



Developers' Guide

Framework

Version 2.0.3.1

20th January 2012

© 2011 51Degrees.mobi Limited. All rights reserved.

The copyright in and title to the document "Developers' Guide – Framework" belongs to 51Degrees.mobi Limited. No part of it whatsoever may be reproduced in any form without the prior authority of 51Degrees.mobi Limited and/or any original source as appropriate. Any agreed copy or extract must be marked with all proprietary notices which appear on the original and will be subject to the requirement that you will acknowledge on the face of each part of the reproduced material that it belongs to 51Degrees.mobi Limited.

1 Contents

1	Contents.....	2
2	Preface	5
3	Introduction	6
3.1	51Degrees.mobi Design Concepts	6
3.1.1	Single Code Base = Better Business Model	6
3.1.2	Keeping Mobile Simple	8
3.1.3	Fingers.....	9
3.1.4	Performance	10
3.1.5	No Zoom	12
3.2	Technical Design Concepts.....	12
3.2.1	Wrapping ASP.NET.....	13
3.2.2	Efficient Hyper Text Markup Language (HTML)	13
3.2.3	Cookies & Mobile Profiles.....	16
3.2.4	Images - Size Matters.....	17
3.3	Target Audience	18
4	Format.....	19
4.1	Application Themes.....	19
4.1.1	Default Themes.....	19
4.1.2	Dynamic Themes.....	20
4.2	Styles Control	21
4.3	CSS Includes	23
4.3.1	CssIncludeGroup	23
4.4	CSS.....	23
4.5	Default Style Output	24
5	Images.....	25
5.1	Concept	25
5.2	Calculating Image Size.....	27

5.2.1	Server	27
5.2.2	Client	27
5.2.3	Summary	29
5.3	Image Sources	33
5.3.1	Formats	33
5.3.2	URLs	33
5.3.3	Why?	33
5.3.4	Image Controls	36
6	Data Persistence & Performance	37
6.1	Performance	38
6.2	Mobile Profile	39
6.2.1	Data Types	40
6.2.2	Enabling Mobile Profile	40
6.2.3	User Data	41
6.2.4	Profile ID	42
6.2.5	Performance Properties	43
6.2.6	Mobile Controls	45
7	Configuration	46
7.1	.NET Versions	46
7.2	Trust	46
8	Supporting Classes	46
8.1	Message	46
8.2	Mobile Profiles	47
8.3	Telephone Numbers	48
9	Mobile Controls	48
9.1	Common Issues	49
9.1.1	PostbackUrl Property	49
9.1.2	Security Permissions	49

9.2	AdRotator	49
9.3	BulletedList	51
9.4	Button	51
9.5	Calendar	52
9.6	ChangePassword	54
9.7	CheckBox	55
9.8	CheckBoxList	56
9.9	CompareValidator	57
9.10	CustomValidator	57
9.11	DataList	58
9.12	DropDownList	59
9.13	FileUpload	59
9.14	HyperLink	60
9.15	Image	60
9.16	ImageButton	61
9.17	Label	61
9.18	LinkButton	61
9.19	ListBox	62
9.20	Location	63
9.20.1	Methods	63
9.20.2	Implementation	66
9.20.3	Reference	68
9.21	Login	71
9.22	LoginName	73
9.23	LoginStatus	73
9.24	Map	73
9.25	Pager	78
9.26	Panel	79

9.27	PasswordRecovery	80
9.28	RadioButton	80
9.29	RadioButtonList.....	81
9.30	RangeValidator	82
9.31	RegularExpressionValidator	82
9.32	RequiredFieldValidator	83
9.33	Styles	83
9.34	Table.....	85
9.35	TextBox.....	85
9.35.1	Reference	87
9.36	ValidationSummary.....	88
9.37	Page.....	89
10	Appendices.....	89
10.1	Configuration	89
10.1.1	Migrating from Previous Versions.....	89
10.1.2	Enabling Mobile Profiles	90
10.1.3	fiftyOne Sections	93
10.1.4	Handlers	97
10.1.5	Modules	98
10.2	Install Files.....	98
10.3	Automatic Upgrades	99

2 Preface

Thank you for using 51Degrees.mobi. We've spent over 18 months designing, building and testing this 1st version of the Framework. We're excited to have created a product that enables ASP.NET developers to develop compelling mobile web applications rapidly. We've captured over 15 years' experience of mobile development, solving common challenges and pitfalls in the Framework so you don't have to. Our team of testers has been working hard ensuring as many network and mobile device combinations as possible have been thoroughly checked. We're proud of the product we've created and hope you and your users will enjoy using it. If not please let us know via our [forums](#) or other [contact methods](#).