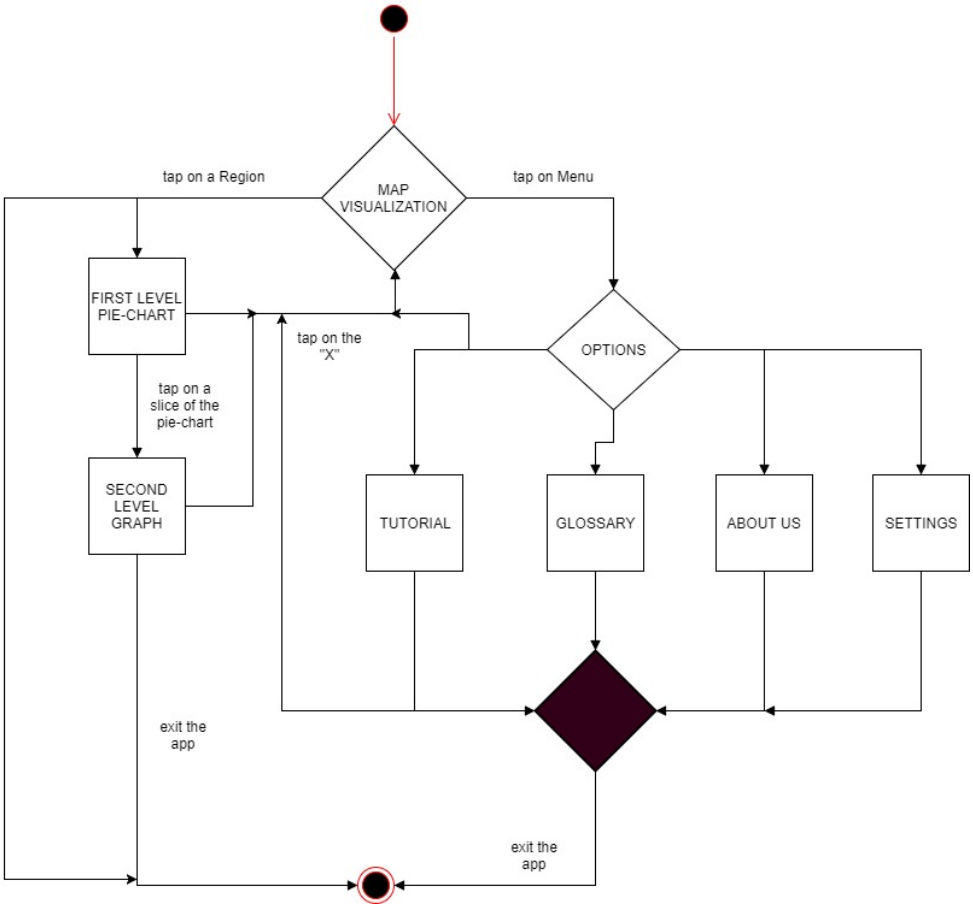
- **Sequence diagram**:is a diagram that shows how objects operate with one another and in what order. It is a construct of a message sequence chart. A sequence diagram shows object interactions arranged in time sequence.

- **Graphical interface**: this section will show the prototypes of the intended graphical interface, showing the most important schemes.

GLOSSARY

- **Flow chart:** a type of diagram that represents an algorithm, workflow or process, showing the steps as boxes of various kinds, and their order by connecting them with arrows.
- **Pie chart:** a circular statistical graphic which is divided into slices to illustrate numerical proportion. In a pie chart, the arc length of each slice (and consequently its central angle and area), is proportional to the quantity it represents.
- **Bar chart:** a chart or graph that presents categorical data with rectangular bars with heights or lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. A vertical bar chart is sometimes called a line graph. A bar graph shows comparisons among discrete categories. One axis of the chart shows the specific categories being compared, and the other axis represents a measured value.
- **Mockup (graphical interface):** a scale or full-size model of a design or device, used for teaching, demonstration, design evaluation, promotion, and other purposes. A mockup is a prototype if it provides at least part of the functionality of a system and enables testing of a design. The most common use of mockups in software development is to create user interfaces that show the end user what the software will look like without having to build the software or the underlying functionality. Software UI mockups can range from very simple hand drawn screen layouts, through realistic bitmaps, to semi functional user interfaces developed in a software development tool.

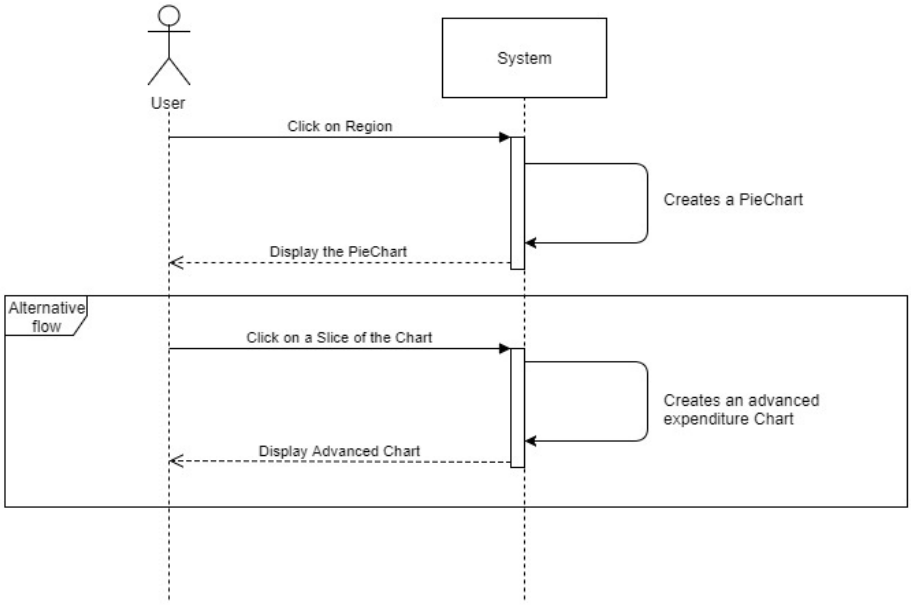
Flowchart diagram



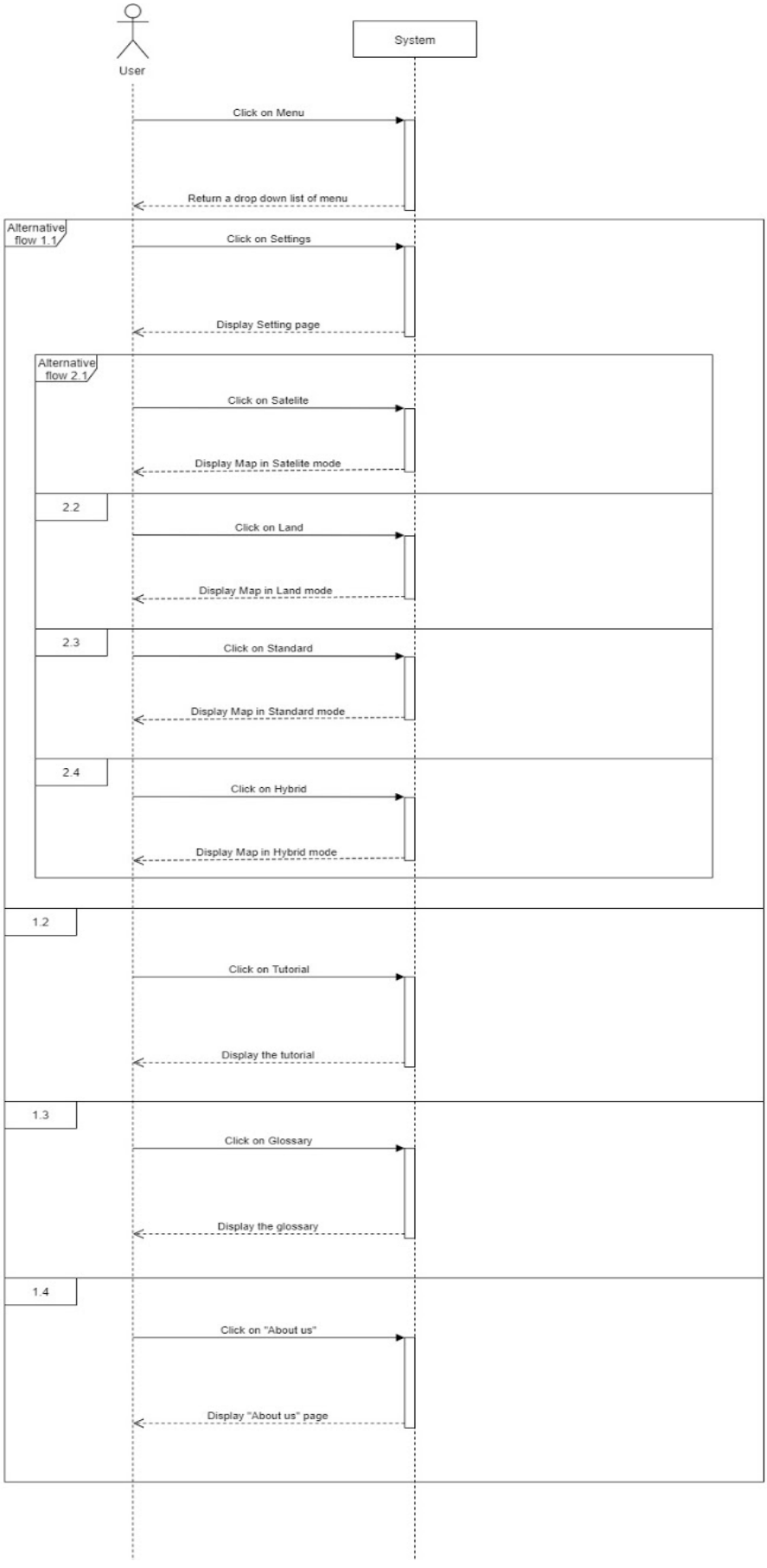
The scheme is related to the normal use by the user of the application "Salute Transparente". The navigation at each access will start from the visualization of the map screen. From this screen, it is up to the user to decide whether to go to a detailed analysis of the expenditure information. From there the user can access detailed information of the expenditure by pressing on a slice of the pie-chart or go back to the map. From the detailed expenditure screen the user can go back to the map. If the user taps on the menu button, the four options will appear in a drop-down list. By tapping on any of them, user has the possibility to find the dictionary of terms, find out more about the app and

it's creators, change the settings of the map or go through a step-by-step tutorial to learn how to use the app. From any of this items the user can go back to the map.

Sequence diagram



The sequence diagram of the user accessing information about a region shows the most important use of our app. The user will have two levels of expenditure access.


User
System
Click on Menu
Return a drop down list of menu
Alternative flow 1.1
Click on Settings
Display Setting page
Alternative flow 2.1
Click on Satelite
Display Map in Satelite mode
2.2
Click on Land
Display Map in Land mode
2.3
Click on Standard
Display Map in Standard mode
2.4
Click on Hybrid
Display Map in Hybrid mode
1.2
Click on Tutorial
Display the tutorial
1.3
Click on Glossary
Display the glossary
1.4
Click on "About us"
Display "About us" page

The sequence diagram of the ways that the user can access the different options from the menu shows a basic menu interaction with the system. It is done in such a way that to be very easy to use by a non experienced user.

GRAPHIC INTERFACE

Map

We have chosen to split the map of Italy in its Regions because Italy is divided in administrative Regions that receive amounts of money to spend in healthcare and also tax and send money to the central government for healthcare. We have set markers on the capital of each region. The user can click on each marker and access information about the expenditures for that region.

Menu

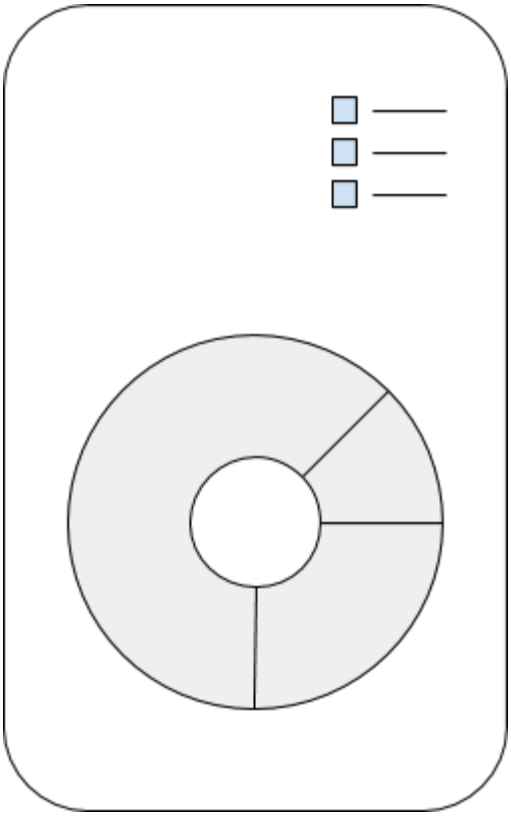
The way the menu visualization is done is through a drop-down list of options. We chose this way as it is a very good way for the user not to lose the attention on the map, the most important part of the app, from where any of the regions expenditure information can be accessed.

Tutorial

The best way, in our vision, to teach a user about the ways of using our app is through a step-by-step tutorial in which we show how to do all the actions of our app.

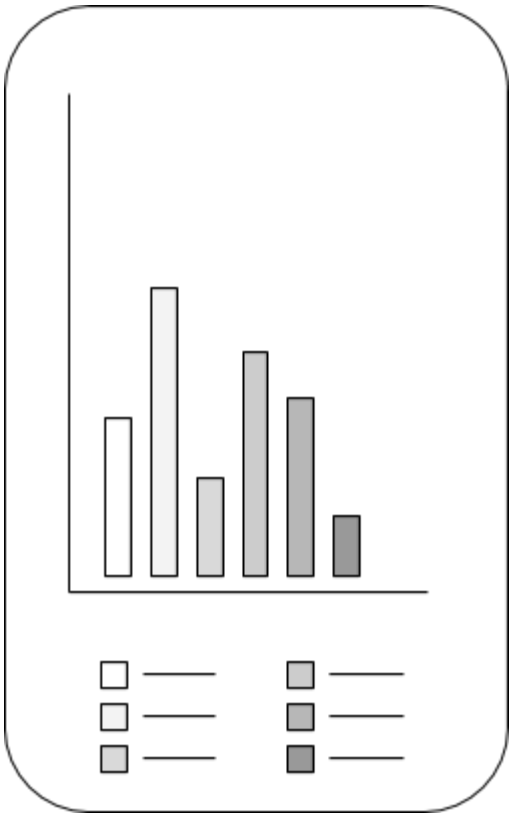
Charts

Pie chart screen (first screen of expenditures)



We have chosen to represent the data using a pie chart because it is a very good way of visualizing the main families of expenditures. The user has the possibility to tap on any of the slices and get to the next graphical presentation of a family of expenditures.

Bar chart screen (second screen of expenditures)



For the advanced expenditure display we have chosen a bar chart, as we think this brings a variation in the way expenditures are display and the user can understand better the expenditure information.