

# CEN 5035 Software Engineering

## Fall 2016

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Individual Website in WebRatio  
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**Due date:** 11:59 PM, Friday 23th September 2016 on Blackboard

### 1 Overview

Interaction Flow Modeling Language (IFML) is a standardized modeling language in the field of software engineering. We will be using the WebRatio Web Platform for the IFML. Each student is required to individually create a WebRatio account to install and use WebRatio Web platform to complete this homework.

### 2 Individual Homework Requirement

Develop a simple personal website with the basic information about yourself. Features at the minimum must include multiple web pages, your pictures with some description, master (list) and details of your academics and a search option. Also use the "Form" component in some way. (For example, create a discussion board). Use of additional features is highly recommended.

### 3 Tutorial

The following tutorials are a continuation of the tutorials suggested in the Installation guide and will guide you to learn the basics of designing a website using WebRatio. The tutorials mentioned below are the essential ones and are not exhaustive. Please refer to the WebRatio tutorials available at:

<http://my.webratio.com/learn/content?cbck=wrReq11972&so=pcu1a&link=oln208a.r edirect&nav=60>

- i. View Containers-  
<https://www.webratio.com/learn/learningobject/view-containers-v-72>
- ii. Text Editing-  
<https://www.webratio.com/learn/learningobject/how-to-model-rich-text-editing-v-72>
- iii. View Components and Data Binding-  
<https://www.webratio.com/learn/learningobject/view-components-data-binding-v-72>
- iv. Master and Details-  
<https://www.webratio.com/learn/learningobject/master-details-v-72>

- v. Search-  
Search by alphabetic order  
<https://www.webratio.com/learn/learningobject/how-to-model-the-alphabetical-index-v-72>  
  
Search Keywords (Pattern)  
<https://www.webratio.com/learn/learningobject/search-pattern-v-72>
- vi. Domain Model-  
<https://www.webratio.com/learn/learningobject/domain-model-overview-v-72>  
<https://www.webratio.com/learn/learningobject/defining-the-domain-model-v-72>
- vii. Data Management- Action Definition  
Create data, delete data, update data  
<https://www.webratio.com/learn/learningobject/data-management-action-definition-v-72>

**Note: Please use your WebRatio cloud account to store your data.**

Before you start with your database in the domain model, login into your WebRatio cloud account using:

<https://www.webratio.com/account/login-page/>

The screenshot shows the WebRatio interface. At the top, the 'WEB RATIO' logo is on the left, and a user profile with 'Logout | Settings | Help' links is on the right. Below the logo, a sidebar shows 'free4ff25' and 'freeapp [RUNNING]'. The main content area is titled 'free4ff25 / freeapp' and displays the following details:

- Status: RUNNING
- Location: <http://free4ff25-freeapp.eu.webratio.net>
- Size: Free App
- Max registered users: 10
- Max concurrent requests: 3
- Data storage: 20 Mb
- This Web application was generated with WebRatio Community Platform 7.2.14 201608091213

Below these details are tabs for 'Server', 'Database', 'Monitoring', 'Logs', and 'Domain'. The 'Database' tab is active, showing:

- Status: RUNNING
- Type: MySQL Community Server 5.6.17 Download Driver JDBC
- Server: 52.19.51.26
- Port: 3306
- Database name: freeapp54
- Username: freeapp54
- Password: [REDACTED]
- JDBC URL: jdbc:mysql://52.19.51.26:3306/freeapp54

At the bottom of the database section are two buttons: 'Create snapshot' and 'Clear database'. Below this is a 'Snapshots' section with the text: 'You can have no more than 5 snapshots.' and a box stating: 'No snapshots. You can add a snapshot using the "Create snapshot" button.'

**Figure 1:** You will need to have the highlighted details to create your database.

Please refer to the following portion of the tutorial available at:

<http://my.webratio.com/learn/learningobject/connecting-the-database-v-72>

**Note:** Though this tutorial is labeled for Mobile version, but, the steps are the same for Web version too.

## Adding a Database

The first thing to do when using synchronization is to add a database connection to the Web project. You can have different database connections, each referring to a subset of the Domain Model.

Right-click on the work area of the "Domain Model" and choose "Add", and then choose the "Database" option. Select a meaningful name for the database, such "CRM". The name is just a reminder about which database connection is set on a specific element.

Then choose the database type. Move to the "Properties View" and click on the "Type" drop-down property. As you can see, you can choose from a set of predefined options, which are the most common database types you may want to use.

**Note: Please set the "Type" as MySQL.**

Once you choose the database type, configure the connection properties. Copy the value of the "Sample URL" property, which shows the structure of the connection string for the specific database type, and paste it into the "URL" property. Replace the "host" placeholder with the IP address of the workstation hosting the database, the "port" placeholder with the port number on which the database engine is running, and the "database" placeholder with the name of the database to which you want to connect. Remember that the angular brackets are part of the placeholders, and they must be removed.

**Note: Please copy the JDBC URL in your WebRatio Cloud account and paste it into the "URL" property. Please see the highlighted fields in the Figure 1 above.**

Now you have to specify the "Username" and "Password" for connecting to the database. To save the password in the project with encryption, you just have to flag the corresponding checkbox placed inside the "Password" property.

**Note: Please copy the Username and Password in your WebRatio Cloud account and paste it into the "Username" and "Password" fields. Please see the highlighted fields in the Figure 1 above.**

## 4 Submission

1. Zip the single folder of your WebRatio workspace containing your entire project.
2. Create a Readme.txt file that contains your WebRatio cloud username and password
3. Submit it to Blackboard on the date and time specified.

**NOTE: Since your cloud password will be available to the instructor and TA, please make sure that your cloud password is shareable. (For example, don't use passwords you use for your Facebook, email, bank account etc.)**

## References:

- [1] WebRatio <https://www.webratio.com/site/content/en/home>