

OPEN SOURCE .NET BLOG

Team: sdmay20-34

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- Cylosoft uses an out of date blog engine for their customers' websites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

Intended Users

- 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

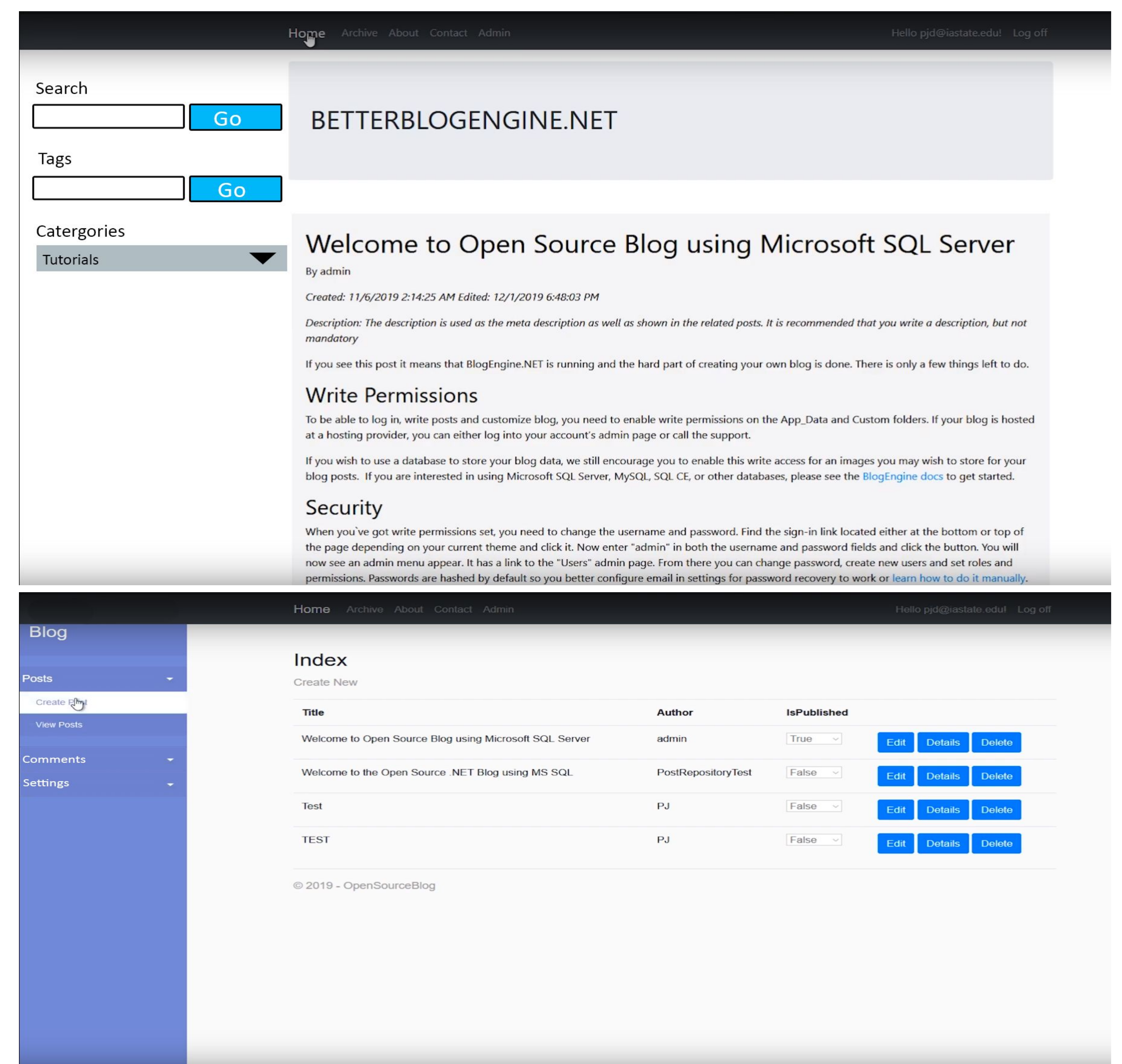
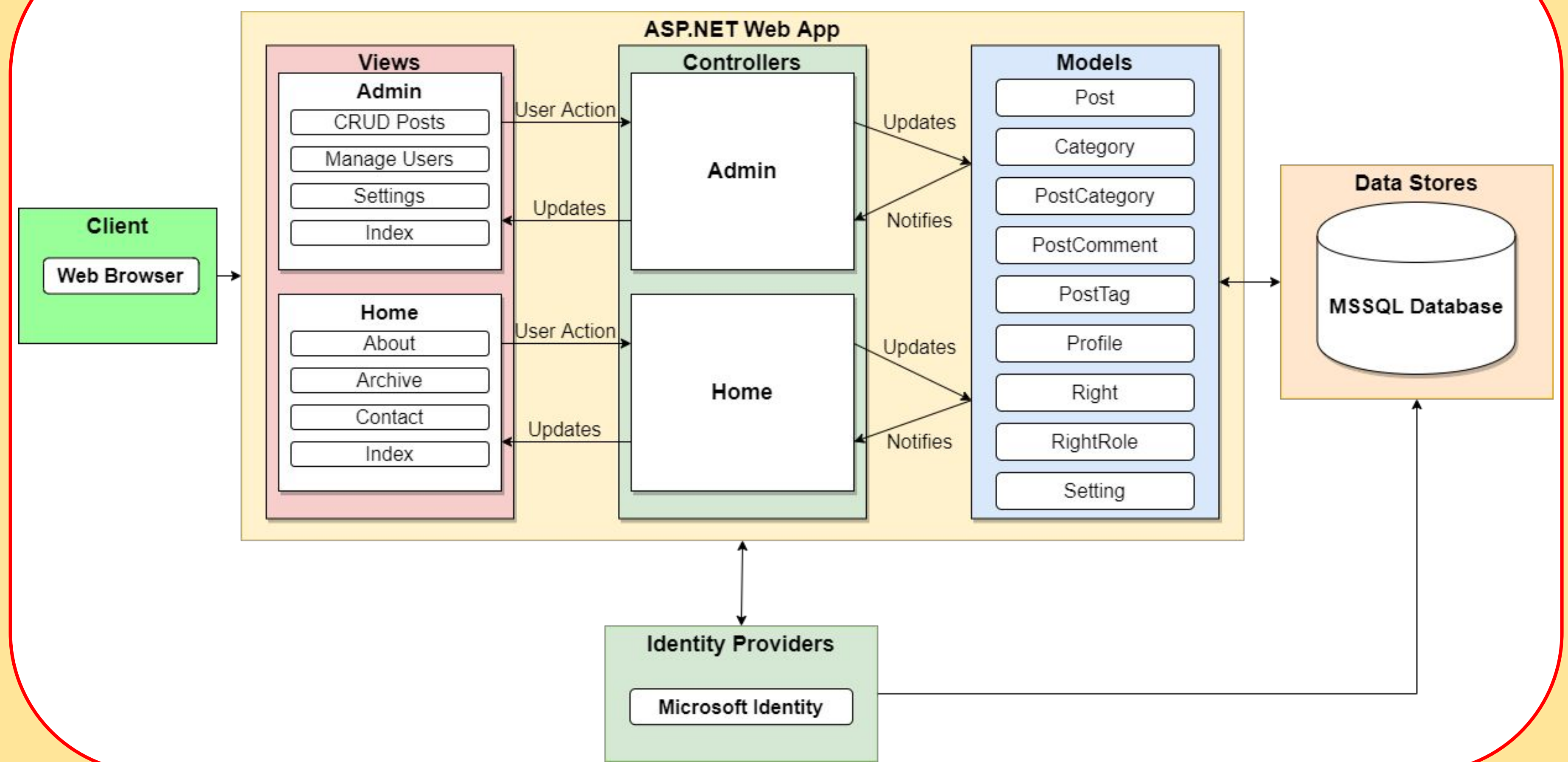
User Area

- 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

Component Diagram



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

- 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

Technical Details

User Interface

- HTML
- Javascript
- CSS
- Bootstrap
- Razor Pages

Backend

- ASP.NET 4.8
- C#

Database

- Microsoft SQL Server

Operating Environment

- Microsoft Azure

Project Resources

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