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Chapter 1. Preface

1.1. Introduction

With Standalone Reader for Java Phones you can take a picture of any semacode tag and decode it on your phone with just one click.

The software will then prompt you with the URL and ask if you wish to load it. At that point, Reader for Java Phones hands the URL off to your phone's built-in browser, which takes over to connect to the internet and load the page.

In addition, this package includes example source code to write your own semacode-enabled applications. In order to do this you will also need the Semacode SDK.

1.2. This document

This document describes the Semacode Standalone reader for users of mobile device applications.

1.3. Intended audience

This document is written for advanced mobile application users and for developers who are also using the Semacode Java ME SDK. The reader should be familiar with how to install and launch Java applications on their mobile device.

1.4. Documentation problems

If you discover any errors or omissions in this document, please email us (info@semacode.com) with the problem, and the name, version, and date of the document you're having trouble with.

1.5. Note to our commercial developers

Semacode depends on our commercial developers to support our ongoing R&D efforts. If you are a commercial user, you are legally obligated to pay for this software, and we believe that it is well worth the price you pay for it.

Are you a commercial user? If you can answer "Yes" to one of the following questions then you probably are:

- You are developing a product with Semacode SDK that you will use for commercial gain.
- You are being paid for your work with Semacode SDK.
You will be licensing products that use Semacode SDK.

If any of these qualifications describe you, then please be sure that this copy of Semacode SDK is fully paid.

**Important**

Semacode SDK is licensed on a *per developer* basis. That means you must have one fully-paid copy of the SDK for each developer seat using the SDK.

In order to purchase a licensed copy, visit [http://semacode.com/store/](http://semacode.com/store/)
Chapter 2. Installing the software

This chapter describes how to install the Semacode standalone reader.

2.1. Hardware support

Semacode reader runs on a large number of mobile devices which support the standard Java platform. The specific feature the software requires is Java camera access. Generally speaking this feature is available on newer phones that come with MIDP 2.0. Consult the phone manual to see if it has MIDP 2.0.

A (more-or-less) complete list can be found at: http://semacode.org/about/hardware/.

2.2. Downloading the software

Semacode reader is available from two locations. For non-commercial users, it is available as a free download from http://semacode.org/software/. For commercial users, it is available from the online store at http://semacode.com/store/.

2.3. Installing onto the phone

The installation procedure for Java applications varies widely from phone to phone. Therefore, you should consult the phone's user manual for the exact instructions.

Generally speaking the easiest way to install is by using a USB cable or Bluetooth. In this case, first, download the software to your PC. Then, copy Semacode.jar to your phone and then follow the prompted installation procedure on the phone.

If you cannot install the software directly from your PC, you may install Semacode reader "over the air" (OTA). Open the web browser on your phone, and enter in the following URL: semacode.org/ota. Once you reach this page, you will be guided through the OTA download and installation process.

2.4. Operator and manufacturer DRM

Some manufacturers and mobile phone operators (carriers) use Digital Rights Management (DRM) to restrict what software can be installed on their phones.

In this case, only software that is offered through the operator can be installed. If you wish to install Semacode reader, you must contact your operator or manufacturer for instructions on how to unlock the phone.
Chapter 3. Using the software

This chapter describes how to use the Semacode reader.

3.1. Basic use

Locate the Semacode reader application on your phone's application menu (potentially labelled "Java"). Run the application.

Once the application is running, the viewfinder will start automatically. Point the phone's camera at a semacode tag, so that it is centred in the viewfinder display. See the included "Quick Reference Sheet" for an illustrated diagram of how the visual tag should appear in the viewfinder.

Once you have aligned the tag correctly, simply press the central directional pad button. This may also be labelled OK or Fire. This will cause the reader to begin automatically decoding the tag.

When decoding is complete, the software will prompt you to load the URL.

The URL will load in the phone's built-in web browser. For instructions on how the user, see the phone's user manual.

3.2. Troubleshooting

Semacode reader relies on optical scanning to decode the tags. There are several situations that may interfere with proper function.

Problem: Low light.

Solution: Very low light, such as in a darkened room, may cause the reader to be unable to distinguish the white from the black dots. Increase the available light, or move yourself or the visual tag to remove shadows.

Problem: Camera on an angle

Solution: Holding the camera at a severe angle to the code may cause it to be distorted in the image. Point the camera directly at the tag, so that it appears to be a square shape in the viewfinder.

Problem: Strong shadow line

Solution: A very strong shadow that falls across the centre of the tag may confuse the software's ability to distinguish light and dark squares. This might be caused by shadows over direct sunlight or spot lighting. Move the object causing the shadow, or the tag, or shade the tag so that it is in uniform light (either uniformly bright or dark).
Chapter 4. Support options

If you need technical support of some kind, there are options available.

For non-commercial users, there are support forums available at http://semacode.org/support/. The forums are monitored by Semacode personnel.

For commercial users, a variety of support options are available, by contacting a Semacode Corporation representative at http://semacode.com/contact/.