**SW Development IV – Advanced .NET 420-411-DW  
Project 2 – Forum Engine**

**Phase 1**

**Introduction**:

In this project we will build an ASP.NET MVC website that functions as a web forum (think StackOverflow). The project will be completed in 2 phases. This is an **individual** project.

Some of the basic forum functionality that must be implemented:

* When anyone connects to the site, a summary (index) page is presented, which consists of a list of the thread titles, date, tags, and user display name; you can either display these by latest threads or most active threads (e.g., most comments in the last 24 hours)
* A link associated with each thread on the summary page directs to a details page: the thread text is shown, along with all the comments. Thread views are incremented every time the details are viewed
* Anyone can search for existing threads based on keywords that are searched for within the thread title, text, or tags
* A user must log in in order to start a new thread / comment in an existing thread
* When a new user registers, they must provide information such as user name, password, first name, last name, email address, image (otherwise a default thumbnail image is used) interests, and anything else you feel is necessary. The image itself is not stored in the database: it will be stored in the filesystem, the file path will be stored in the database.
* A registered user can create a new thread: a thread consists of a title, date, tags, views, upvotes, and content
* A registered user can comment on a thread, or on a comment; a comment is comprised of the date, upvotes, and content
* An administrator can edit or delete any thread or comment. For simplicity, administrator is hardcoded to be determined by the user name “admin”, not a separate user privilege table

Additional, optional features:

* Users can accumulate reputation points as their threads/comments are upvoted
* Administrator can ban users for 24 hours

**Project Phase 1:** Design and implement all the database tables and relationships that are required for a forum. Note: for this project, we will store the user images on the file system, so you just need to store the URL in the database.

Please hand in a hardcopy with a cover page and:

* Screenshot of the table designer for each table, and a screenshot of the edmx diagram which show the relationships between tables

OR

* the T-SQL code