

An "Open Robot Battle Near Earth" remake of "Nether Earth"
Specification, Design, and User Manual

By

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1. Overview

Rawbots is a game inspired from Nether Earth. It is written in C#, and is meant to be cross-platform on Windows, Mac OS X and Linux using Mono and MonoDevelop.

2. Dependencies

Rawbots comes with libraries such as OpenTK, Tao and QuickFont inside the Libraries folder. OpenTK and Tao provide C# bindings to OpenGL and GLUT, while QuickFont is an OpenTK extension that provides support for font drawing.

If you wish to download those libraries separately, here is where they can be obtained:

OpenTK: <http://www.opentk.com>

QuickFont: <http://www.opentk.com/project/QuickFont>

Tao Framework: <http://sourceforge.net/projects/taoframework/>

Besides the libraries used by Rawbots, you will need the proper runtime environment and development tools. On Windows, you can use the Microsoft .NET Framework and Visual Studio.

The usage of the .NET Framework and Visual Studio is optional, since Rawbots is fully compatible with Mono and MonoDevelop. On Linux and Mac OS X this is the only option available for obvious reasons.

Here is the download page for Mono:

<http://www.go-mono.com/mono-downloads/download.html>

If you are on Windows, you will need to install "Gtk# for .NET" and "Mono for Windows, Gtk# and XSP" as well.

Once Mono is installed, you can download and install MonoDevelop:

<http://monodevelop.com/>

Installation should be pretty straightforward. If you're on Linux, there's nothing to say really, just get the Mono runtime and MonoDevelop from your distribution's package manager.

3. Licensing

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MPL 2.0 was chosen because it is a weak copyleft license that would allow others to build on our work past the end of this course. When spending a lot of time on a team project it's usually better if the end result is not wasted and forgotten afterwards. We encourage future teams to use our work for reference if they wish, or even build on top of it if the course allows for it.

4. Source Code

The Rawbots source code is available on GitHub:

<https://github.com/rawbots/rawbots>

You can obtain a copy of the source code through the GitHub web interface or using a git client.

If you are not familiar with git, it is a very powerful version control system. Unfortunately, powerful tools made by power users are not necessarily easy to learn at first. However, by the end of this project, all of our team members were comfortable enough with it.

Here is some help on git usage:

<http://help.github.com/>

<https://github.com/FreeRDP/FreeRDP/wiki/Git-Version-Control>

The read-only git URL for Rawbots is `git://github.com/rawbots/rawbots.git`

You can clone the repository without developer access using:
`git clone git://github.com/rawbots/rawbots.git`

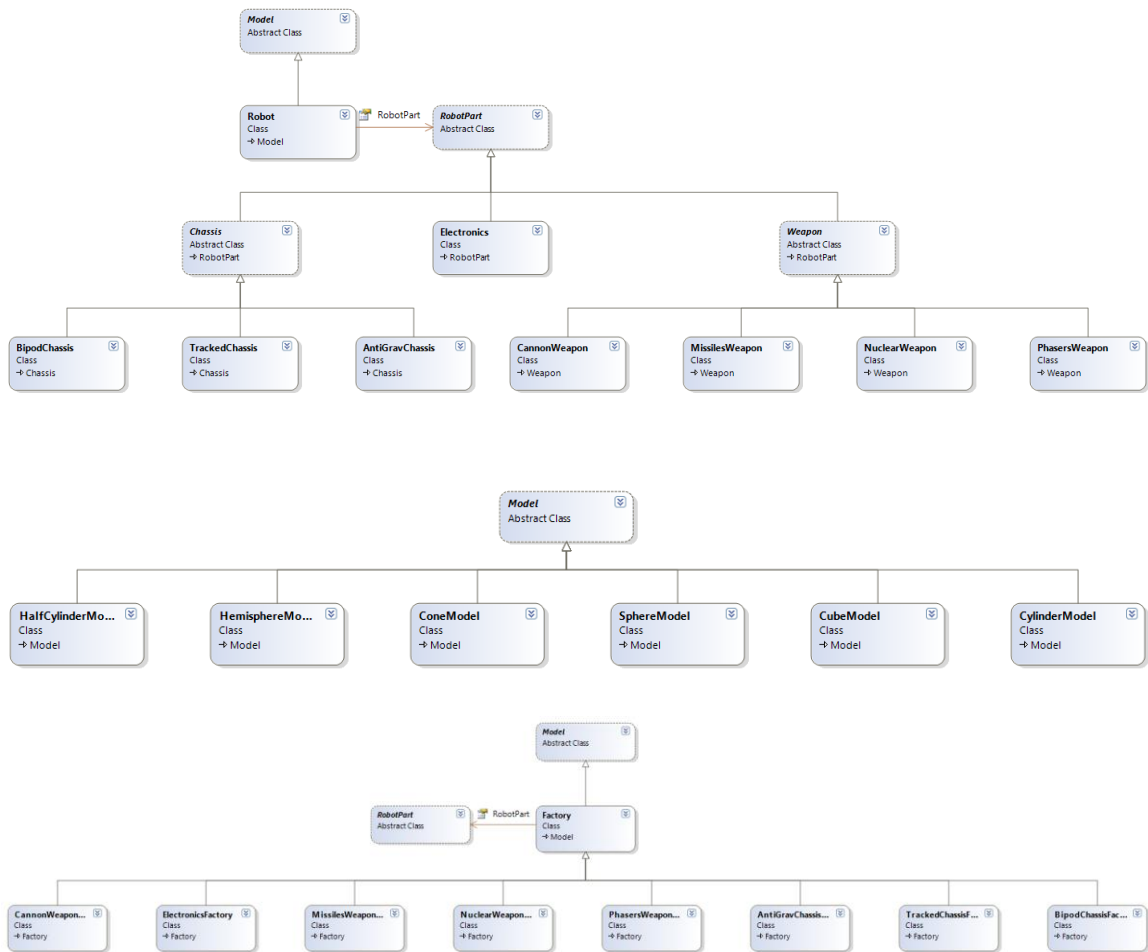
5. Compilation

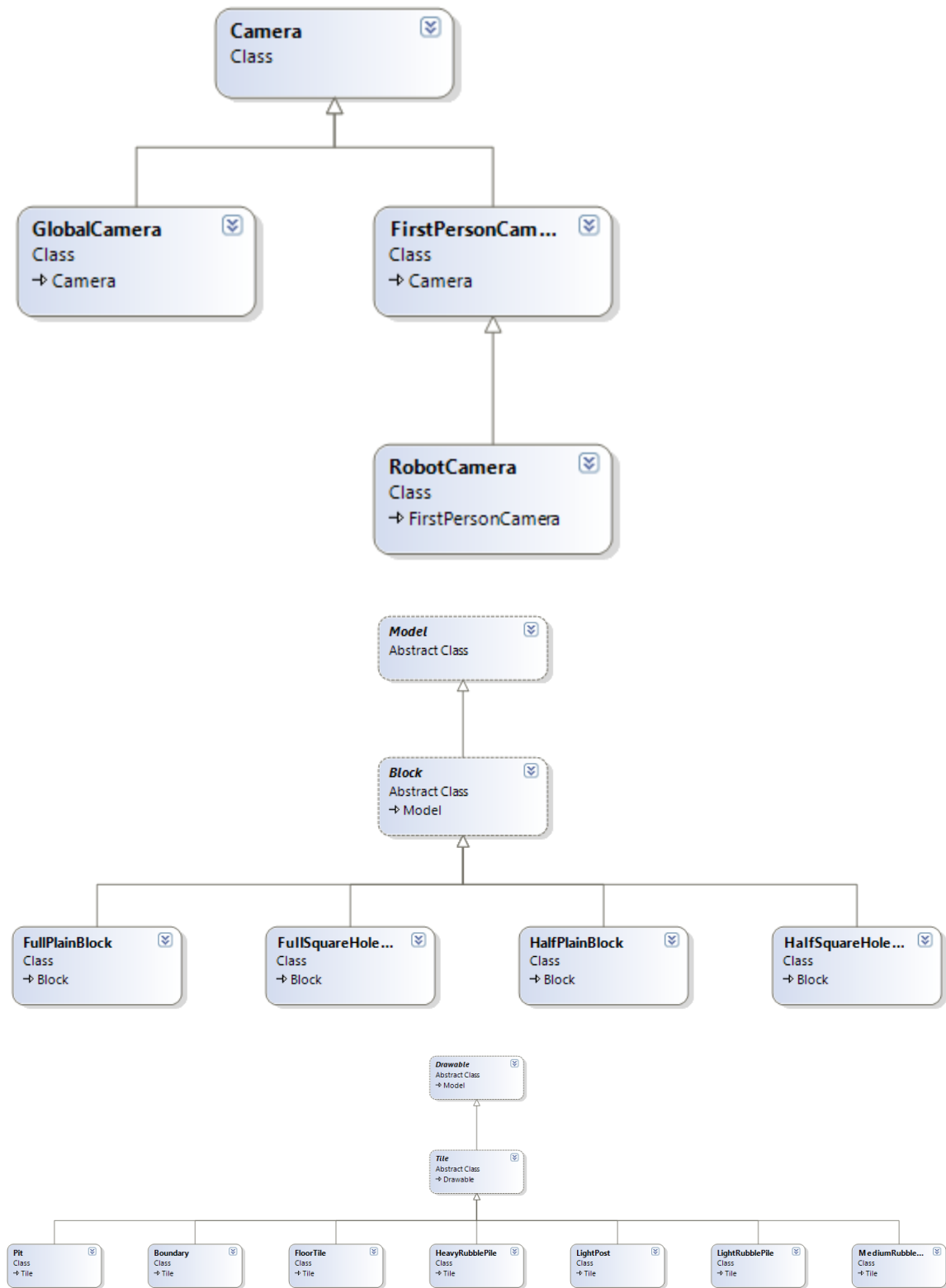
If you have properly set up your development environment and the dependencies as described earlier, Rawbots compilation should be straightforward. Open the solution file (Rawbots.sln) either in Visual Studio or MonoDevelop, build and run. That's it, nothing more complicated than that.

6. Directory Structure

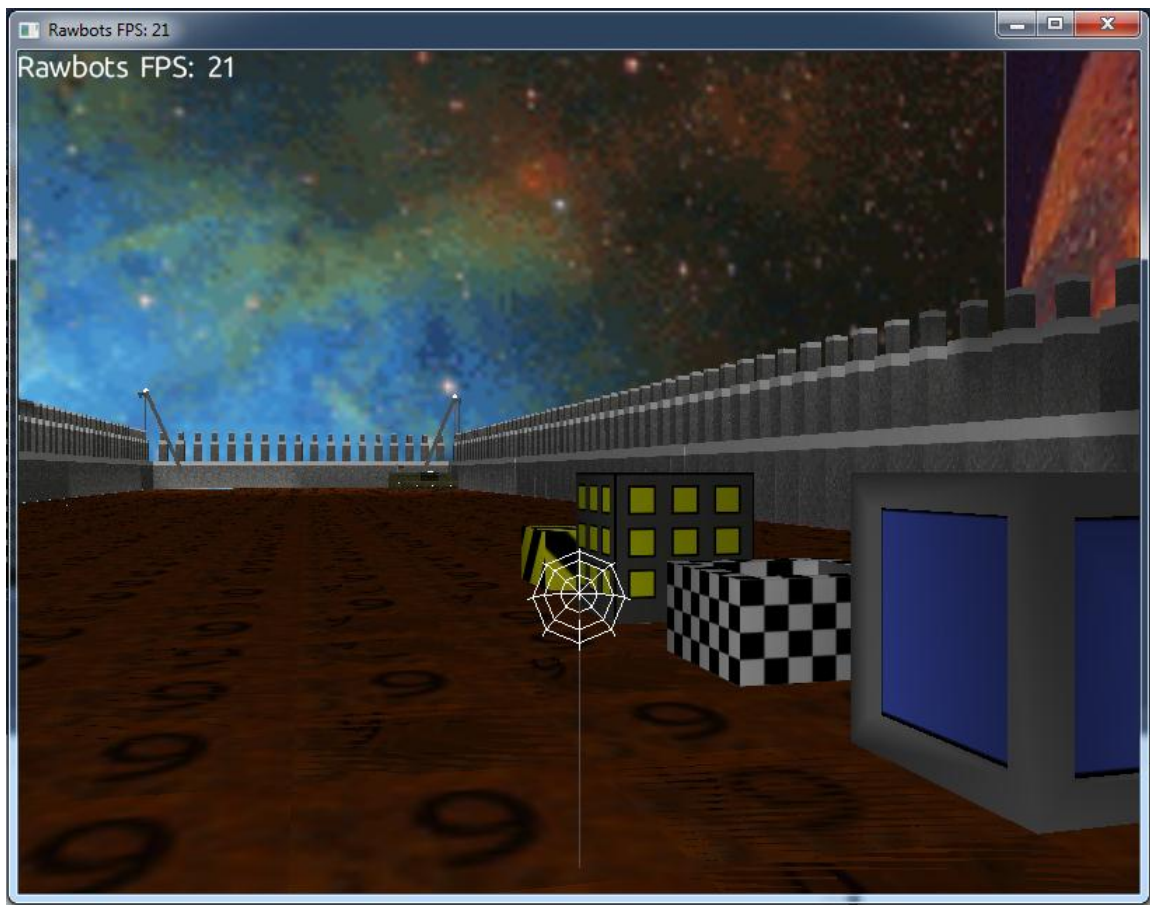
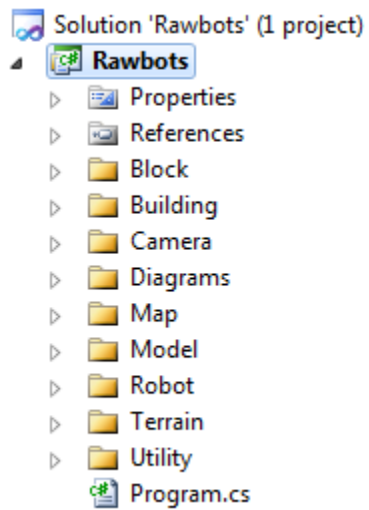


7. Software Architecture





8. Screenshots



APPENDIX A: MPL 2.0

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