



FitNesse Overview & Deep Dive
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- MapQuest was originally founded in 1967 as a cartographic services division of R.R. Donnelley & Sons in Lancaster, Pennsylvania.
- In 1994 MapQuest became an independent company and was renamed GeoSystems Global Corporation.
- In February 1996, MapQuest launched the first consumer-focused interactive mapping site on the Web, MapQuest.com.
 - The site became so popular that within the first week of its launch both of the original servers went down. Within three months, the site needed 50 servers to handle the demand.
- In 1999 GeoSystems global was renamed to MapQuest.com
- In 2000 MapQuest was purchased by AOL.

Why FitNesse?

- [FitNesse](#) is a software testing tool.
- From another perspective, [FitNesse](#) is a lightweight, open-source framework that makes it easy for software teams to:
 - Collaboratively define [AcceptanceTests](#) -- web pages containing simple tables of inputs and expected outputs.
 - Run those tests and see the results.*

How Does It Work In A Nutshell?



- Create a wiki table (wiki markup)
- Create a fixture (java)
- Run the test

How do I get started?



- Goto: <http://www.fitnessse.org/> and download the latest package.
- Unpackage and from a command line start FitNesse
 - `run.bat -p 3700`
- View the site in your web browser:
 - `http://localhost:3700`

FitNesse Pages

My first FitNesse page sample.

- <http://localhost:3700/FrontPage?edit>
 - You can add any links you would like using standard wiki markup.
- Go to Sandbox and add a new sample link. -> Save page.
 - MUST BE CAMEL CASED I.E SimpleSample5
- Click on “?” to add a new wiki page

My first FitNesse page sample content



- Add content and save page. Common content:
 - Local classpath
 - !path C:\projects\fitnesse\fixtures\fitnesseexample.jar
 - Import
 - !|Import|
 - |com.mapquest.sample.fixtures|
 - First row, column is name of fixture to create
 - !|**SimpleFixture**|parm1|parm2|parm3|parm4|
 - SecondRow are inputs that map to public member variables of the fixture and the names of the methods of the fixture to call. They are denoted by their “?” at the end of their names
 - |data1|data2|isData1ANumber?|isData2ANumber?|
- Add the test feature to the properties page.
- Run the test

- Adding variables to pages
 - Are accessible to the page it was created in and all children pages.
 - Good for making global changes such as a server name or port.
 - See example: <http://localhost:3710/MapQuest.MqSearchApiTest.SearchApi>
 - Add Variable fixtureName
 - !define fixtureName {SimpleFixture} Parameters
 - !|\${fixtureName}|parm1|parm2|parm3|parm4|
- Parameters
 - Are passed in as the first row of the table after the name of the fixture that you are associating your table with
 - !|SimpleFixture|**parm1|parm2|parm3|parm4|**
- Test Suites
 - Are created by editing page properties and selecting test button

■ How Does It Work:

- First, FitNesse submits the test table to the underlying FitFramework (FitNesse is a wiki GUI built on top of Fit).
- Fit looks for and runs the fixture code corresponding to the test table.
- By design, the fixture code calls some underlying application code to do the real work, and report results back to the fixture
- Fit gives FitNesse back the results from running the fixture code
- FitNesse figures out whether to turn table cells red or green (or yellow, if an exception was thrown) and displays the results page accordingly

Fixtures

- What Is A Fixture:
 - Java class that is called to process the table
 - The type of fixture determines how the result gets reported back to fitnessse
 - Types:
 - Column
 - Rows of data represent inputs & outputs
 - Row
 - Designed to check that you get back exactly what you want from a query
 - Action, etc.
 - Your own custom fixture
 - Packaging for fitnessse
 - Typically via a jar file

- SimpleSample fixture
 - Column fixture
 - Compiled and packaged using ant tasks
 - No need to restart FitNesse upon updating fixture
- Modify return values true -> false
- Change variables from data to column

- We have found FitNesse to be a great tool to get acceptance tests defined, created, and running in very little time
- Provides one place to create and maintain tests
- Collaborative, intuitive environment allows all members of the team to engage in testing
- Color coded results makes the task of reviewing results quick and easy

Questions?