GitBerto:
The automated robot guide

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Abstract

In this paper we propose a small project for the *Mobile Systems* course. The project basically consists of a small robot that is piloted by a mobile device: the user sets a destination and then follows the robot that takes him to the desired location.

We underline that this project only a very simplified description of the main operation of the system that can be extended in future developments. In this work we only develop e very simple system that shows the basic idea of this project without covering all the aspects of a real *sealable* product, but only those related with the contents of the *Mobile Systems* course with some elements derived by the course of *Ingegneria dei Sistemi Software*.

1 Introduction and fast Requirement Analysis

Since this is a small project, we never provide a detailed project with exhaustive analysis but we will however give some important details by making a fast analysis.

User Story 1.1: Main User Story

The user:

1. uses his device and opens the `GitBerto`application on his mobile that **automatically connects with the paired physical robot**;
2. inserts a destination using the classical *address searching* and the application shows the founded possibilities; then, the **user selects the desired target** to arrive to and the application calculates the route to get the destination;
3. clicks on the *GO* button, then the **physical `GitBerto`robot start to move** and guides the user towards the destination.

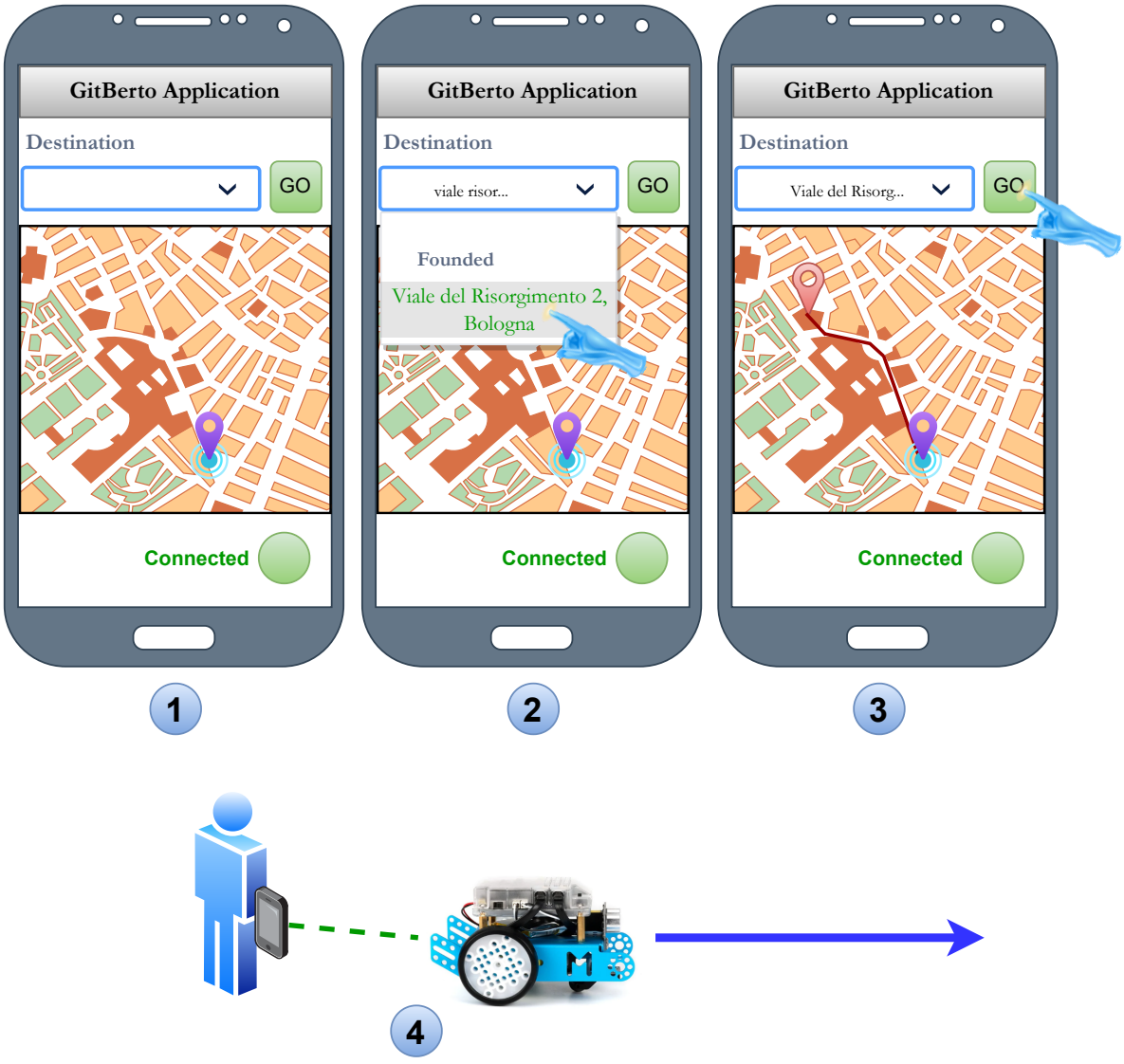

Figure 1: Main user story

The figure 1 shows a graphical representation of the steps presented in the main user story.