Tag Searcher
Tag Searcher

Introduction

This section describes an embedded tool: Tag Searcher, which is developed by the POPS team, Inria-Lille.

The objective is to use the PDA to look for an item in a given neighborhood. The user would be notified of item proximity via the change of the beep frequency.

Tag Searcher is composed of three main modules:

- The Reader interface is an abstraction of the required services for searching for a tag at a given RF power. The wrappers for CAEN and Intermec readers are straightforward.
- The Ticker class represents a periodic thread that beeps periodically using the standard java call java.awt.Toolkit.getDefaultToolkit.beep(). The ticker's period is synchronized inside the PeriodSemaphore class.
- The Scanner class is able to scan for a tag ID and update the Ticker period according to the RF power at which the tag was observed : observation at a small RF power leads to a small tick period, and vice versa.
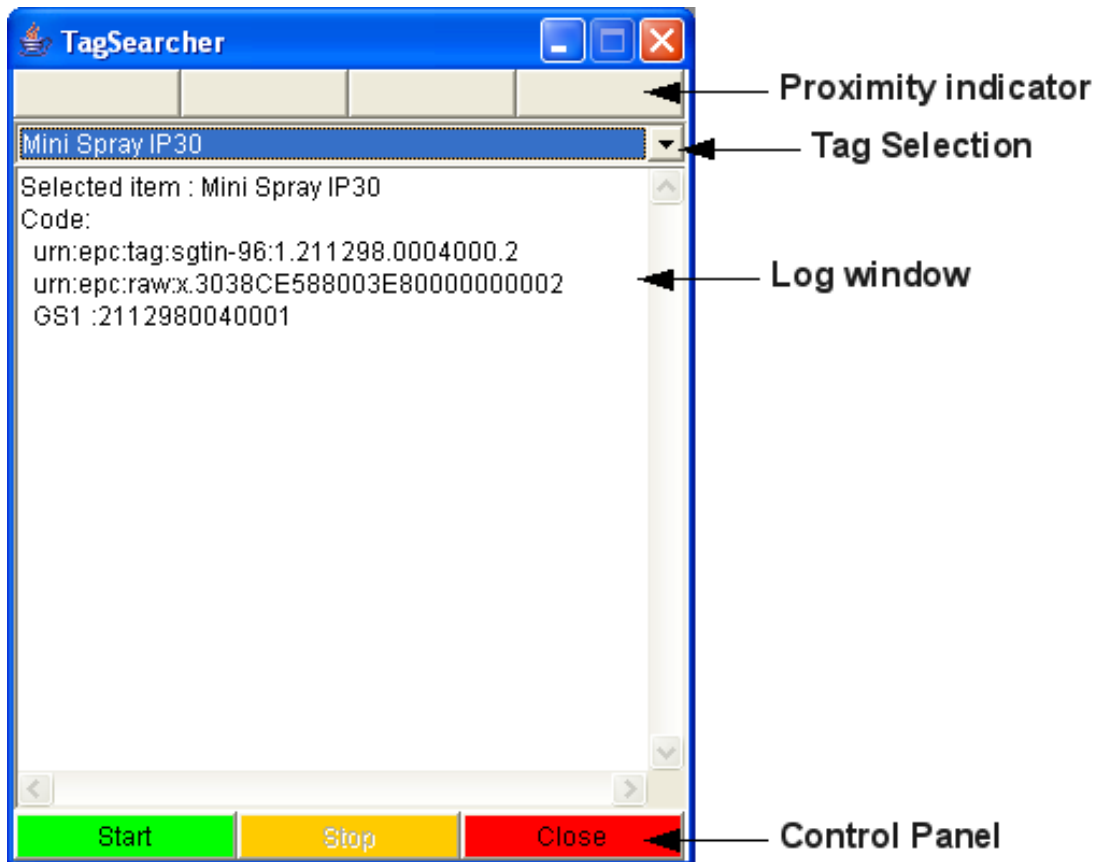
After testing on both PDAs (i.e. Psion, Intermec), a standalone application with an IHM was developed. It is able to retrieve a list (from a local file or an URL) so that the user choose the item to search for.

Users & Developers Guide

The executable jar file can be found under the repository TagSearcher/dist. All the source can be found under the repository TagSearcher/src.

Before launching the application, you have configure in **TagSearcher/Config.txt** to choose Reader name (Simulation mode , Caen or Intermec reader) as well as the items that you want to search.

Here is the graphical user interface of the Standalone Tag Searcher Application.

The executable jar file and source can be found here.
Tag Searcher (en)
Creator: xwiki:XWiki.reckeyzhang Date: 2010/06/04 12:31
Last Author: xwiki:XWiki.reckeyzhang Date: 2010/06/10 20:53
Copyright (c) 2008-2010, Aspire