Porting the WidSets Technology to the Maemo Platform

Alexander Sannikov, Stanislav Epifanov, Mikhail Kryshen

Petrozavodsk State University
Department of Computer Science

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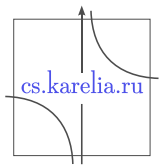


WidSets

Provide stable implementation of WidSets for the Maemo Platform.

- Over 1 million of users
- A lot of existing widgets
- Ability to create new widgets
- Easy for use

WidSets - easy way to extend your Maemo desktop.

Main Requirements

- Integration in the Maemo Desktop.
  - Develop the integration layer.
  - Optimize the user interface for the tablet screen.
- Stability
- Safety
- Performance

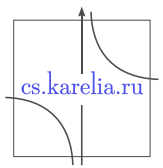
Project Organization

Team

- Mikhail Kryshen - Manager, Instructor
- Stanislav Epifanov - Assistant Manager, 3rd year student
- Alexander Sannikov - 3rd year student
- Dmitriy Sidorov - Secretary, 3rd year student
- Lev Terentev - 1st year student
- Kirill Ivashov - 3rd year student

Timing and Deliverables

- 02.09 Meeting with instructor, project planning, analysis of WidSets porting and integration possibilities. Requirement modeling and specification.
- 03.09 Design the project architecture.
- 04.09 Coding, testing.
- 05.09 Testing, debugging. Attestation. Final presentation.



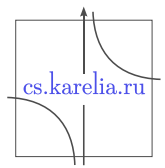
Web Resources

Russian Maemo Community

http://maemo.cs.karelia.ru/

Project wiki

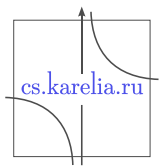
http://maemo.cs.karelia.ru/wiki/Maemo-WidSets



WidSets for Maemo

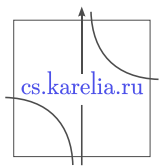
1. Porting the WidSets:
   - GCJ java-to-native code compiler, MIDPath (MIDP2 implementation).
   - Jalimo virtual machine and MIDPath.
2. New compatible version of WidSets implemented in C/C++: hard to implement, WidSets scripting language is based on Java.

Porting the WidSets using GCJ compiler is the preferred way..

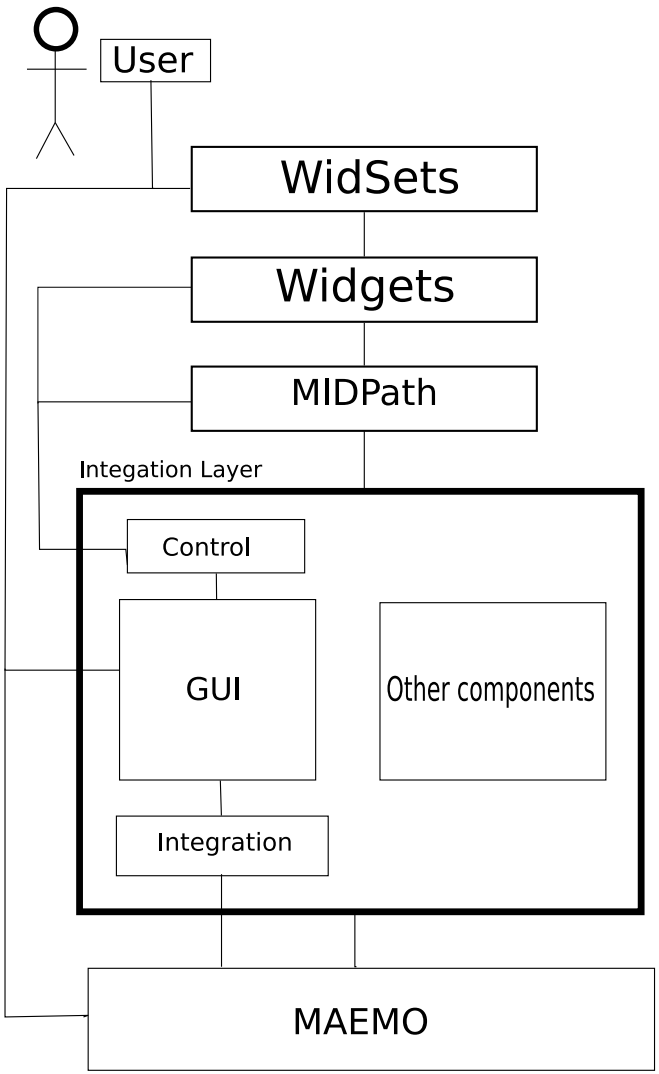


Tools

- The GNU Compiler for Java (GCJ or gcj), a free software compiler for the Java programming language, forms part of the GNU Compiler Collection
- ProGuard is a free Java class file shrinker, optimizer, obfuscator, and preverifier
- MIDPath is a Java library which provides a MIDP2 implementation on top of various graphical libraries and audio libraries



Architecture model



1. WidSets - Nokia WidSets client
2. MIDPath - MIDPath library
3. Integration - providing of integration to the Maemo platform
4. Control - pointer and joystic support
5. GUI - User Inerface for cominication with another modules.

UI Model

1. Workspace.
2. "Select Widget"bar.
3. "Add widget"button.
4. Random Widget.
5. "Settings"button.
6. "Add widget to Maemo desktop"button.
7. "Fullscreen mode"button.

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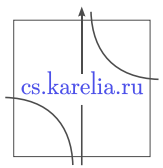
Results and Future Plans

Current Results:

- Designed the user interface and architecture of the Maemo–WidSets integration layer.
- Found and partially fixed incompatibilities between GCJ and WidSets bytecode.

Plans:

- Fix compatibility problems between GCJ, WidSets, MIDPath and Maemo.
- Implement the Maemo-WidSets integration layer.



Thanks

Thank You for your attention!