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Problem

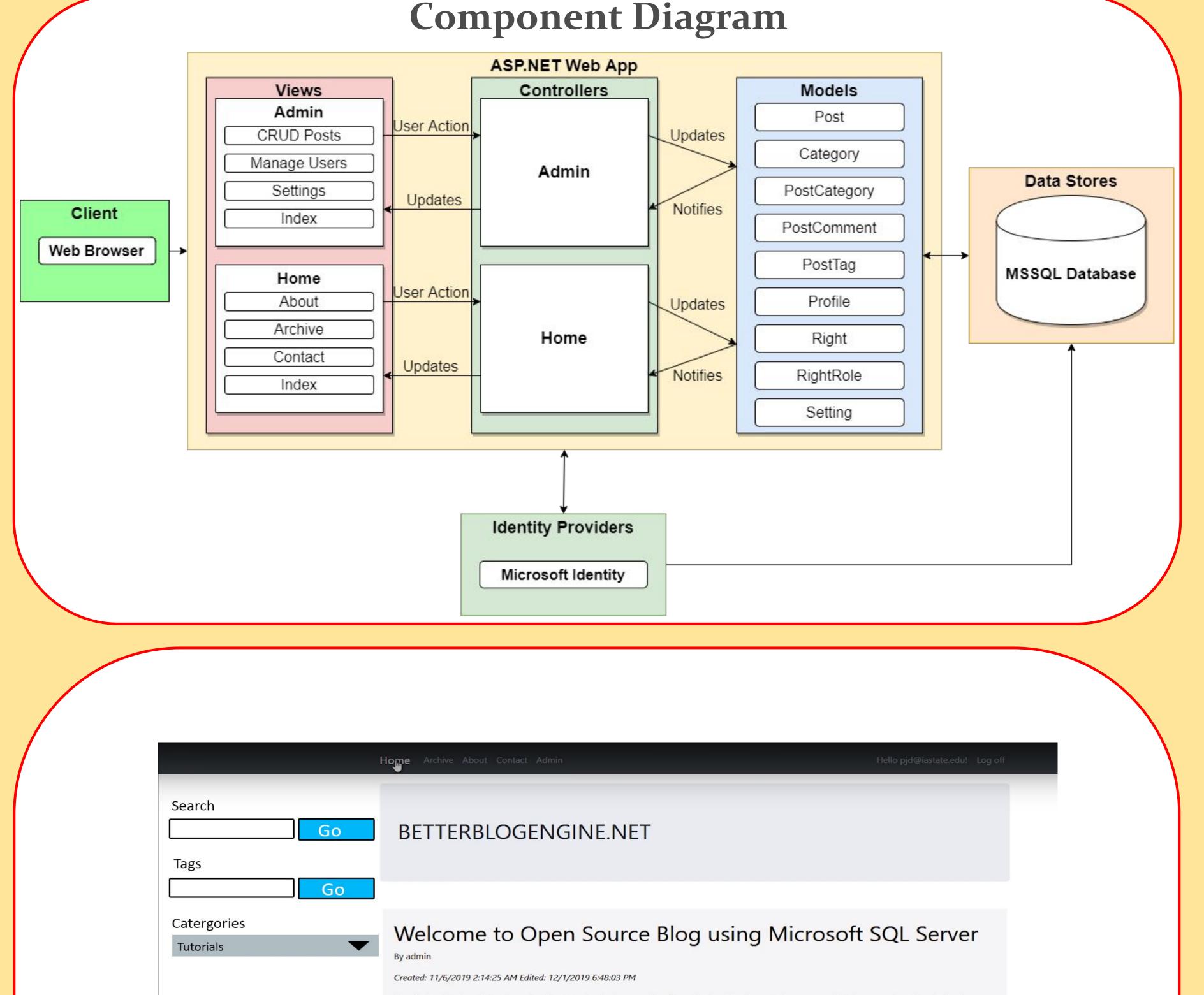
• Cylosoft uses an out of date blog engine for their customers' websites

Need

- Updated .NET codebase
- Microsoft Identity implementation
- Free Themes
- Using MVC structure



- Cylosoft clients
- Businesses looking to improve Search Engine Optimization
- Any blog owner that prefers open-source software



Engineering Standards & Design Practices

Standards

- Software life cycle process (ISO/IEC 12207)
- Software assurance (ISO/IEC/IEEE 15026)
- Software review and audits (IEEE 1028)

Practices

- Testing
- Refactoring
- Code reviewing
- Code simplicity

Non-Functional Requirements

- Be accessible at any time
- Properly handle errors out of users' view
- Display content properly based on screen size
- Utilize Microsoft Identity for security
- Follow the MVC architecture
- Visually appealing user interface
- Be simple to use

Functional Requirements

User Area

- Sort posts by most and least recent
- Filter posts by tags and categories
- Comment and view approved comments on posts
- Sign up/log in for an account
- Search for specific posts
- Deny certain access for unauthorized users

Admin Area

- Create, Read, Update, and Delete posts
- View new comments and approve them
- Assign posts to certain categories
- Edit user roles
- Change themes

Description: The description is used as the meta description as well as shown in the related posts. It is recommended that you write a description, but not mandatory

If you see this post it means that BlogEngine.NET is running and the hard part of creating your own blog is done. There is only a few things left to do.

Write Permissions

To be able to log in, write posts and customize blog, you need to enable write permissions on the App_Data and Custom folders. If your blog is hosted at a hosting provider, you can either log into your account's admin page or call the support.

If you wish to use a database to store your blog data, we still encourage you to enable this write access for an images you may wish to store for your blog posts. If you are interested in using Microsoft SQL Server, MySQL, SQL CE, or other databases, please see the BlogEngine docs to get started.

Security

When you've got write permissions set, you need to change the username and password. Find the sign-in link located either at the bottom or top of the page depending on your current theme and click it. Now enter "admin" in both the username and password fields and click the button. You will now see an admin menu appear. It has a link to the "Users" admin page. From there you can change password, create new users and set roles and permissions. Passwords are hashed by default so you better configure email in settings for password recovery to work or learn how to do it manual

| Index | | |
|--|--------------------|----------------------|
| Create New | | |
| Title | Author | IsPublished |
| Welcome to Open Source Blog using Microsoft SQL Server | admin | True ~ Edit Details |
| Welcome to the Open Source .NET Blog using MS SQL | PostRepositoryTest | False v Edit Details |
| Test | PJ | False ~ Edit Details |
| TEST | PJ | False ~ Edit Details |

Technical Details

User Interface

- HTML
- Javascript
- CSS
- Bootstrap
- Razor Pages
- Backend
 - **Operating Environment**
 - ASP.NET 4.8 Microsoft Azure

• C#

- Database
- Microsoft SQL Server

Project Resources

- <u>https://github.com/rxtur/.BlogEngine.NET</u>
- http://sdmay20-34.sd.ece.iastate.edu/

Test Plan

- **Unit Testing**
- Each component shall be extensively tested and compared against a predetermined test set that is deemed as the correct specification

Integration Testing

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Create Plant

• The individual components must be put together and all be tested to ensure that they can communicate with each other

Acceptance Testing

• Meet with client who will check our project and provide feedback for any necessary improvements or changes to the software

User Testing

• We will have a third party, someone who knows nothing about our project, use our software in the eyes of the end user and provide feedback