Getting Started Guide

So, you have just downloaded Habanero Suite 2.6.0 and are wondering where to from here. Well, here we go…

***Note:*** *The only prerequisite for this framework and its tools is the .NET 4.0 Framework.*

# Package Contents

The root folder of this package contains the following:

* **bin/** – The binaries for the Habanero components included in this package.
* **components/** – The Habanero components, their binaries and their source.
* **hands on lab/** – Some hands on articles for gaining a better understanding on how to use the framework.
* **tools/** – Some tools that will help you get going with the Habanero Framework.
* **samples/** – Some samples showing how to use Habanero in various scenarios
* **Brochure.pdf** – A marketing brochure highlighting the main benefits of Habanero.
* **GettingStarted.pdf** – This guide… amazing isn’t it…
* **HabaneroBook\_EarlyDraft.pdf** – A ***very early*** work in progress draft of the Habanero book that will give you some insight into the framework, its concepts and the practices valued around its development.
* **readme.txt** – Some simple information about the package.

# Tools

The “**FireStarter”** tool provided in this package will assist you in creating your applications based on the Habanero framework. It is not required for Habanero development, but does help a great deal.

* FireStarter can be run from the folder it is found in and does not required any installation procedure (other than ensuring that the .NET 4.0 Framework is installed).
* If you use the “Import from Database” or “Create Solution from Database” feature to reverse engineer your database into your domain model you will need to place **the relevant database provider’s ADO.NET provider dlls in the FireStarter application folder.**
* **The tutorials found on the** <http://www.habanerolabs.com> **site will assist you in getting started with modeling your domain with this tool.**
* **FireStarter has been designed with an agile development methodology in mind, so it will easily handle repeated modeling and code generation cycles in your application development process.**
* **The code generated by this tool makes use of partial classes to keep the modifiable classes separate to the generated ones. For example, if a ‘MyClass.cs’ file is generated with a ‘MyClass.def.cs’ file as well, the ‘def.cs’ will be regenerated from FireStarter each time the Code Generation feature is used. It is best to check the comments at the top of a generated class before modifying it to make sure that it is not a file that could be regenerated at a later stage.**

# Components

## Habanero Core

Habanero Core is the heart of the Habanero framework. It contains the ORM layer of the framework. This includes data accessors for multiple database vendors as well as a highly efficient in-memory data store.

* **Binaries – These are found in the *“components/Habanero Core 2.6.0/bin”* folder.**
  + **Habanero.Base.dll – The base library for Habanero, containing the required interfaces and infrastructure for the framework. It also includes a variety of utility classes.**
  + **Habanero.BO.dll – The core implementation of the ORM, including the base domain classes, the implementation of the high speed in-memory data store as well as the parsers for the standard domain mapping xml definition files.**
  + **Habanero.DB.dll – This library contains all of the database specific adapters and connection factories for every database vendor that Habanero supports out of the box.**
    - **Note: If you do not require a database connection, this library is not needed. But, if you do intend to connect to a database, the relevant provider’s ADO.NET dlls should be placed in the application’s runtime folder or referenced directly.**
  + **Habanero.Console.dll – This library contains startup classes to make running a console Habanero-based application easier.**
* **Source – The source code is found in a zip file in the *“components/Habanero Core 2.6.0”* folder. Please do not hesitate to dive into the framework and add your ideas, feedback, and contributions.**
* **Code Documentation – The code documentation is found in the *“components/Habanero Core 2.6.0”* folder. It is an auto generated document that provides specific information about each class and function in the framework.**
* **Resources – The primary resource for information is** <http://www.habanerolabs.com>
  + **Hands on lab – If you are new to domain modeling or want to see what Habanero Core is all about without worrying about user interfaces or databases these labs will guide you through the first few steps.**
  + **Samples – There are a set of samples in the samples folder in this package**
  + **Tutorials – These are found on Habanero labs:** <http://www.habanerolabs.com/Tutorials.aspx>
  + **Forum – This is the best place to go for assistance, comments or suggestions. This is also found on the Habanero Labs site:** <http://www.habanerolabs.com/Forum.aspx>
  + **Habanero book – This is found in this package. It is a very rough draft at the moment, but should provide enough information to get you going.**
  + **Downloads – All the latest downloads are available on the Habanero Labs site as well as links to the latest community projects. See** <http://www.habanerolabs.com/Download.aspx>
  + **Updates on new releases – These are available through subscription on the Habanero Labs site.**
  + **Community – We believe that the strength of any open source project is based on the community built around it. As a result, many of these resources require the creation of a user account on the Habanero Labs site in order to access them. We would love to hear your feedback and include your contributions in the framework, so please don’t hold back, get involved.**
  + **Online source code – The latest trunk of Habanero Core and many of the community projects are hosted on the source forge website (see** <http://sourceforge.net/projects/habanero/>**) if you have an itch to be on the cutting edge. All commits to Habanero trunk are only uploaded after all the tests have passed, so the trunk version has some guarantee of stability.**

## Community Projects

### Habanero Faces

Habanero Faces is a set of user interface libraries for use with Habanero Core used to build Windows Forms or Visual WebGUI user interfaces for your business objects. It provides this aspect through a runtime UI generation of standard user interfaces as defined in the class definitions of your domain model.

* **Binaries – These are found in the *“components/Habanero Faces 2.7.0/bin”* folder.**
  + **Habanero.Faces.Base.dll – The base library for Habanero Faces which contains the required interfaces and infrastructure for the UI part of the framework.**
  + **Habanero.Faces.Win.dll – The Windows Forms implementation of the Control Factory as well as the standard control interfaces.**
  + **Habanero.Faces.VWG.dll – The Visual WebGUI Forms implementation of the Control Factory as well as the standard control interfaces. If you use this library, you will need to install** Visual WebGUI 6.4 RC0a found on the <http://www.visualwebgui.com/> website.
* **Source – The source code is found in a zip file in the *“components/Habanero Faces 2.7.0”* folder.**
* **Code Documentation – The code documentation is found in the *“components/Habanero Faces 2.7.0”* folder. It is an auto generated document that provides specific information about each class and function in the framework.**
* **Resources – The primary resource for information is** <http://www.habanerolabs.com>.
* **Online source code – The latest source code trunk is found on the source forge website.** <http://sourceforge.net/projects/habanerofaces/>

### Habanero Testability

Habanero Testability is a set of libraries for use with Habanero Core used to build valid data for your business objects for testing purposes. Included are some helper classes to assist in testing aspects of your business objects.

* **Binaries – These are found in the *“components/Habanero Testability 1.3/bin”* folder.**
  + **Habanero.Testability.dll – This library provides the factories for creating valid business objects for use in your tests. It includes value generators and business object generators.**
  + **Habanero.Testability.Helpers.dll – This library contains helper classes for testing Habanero objects. This includes Fakes for testing your business objects without some of the built in Habanero functionality that may interfere with the purpose of the particular test.**
  + **Habanero.Testability.Testers.dll – This library contains testers for testing particular aspects of your Habanero business objects as well as extension methods for easily asserting these aspects**. This library does have a dependency on the nunit framework **(v2.5.10) for its assertions.**
* **Source – The source code is found in a zip file in the *“components/Habanero Testability 1.3”* folder.**
* **Resources – The primary resource for information is** <http://www.habanerolabs.com>.
* **Online source code – The latest source code trunk is found on the source forge website.** <http://sourceforge.net/projects/habanerotestabi/>

### Smooth Habanero

Smooth Habanero is a set of libraries that can be used to automatically map your domain model classes to a database structure. Normally when using Habanero Core you will create an xml file which contains the mapping between your classes and the database. If you prefer to work from code (rather than using a modeling tool like FireStarter), you can use Smooth to automatically map your classes.

* **Binaries – These are found in the *“components/Smooth Habanero 1.6/bin”* folder.**
  + **Habanero.Smooth.dll – This library provides the classes to do the automatic mapping of your classes.**
* **Source – The source code is found in a zip file in the *“components/Smooth Habanero 1.6”* folder.**
* **Resources – The primary resource for information is** <http://www.habanerolabs.com>. Further documentation is coming soon.

### **Other Projects**

Information on other community projects can be found at: <http://www.habanerolabs.com/Community.aspx>

# Links

Here are some links that you may find useful in your journey to becoming an expert Habanero developer:

* <http://www.habanerolabs.com> – Your first port of call for **anything** you need.
* <http://www.habanerolabs.com/Download.aspx>– **All the latest downloads.**
* <http://www.habanerolabs.com/Tutorials.aspx>– **Tutorials** to get you going.
* <http://www.habanerowiki.com> – The Habanero **Wiki**, there is a great deal of useful information here
* <http://www.habanerolabs.com/Forum.aspx>– **Questions, comments and ideas are welcome. We have many very active community members that would love to hear your voice.**
* <http://sourceforge.net/projects/habanero/>– **It is open source, your contributions are welcome!**