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1 Introduction

1.1 Purpose of API

Spang is an API which is intended to enable and simplify the communication of sensor data between an android device and a computer.

2 Test environment

 A wireless network that doesn't block UDP-messages that both computer and phone are connected to.

2.1 Hardware environment (what computers/devices were used?)

- One computer running Windows, connected to the network mentioned above.
- One phone running Android, connected to the same network (an emulator running on the host computer would also work, if connected to the IP address "10.0.2.2")

2.2 Software environment (what software (incl. version) was used?)

PC program (Release/Final/Spang-PC/Spang-PC_C-sharp.exe).

Android app (installed by running "Release/Final/Spang-mobile.apk" on an android device).

3 System information

3.1 System version (what version of your software is tested in this document)

The version used is that of the final day of the official software development (2012-10-22)

4 Known bugs and limitations

The buttons in the shortcut view sometimes gets placed with a down offset for no apparent reason.

5 Test specification

Acceptance test for user stories can be found in the sprint backlog PDF for each sprint.

6 Automatic test

6.1 Code coverage

We value features in the API greater than code coverage, but a coverage of about 40% in our core library is good. In order to test this, we use the Emma plugin for Eclipse.

6.2 Nightly builds

N/A

6.3 Unit test

As for the API, everything except the *network* and *sensors* packages. This since we couldn't find any good way to unit test that kind of android services in the limited time we had and felt that our time could be focused on better things. Those packages have instead been thoroughly integration tested.

Still, the Spang core library (the API) has, at the time of this writing, test code coverage of 43.6% according to the Emma Eclipse plugin.

Spang-mobile, the android application showing the usage of our Spang API is not as thoroughly tested, since testing android code is harder and since this application is not our main priority.

We really tried to test the GUI with Robotium, but we felt that the point of doing an automatic test has to be that it is faster and easier than doing it manually. However, the android emulator was often so slow (if it launched at all) that the testing timed out before the test started.

7 Test report

Test id	Result	Comment	

Vad testas? Är det senaste versionen i GIT (inte bra!), eller en upptagged release (bra!).

(present a table with Test id, Result, Comment)
(use comment to say what bug the test resulted in or that the test could not be performed since the requirement is not yet implemented)