BMISystem System Manual

**Version <1.0>**

**2015719243**

**Cem ŞANAL**

**09/01/2017**

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# FACILITY INFORMATION

BMISystem project is supported from Boğaziçi University. The project is the term project of graduate program class which is named as “Software Development Practice” under the supervision of Suzan Üsküdarlı.

# DEVELOPMENT TRACKING

All developments and changes could be traced from GitHub. (<https://github.com/sanal-cem/Fall2016Swe573_Cem_Sanal>)

**Issues** section is for tracing current developments and changes.

**Wiki** section is for tracing general improvements and further documentation.

# FUNCTIONAL USES/OPERATIONAL CAPABILITIES

Design and development of a web system that suggest different foods and activities to overcome people’s health issues such as being overweight using BMI calculation.

Body Mass Index (BMI) is simply a guideline to track weight issues. It is a measurement of body fat based on weight. BMI calculation for females and males would differ. BMI is the amount of fat content in the body as related to height and weight. This is a way of measuring the fat content and muscle mass so that the person knows whether they are healthy or whether they can be prone to health problems like cardiovascular diseases, diabetes, or even certain types of cancer.

## Basic Capabilities

1. User Login
2. User Registration
3. Food Search from USDA Food Database
4. Add Food
5. Users Food Showcase
6. Add Activity
7. Users Activity Showcase

## Important Functions

### Controller Package

Login Controllers, Registration Controllers, Food Controllers, Activity Controllers, Food Search Controllers

### Model Package

User object, Food object and Activity object functions.

### Service Package

Register and Login Service, Food Service, Activity Service functions.

### Model Package

Activity List and Food List functions.

# SOFTWARE INSTALLATION

**Installation Requirements**

1. MYSQL >= 5.7.14
2. Tomcat Server >= 8.0

## Windows installation

1. Install the appropriate MYSQL version as x64 or x86\_64.

2. Install the Tomcat Server. (version > 8.0)

3. Stop Tomcat service.

4. Insert the BMISystem.war file from that link: "https://github.com/sanal-cem/Fall2016Swe573\_Cem\_Sanal/tree/master/BMISystem/target/BMISystem.war" into "C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps" folder of the Tomcat Server.

5. Start Tomcat service and check "C:\Program Files\Apache Software Foundation\Tomcat 8.5\webapps" folder. There should be BMISystem folder.

6. Execute localhost:8080/BMISystem/

## AWS Installation

1. Sign in to Amazon AWS.

2. Open RDS from the AWS console and Launch a MYSQL DB instance. DB Name should be 'bmi'. Examine AWS documents for the rest processes.

3. Create an Elastic Beanstalk environment. A free Tier is sufficient until v1.0 BMISystem. Examine AWS documents for the rest processes.

4. Upload BMISystem.war file from that link: "https://github.com/sanal-cem/Fall2016Swe573\_Cem\_Sanal/tree/master/BMISystem/target/BMISystem.war" into the Elastic Beanstalk environment. Deploy it in the environment.

5. Install MYSQL Workbench into your own local environment and connect to your new AWS MYSQL instance using provided MYSQL hostname. Refer AWS documents to create that connection easily.

6. Execute DumpBMISystem.sql file inside the 'bmi' db.

7. Try opening provided Elastic Beanstalk environment link.