



Download this chapter free at:
<http://tinyurl.com/aspnetmvc>

Professional

ASP.NET MVC 1.0

Rob Conery, Scott Hanselman, Phil Haack, Scott Guthrie



Updates, source code, and Wrox technical support at www.wrox.com

Professional ASP.NET MVC 1.0

Published by
Wiley Publishing, Inc.
10475 Crosspoint Boulevard
Indianapolis, IN 46256
www.wiley.com.

Copyright © 2009 by Wiley Publishing, Inc., Indianapolis, Indiana
Chapter 1 is licensed under the terms of the Creative Commons Attribution No Derivatives 3.0 license.
Published simultaneously in Canada
ISBN: 978-0-470-38461-9
Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Library of Congress Cataloging-in-Publication Data is available from the publisher.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Limit of Liability/Disclaimer of Warranty: The publisher and the author make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation warranties of fitness for a particular purpose. No warranty may be created or extended by sales or promotional materials. The advice and strategies contained herein may not be suitable for every situation. This work is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services. If professional assistance is required, the services of a competent professional person should be sought. Neither the publisher nor the author shall be liable for damages arising herefrom. The fact that an organization or Website is referred to in this work as a citation and/or a potential source of further information does not mean that the author or the publisher endorses the information the organization or Website may provide or recommendations it may make. Further, readers should be aware that Internet Websites listed in this work may have changed or disappeared between when this work was written and when it is read.

For general information on our other products and services please contact our Customer Care Department within the United States at (877) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Trademarks: Wiley, the Wiley logo, Wrox, the Wrox logo, Wrox Programmer to Programmer, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates, in the United States and other countries, and may not be used without written permission. All other trademarks are the property of their respective owners. Wiley Publishing, Inc., is not associated with any product or vendor mentioned in this book.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Professional ASP.NET MVC 1.0

Table of Contents

Chapter 1: NerdDinner.

Chapter 2: Model View Controller and ASP.NET.

Chapter 3: ASP.NET > ASP.NET MVC.

Chapter 4: Routes and URLs.

Chapter 5: Controllers.

Chapter 6: Views.

Chapter 7: AJAX.

Chapter 8: Filters.

Chapter 9: Securing Your Application.

Chapter 10: Test Driven Development With ASP.NET MVC.

Chapter 11: Testable Design Patterns.

Chapter 12: Best of Both Worlds: Web Forms and MVC Together.

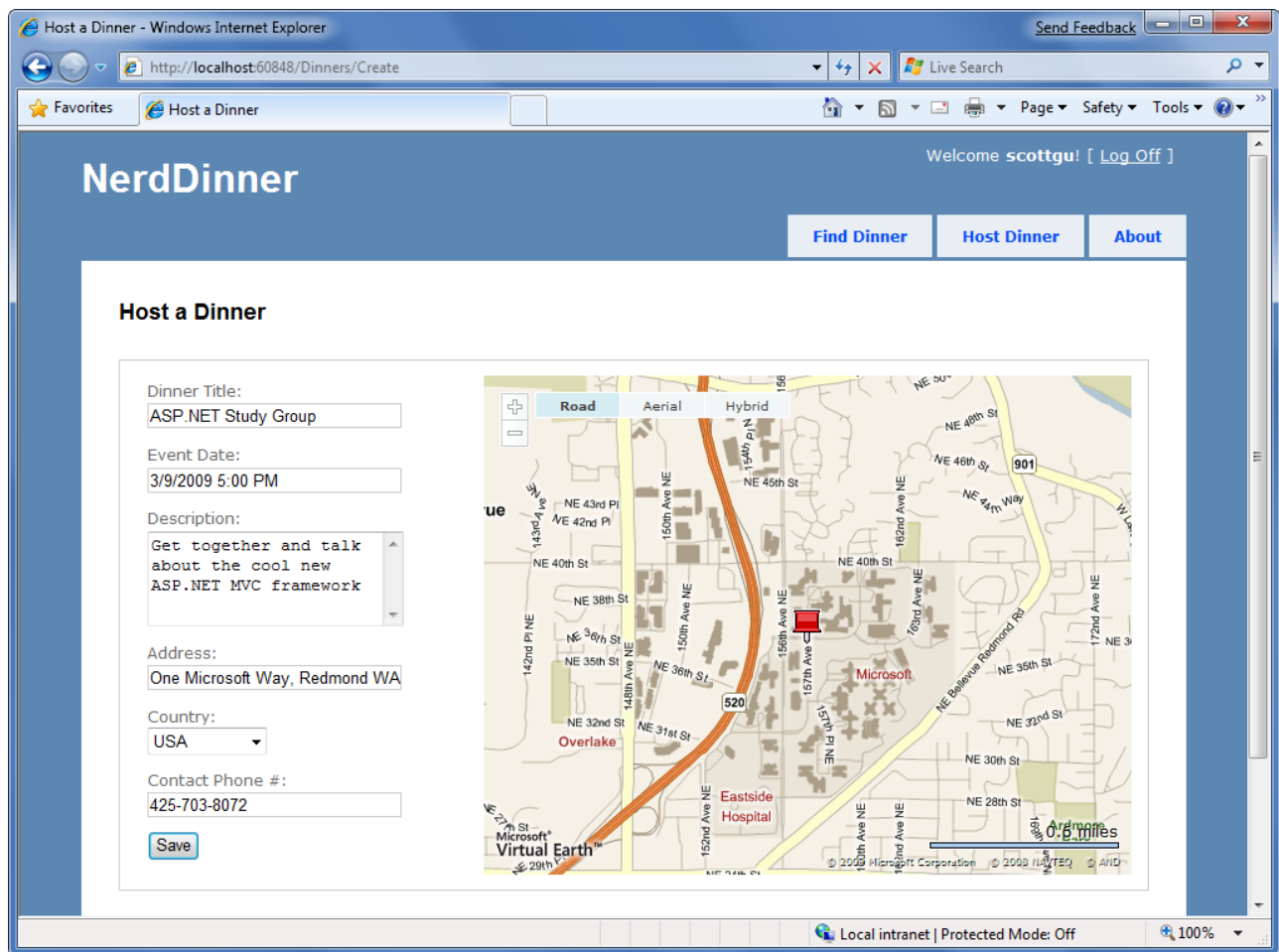
Chapter Contents

NerdDinner	3
File->New Project.....	8
Creating the Database	17
Building the Model	26
Controllers and Views	42
Create, Update, Delete Form Scenarios	67
ViewData and ViewModel	101
Partials and Master Pages.....	108
Paging Support.....	118
Authentication and Authorization.....	127
AJAX Enabling RSVPs Accepts.....	138
Integrating an AJAX Map.....	146
Unit Testing	165
NerdDinner Wrap Up	186

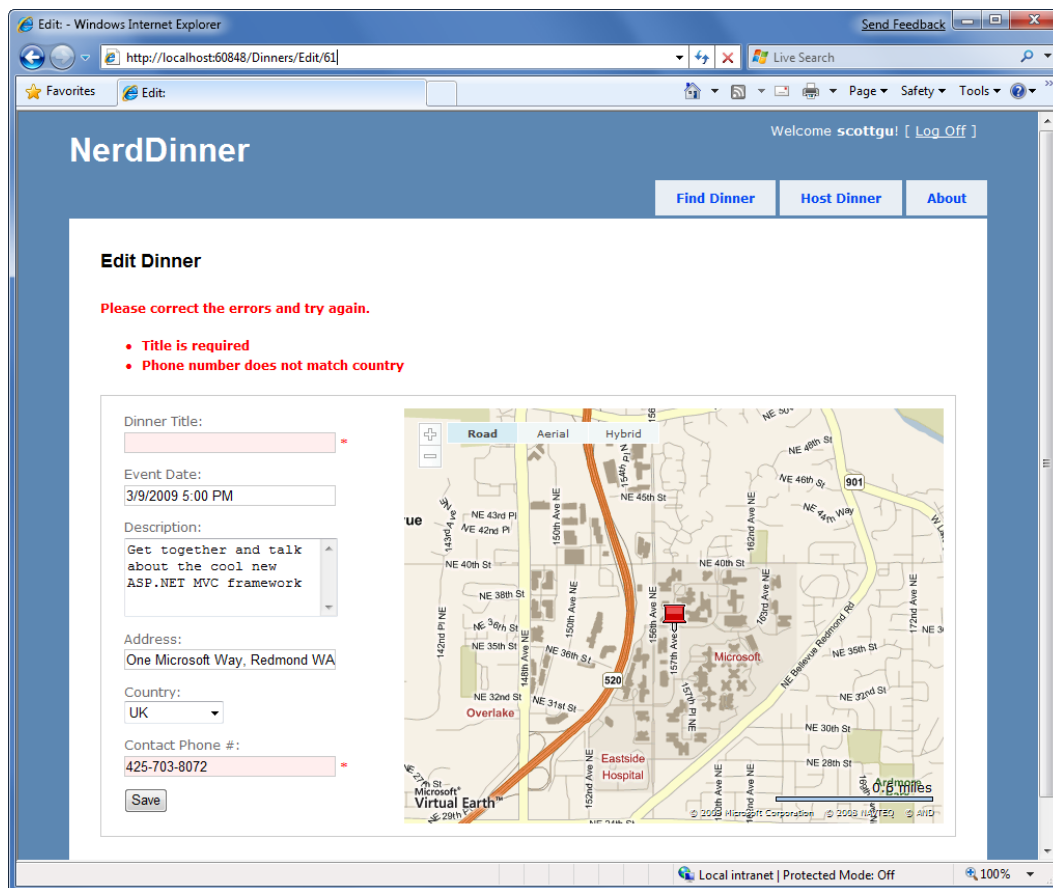
NerdDinner

The best way to learn a new framework is to build something with it. This first chapter walks through how to build a small, but complete, application using ASP.NET MVC, and introduces some of the core concepts behind it.

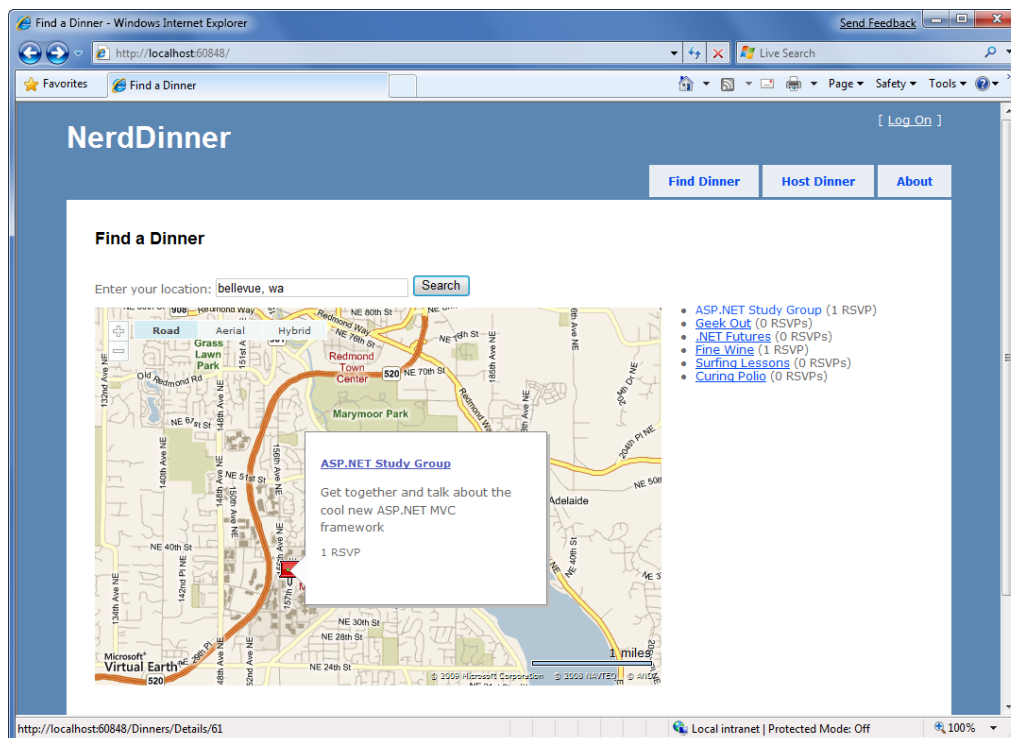
The application we are going to build is called “NerdDinner”. NerdDinner provides an easy way for people to find and organize dinners online:



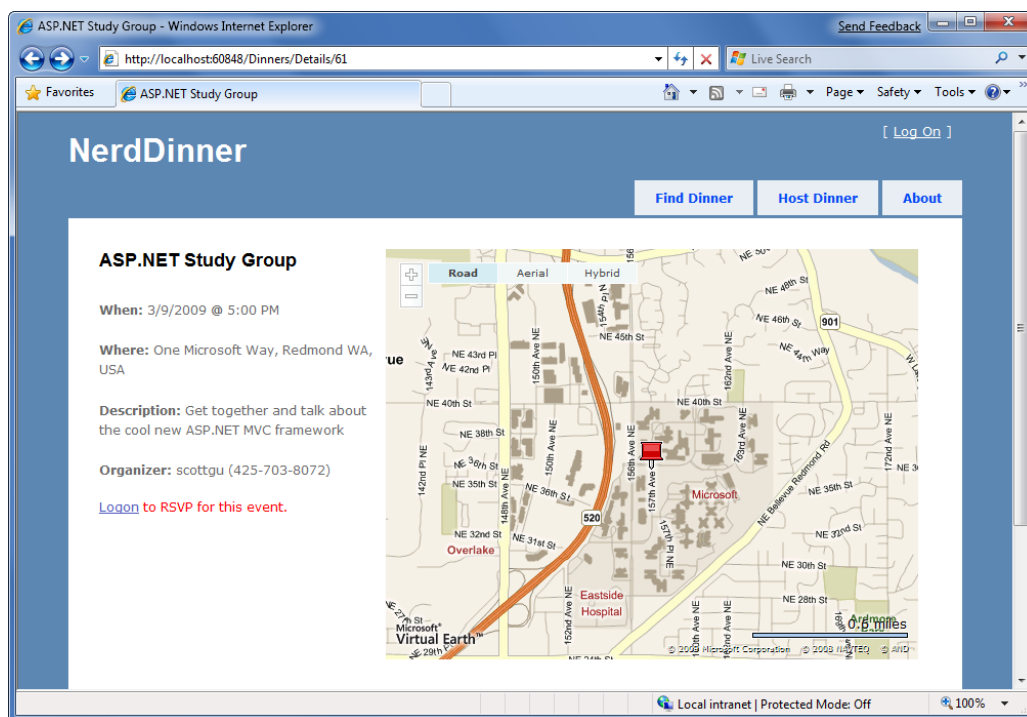
NerdDinner enables registered users to create, edit and delete dinners. It enforces a consistent set of validation and business rules across the application:



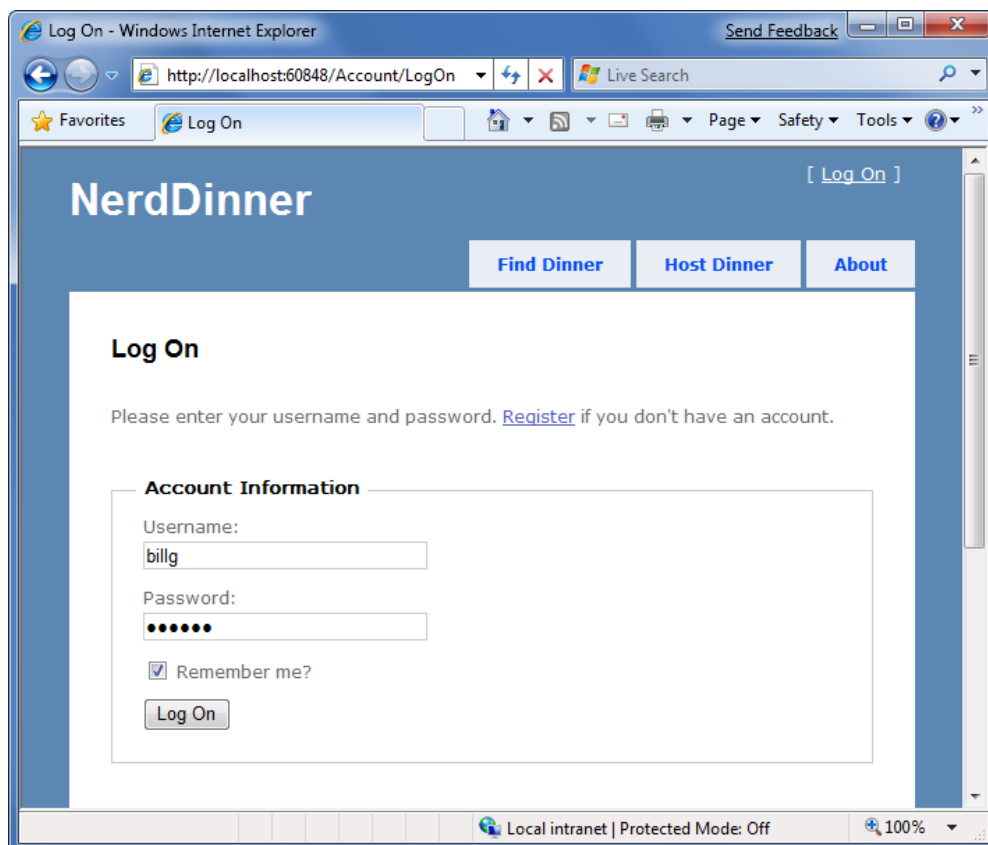
Visitors to the site can search to find upcoming dinners being held near them:



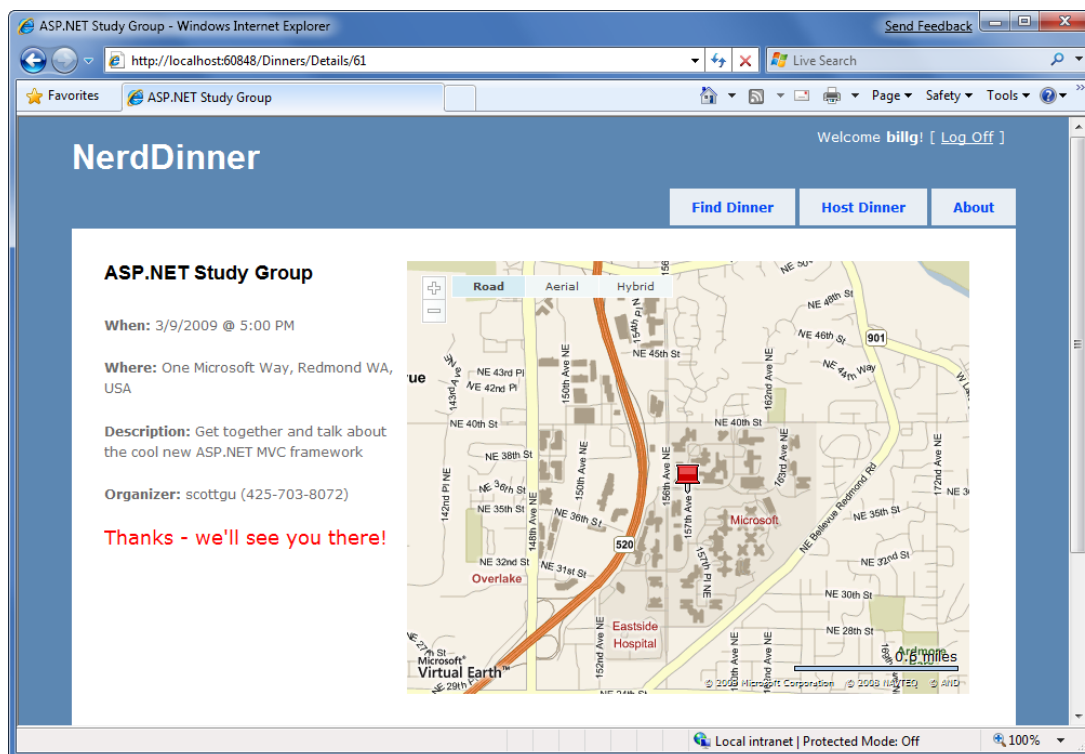
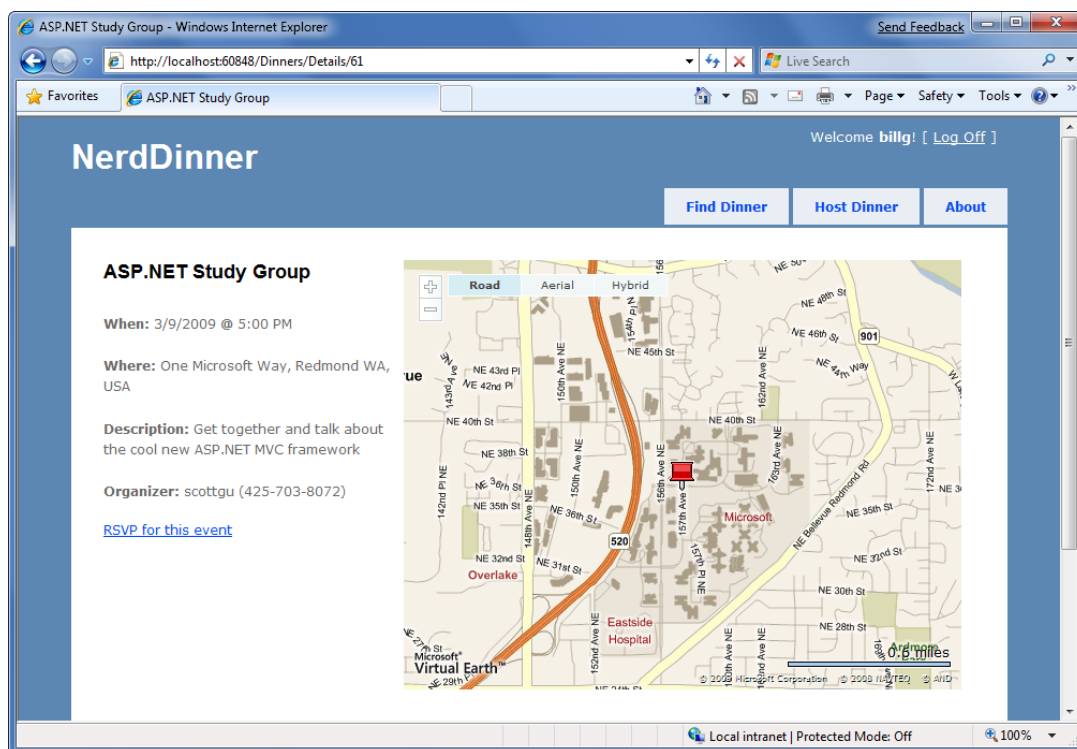
Clicking a dinner will take them to a details page where they can learn more about it:



If they are interested in attending the dinner they can login or register on the site:



They can then easily RSVP to attend the event:



We are going to begin implementing the NerdDinner application by using the File->New Project command within Visual Studio to create a brand new ASP.NET MVC project. We'll then incrementally add functionality and features. Along the way we'll cover how to create a database, build a model with business rule validations, implement data listing/details UI, provide CRUD (Create, Update, Delete) form entry support, implement efficient data paging, reuse UI using master pages and partials, secure the application using authentication and authorization, use AJAX to deliver dynamic updates and interactive map support, and implement automated unit testing.

You can build your own copy of NerdDinner from scratch by completing each step we walkthrough in this chapter. Alternatively, you can download a completed version of the source code here: <http://tinyurl.com/aspnetmvc>.

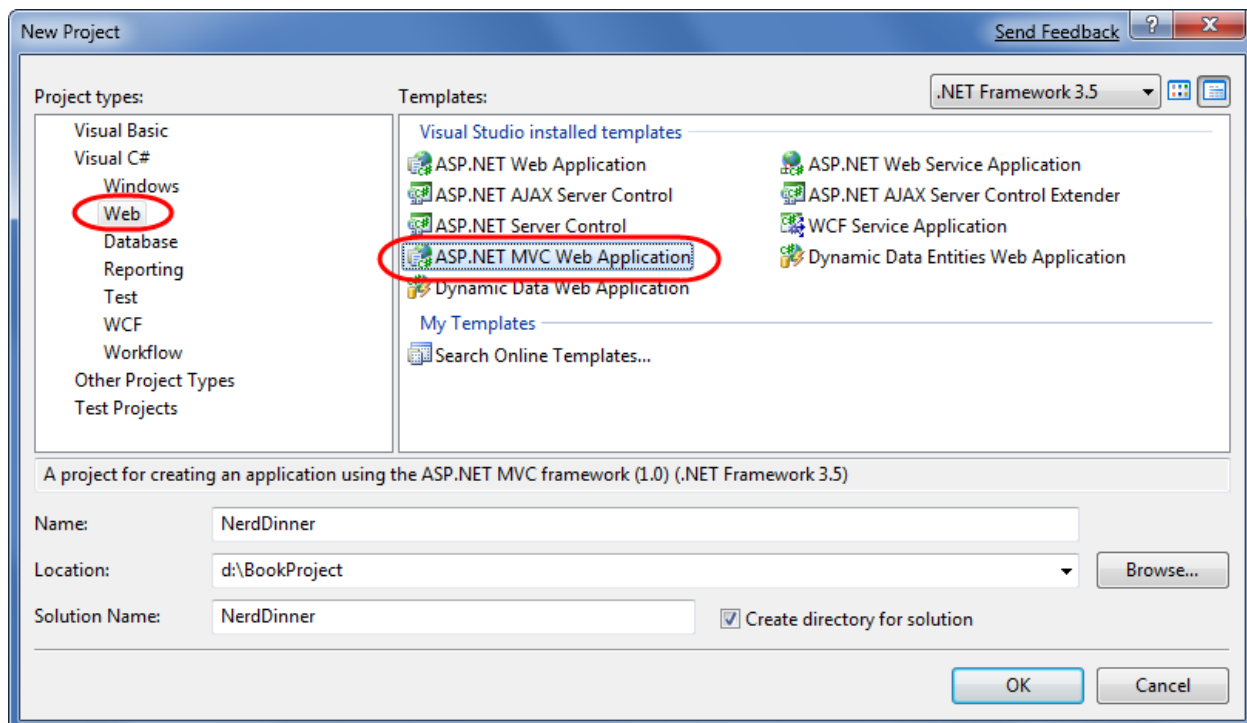
You can use either Visual Studio 2008 or the free Visual Web Developer 2008 Express to build the application. You can use either SQL Server or the free SQL Server Express to host the database.

You can install ASP.NET MVC, Visual Web Developer 2008, and SQL Server Express using the Microsoft Web Platform Installer available here: <http://www.microsoft.com/web/downloads>

File->New Project

We'll begin our NerdDinner application by selecting the **File->New Project** menu item within Visual Studio 2008 or the free Visual Web Developer 2008 Express.

This will bring up the "New Project" dialog. To create a new ASP.NET MVC application, we'll select the "Web" node on the left-hand side of the dialog and then choose the "ASP.NET MVC Web Application" project template on the right:



We'll name the new project "NerdDinner" and then click the "ok" button to create it.

When we click "ok" Visual Studio will bring up an additional dialog that prompts us to optionally create a unit test project for the new application as well. This unit test project enables us to create automated tests that verify the functionality and behavior of our application (something we'll cover how to-do later in this tutorial).