

# “Управление жизненным циклом разработки корпоративных приложений

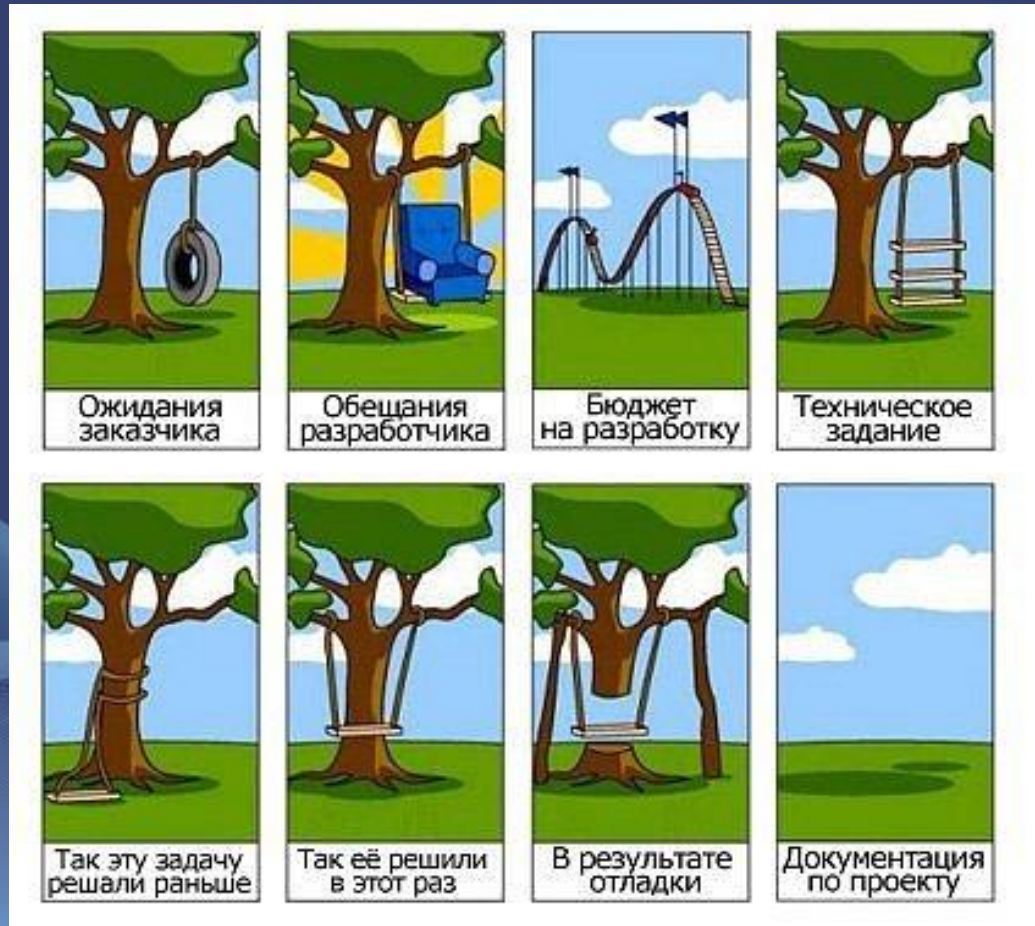
Докладчик:ст. гр. М42д Василенко А.П.

# Содержание

- Основные этапы разработки приложений
- Требования к корпоративным системам
- Доп. инструменты разработки
- Тестирование и сопровождение

# Основные этапы проектирования

1. Анализ требований
2. Проектирование
3. Реализация
4. Тестирование
5. Сопровождение



# Анализ требований

Разработки требований  
Выявление  
Анализ  
Спецификация  
Проверка  
Управления требованиями

Вход:

**Бизнес - требования**  
**Пользовательские требования**  
**Функциональные требования**

Выход:

**Документ**  
**Данные в автоматизированной системе управления требованиями**

# Проектирование

## Структура

Presentation(UI)

Presentation Logic

Domain Logic(Business logic)

Data Interface(Data Align Level)

Data source(Data Layer)

Test-Driven Development(TDD)

Feature Driven Development(FDD)

Dynamic System Development(DSD)

Model Driven Development (MDD)



# Требования к информационным корпоративным системам

- Надежность
- Целостность данных
- Гибкость
- Безопасность
- Масштабируемость
- Модульность
- Открытость
- Простота в изучении
- Поддержка внедрения и сопровождения со стороны разработчика

# Дополнительные инструменты разработки

## *BugTracker*

BugTracker .NET

*Jira*

MantisBT

*Redmine*

## *Version Control System(VCS)*

SVN

*HG + Mercurial*

TFS

## *Nightly Builds*

CCNET

## *Documents Repository*

Windows SharePoint Services

*Tiki*

*Git*

# BugTracker

MantisBT([www.mantisbt.org/](http://www.mantisbt.org/))



Anonymous | [Login](#) | [Signup for a new account](#)

2009-02-01 03:44 EST



[Main](#) | [My View](#) | [View Issues](#) | [Change Log](#) | [Roadmap](#) | [Docs](#) | [Wiki](#) | [ManTweet](#) | [Repositories](#)

## Unassigned [^] (1 - 10 / 2006)

<a href="#">0010092</a> -	Logging of user action (login, download, ...) feature - 2009-01-30 09:55
<a href="#">0009394</a> - @	MantisConnect Webservice crashes when trying to get issue information api soap - 2009-01-30 07:43
<a href="#">0010094</a> -	EMail generation if not assigned bugtracker - 2009-01-30 07:02
<a href="#">0010091</a> -	CHANGE STATUS TO: Assigned vs ASSIGN TO ?? customization - 2009-01-29 23:37
<a href="#">0004640</a> -	New custom field types: "Version", "User" custom fields - 2009-01-29 22:52
<a href="#">0003790</a> - @	Additional Custom-Field-Type "users" custom fields - 2009-01-29 22:49
<a href="#">0010065</a> -	Custom field "date" not saved silently custom fields - 2009-01-29 08:22
<a href="#">0006418</a> -	Change Resolve status and Assignment at the same time feature - 2009-01-29 05:41
<a href="#">0007104</a> -	Auto assign on resolve bugtracker - 2009-01-29 05:39
<a href="#">0007150</a> -	Automatic reassignment on status transition feature - 2009-01-29 05:39

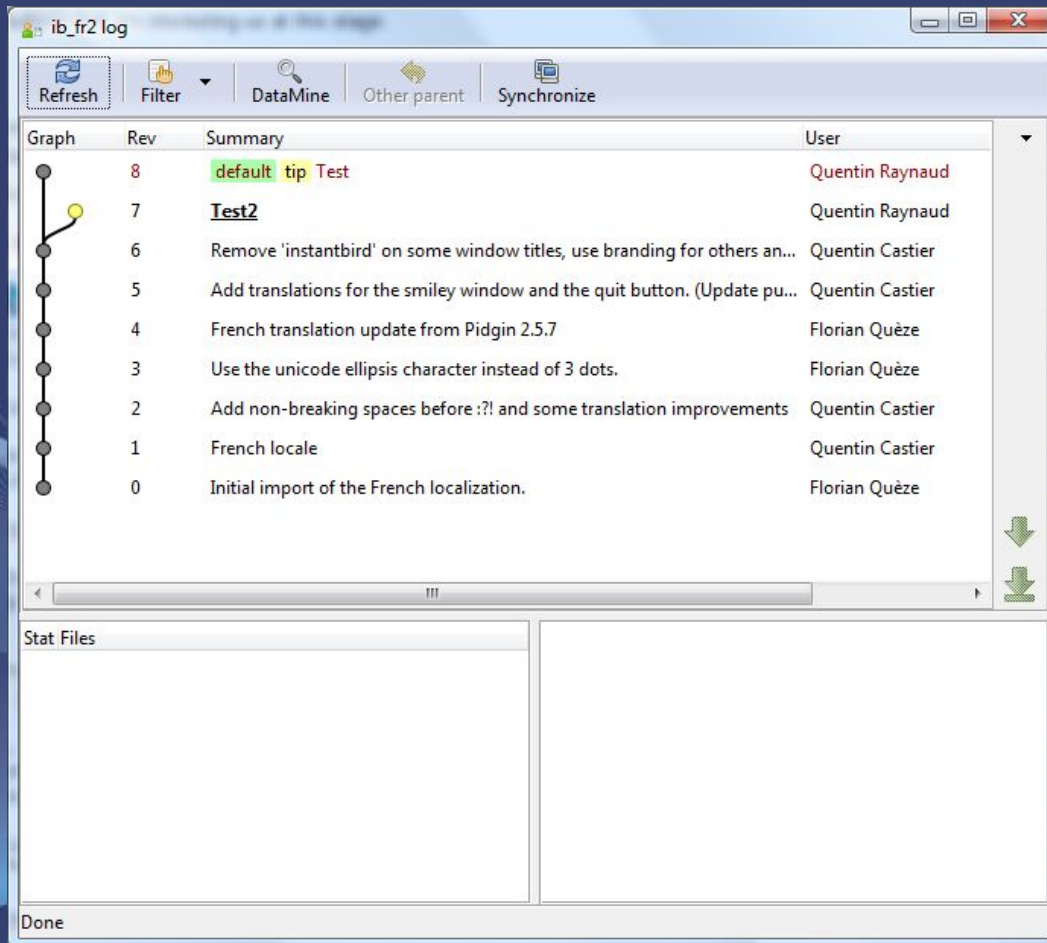
## Resolved [^] (1 - 10 / 254)

<a href="#">0010093</a> -	(phpmailer) class.phpmailer.php => private \$smtp is accessed by mantis email - 2009-01-31 14:37
<a href="#">0010056</a> - @	Category national character upgrade - 2009-01-30 14:30
<a href="#">0009455</a> -	Database configuration does not correctly deal with array administration - 2009-01-30 11:18
<a href="#">0010089</a> -	Updating version field does not trigger history note administration - 2009-01-28 03:55
<a href="#">0008628</a> -	The "Show Content" link on attached tx file doesn't show text webpage - 2009-01-28 03:47
<a href="#">0007790</a> - @	Links protected by brackets are not processed properly bugtracker - 2009-01-27 12:27
<a href="#">0009216</a> - @	Problems with Russian language localization - 2009-01-27 11:40
<a href="#">0007144</a> -	Unable to set realname because of existing username administration - 2009-01-25 14:21
<a href="#">0010078</a> -	logging into the site with out entering login details security - 2009-01-24 12:44
<a href="#">0010073</a> -	Form Validate in JavaScript javascript - 2009-01-22 14:43












# Version Control System(VCS)

TortoiseHG([mercurial.selenic.com/](http://mercurial.selenic.com/))



The screenshot displays the TortoiseHG interface for a repository named 'ib\_fr2 log'. The main window shows a commit log with the following data:

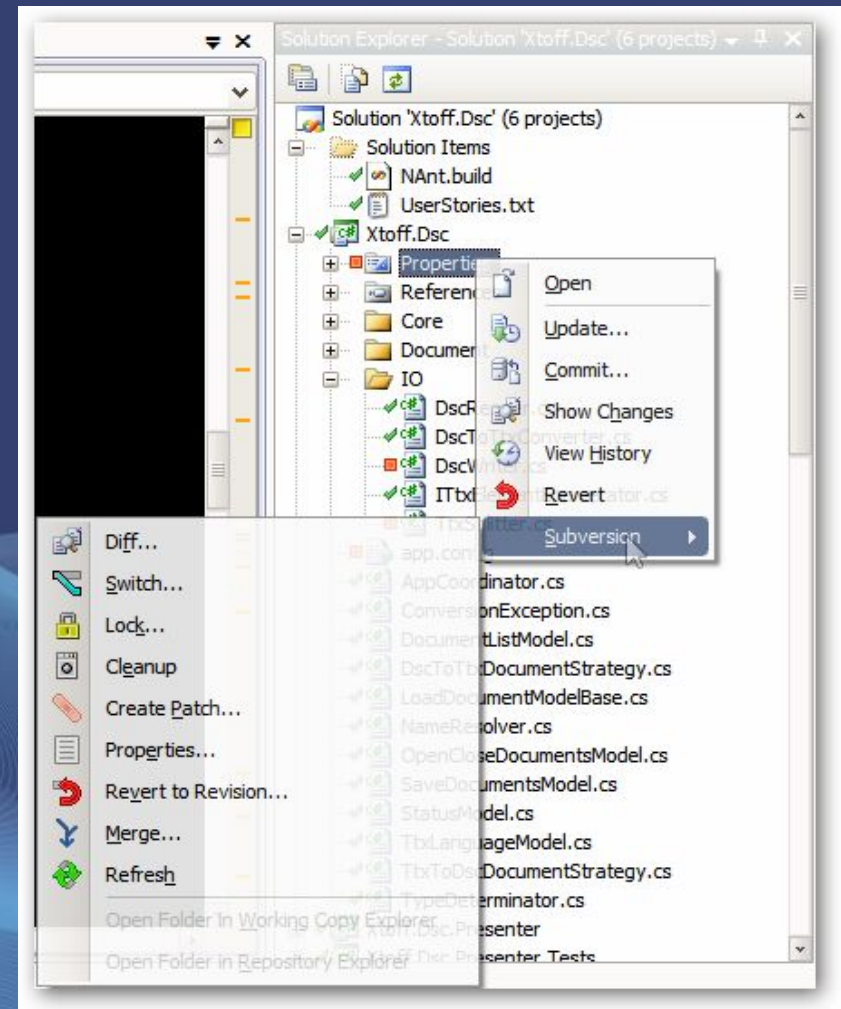
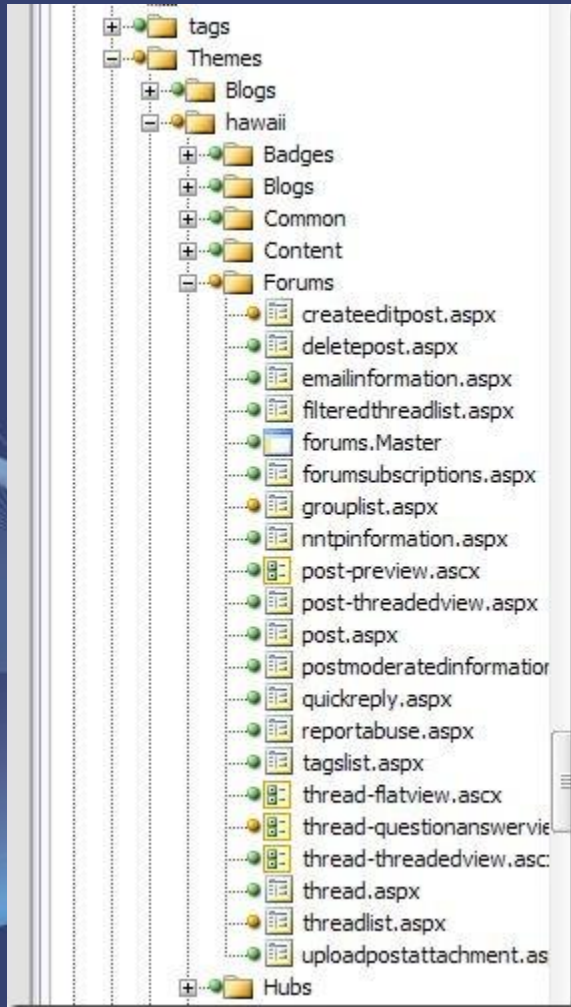
Graph	Rev	Summary	User
	8	default tip Test	Quentin Raynaud
	7	<u>Test2</u>	Quentin Raynaud
	6	Remove 'instantbird' on some window titles, use branding for others an...	Quentin Castier
	5	Add translations for the smiley window and the quit button. (Update pu...	Quentin Castier
	4	French translation update from Pidgin 2.5.7	Florian Quèze
	3	Use the unicode ellipsis character instead of 3 dots.	Florian Quèze
	2	Add non-breaking spaces before :?! and some translation improvements	Quentin Castier
	1	French locale	Quentin Castier
	0	Initial import of the French localization.	Florian Quèze

The interface includes a toolbar with buttons for Refresh, Filter, DataMine, Other parent, and Synchronize. Below the log is a 'Stat Files' section, which is currently empty. The status bar at the bottom indicates 'Done'.

# Version Control System(VCS)

VisualSVN([www.visualsvn.com](http://www.visualsvn.com))

AkhkSVN([ankhsvn.open.collab.net/](http://ankhsvn.open.collab.net/))



# Nightly Builds Server (CCNET)

CCNET - CruiseControl.NET (<http://ccnet.thoughtworks.com/>)

Server	Project Name	Last Build Status	Last Build Time	Next Build Time	Last Build Label	CCNet Status	Activity Messages	Admin
local	<a href="#">Build</a>	Success	2009-12-17 11:08:53	2009-12-17 11:47:21	728	Running	Sleeping	Force Stop
local	<a href="#">Coverage</a>	Exception	2009-10-28 14:08:46	Force Build Only	1	Running	Sleeping	Force Stop
local	<a href="#">Deploy-To-Development</a>	Success	2009-12-17 10:31:03	Force Build Only	89	Running	Sleeping	Force Stop
local	<a href="#">Deploy-To-Production</a>	Failure	2009-10-10 17:19:09	Force Build Only	1	Running	Sleeping	Force Stop
local	<a href="#">Document</a>	Failure	2009-11-02 15:54:55	Force Build Only	53	Stopped	Sleeping	Force Start
local	<a href="#">FxCop</a>	Failure	2009-10-04 20:55:50	Force Build Only	13	Running	Sleeping	Force Stop
local	<a href="#">Metrics</a>	Success	2009-10-22 15:23:40	Force Build Only	49	Running	Sleeping	Force Stop
local	<a href="#">Test</a>	Failure	2009-10-22 14:11:05	Force Build Only	3	Running	Sleeping	Force Stop



# Nightly Builds Server (CCNET)

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Server	Project Name	Last Build Status	Last Build Time	Next Build Time	Last Build Label	CCNet Status	Activity	Messages	Admin
local	Build	Success	2009-12-17	2009-12-17	728	Running	Sleeping		Force

Project	Activity	Detail	Last ...	Last Build Time
DigiNavigation main build	Sleeping	Next build check: 13:33:30	19	24/02/2009 14:49:30
SSE-Documentation	Sleeping	Next build check: 01:00:00	20	23/02/2009 14:26:39
SSE-NightlyBuild	Sleeping	Next build check: 03:00:00	59	25/02/2009 03:00:00
SSE Main build	Sleeping	Next build check: 13:33:28	349	24/02/2009 17:27:22

Buttons: Force Build, Show Queues

			15:54:55	Only					Start
local	<a href="#">FxCop</a>	Failure	2009-10-04 20:55:50	Force Build Only	13	Running	Sleeping		Force Stop
local	<a href="#">Metrics</a>	Success	2009-10-22 15:23:40	Force Build Only	49	Running	Sleeping		Force Stop
local	<a href="#">Test</a>	Failure	2009-10-22 14:11:05	Force Build Only	3	Running	Sleeping		Force Stop



# *Documents Repository*

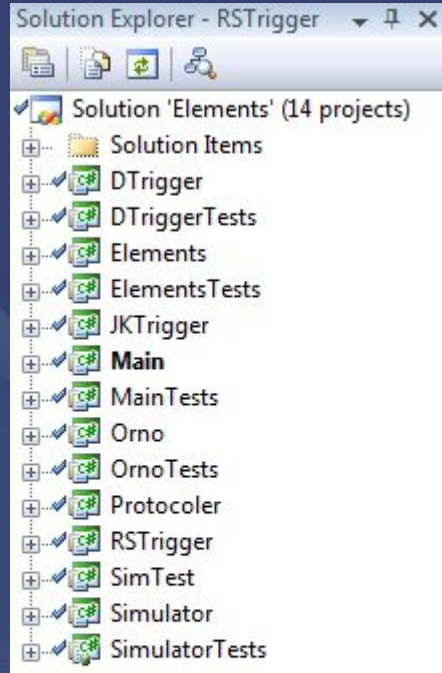
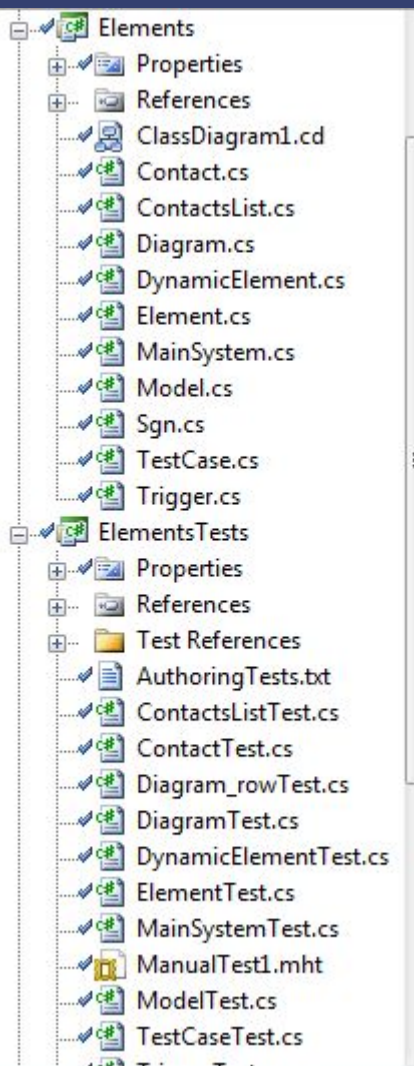
Tiki  
Windows SharePoint Services

# Testing

- Функциональное и регрессионное тестирование (functional and regression testing)
- Тестирование прототипа (prototype testing)
- Тестирование графического интерфейса пользователя (GUI testing)
- Тестирование безопасности (security testing)
- Тестирование доступности (accessibility testing)
- Тестирование удобства пользования (usability testing)
- Тестирование совместимости с различными Интернет-браузерами (cross browser testing)
- Тестирование баз данных (database testing)
- Техническое тестирование (technical testing)
- Тестирование процедур установки и механизмов лицензирования (installation and licensing testing)
- Тестирование VoIP-приложений (VoIP testing)
- Тестирование приложений для мобильных устройств (mobile applications testing)
- Тестирование документации (documentation testing)
- Модульное тестирование (unit testing)

# Unit Testing

Gallio MbUnit  
Rhino Mocks  
Nunit  
NUnitAsp



```
/// 
[TestMethod()]
public void AddTest ()
{
    ContactsList target = new ContactsList(); // TODO: Initialize to an appropriate value
    Contact contact = null; // TODO: Initialize to an appropriate value
    target.Add(contact);
    Assert.Inconclusive("A method that does not return a value cannot be verified.");
}
```

# Unit Testing.MBUnit

```
[Test]
public void SettingValueRaisesEvent()
{
    bool eventRaised = false;
    Parameter param = new Parameter("num", "int", "1");
    param.ValueChanged +=
        delegate(object sender, ValueChangedEventArgs e)
        {
            Assert.AreEqual("42", e.NewValue);
            Assert.AreEqual("1", e.OldValue);
            Assert.AreEqual("num", e.ParameterName);
            eventRaised = true;
        };
    param.Value = "42"; //should fire event.
    Assert.IsTrue(eventRaised, "Event was not raised");
}
```



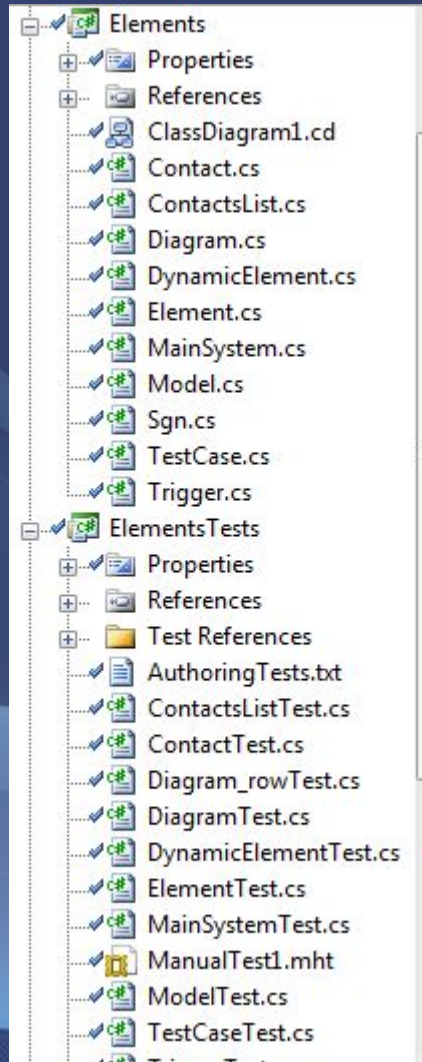
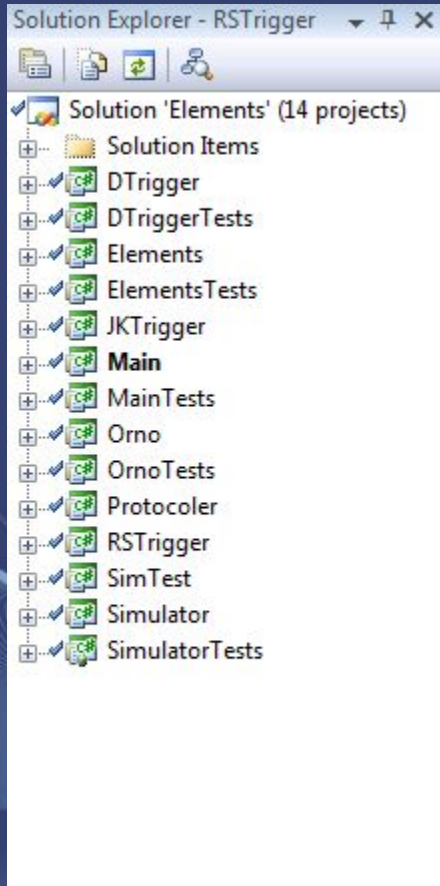
# Unit testing. *NUnitASP*

```
[Test]
public void TestExample()
{
    // First, instantiate "Tester" objects:
    LabelTester label = new LabelTester("textLabel");
    LinkButtonTester link = new LinkButtonTester("linkButton");

    // Second, visit the page being tested:
    Browser.GetPage("http://localhost/example/example.aspx");

    // Third, use tester objects to test the page:
    Assert.AreEqual("Not clicked.", label.Text);
    link.Click();
    Assert.AreEqual("Clicked once.", label.Text);
    link.Click();
    Assert.AreEqual("Clicked twice.", label.Text);
}
```

# Unit Testing



# The End

**СПАСИБО ЗА ВНИМАНИЕ!**

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