Java Web Development Basics

Java EE Workshop – Servlets & JSP

MeTube v.2

MeTube is like YouTube, "**ama ne bash**" like an old Bulgarian Sage once said. You have been tasked to implement this application for literally no money, by the richest man on earth. There are several requirements you must follow in the implementation.

1. Database Requirements

The **Database** of the application needs to support **2 entities**:

User

- Has an **Username**
- Has a **Password**
- Has an **Email**
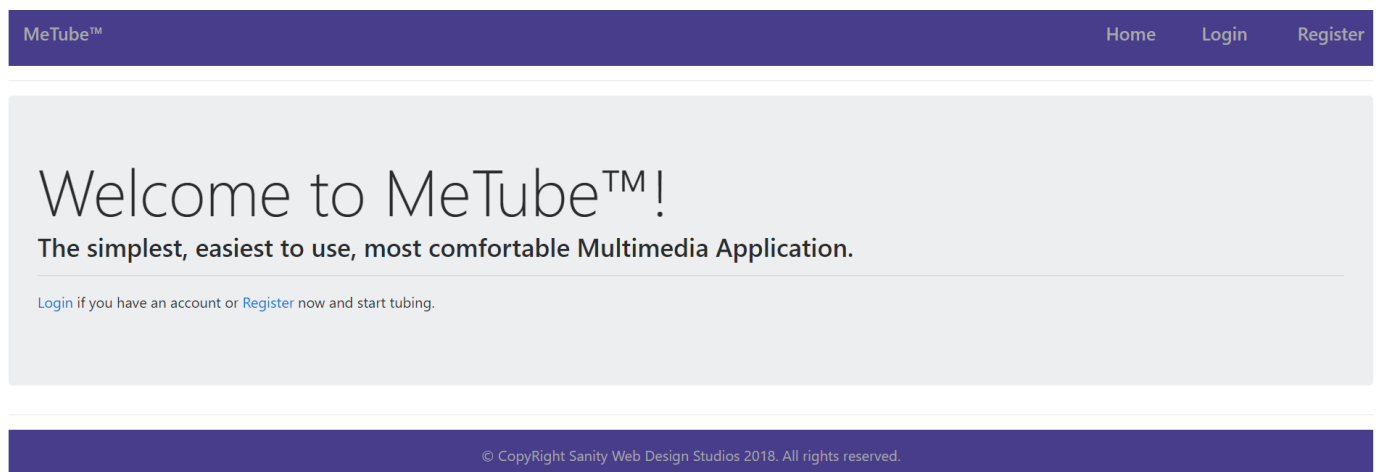- Has **Tubes** (a collection of **tubes**)

Tube

- Has a **Title**
- Has an **Author**
- Has an **Description**
- Has an **Youtube Id –** This Id is only for the **youtube video**. It is not the **Entity's id**.
- Has **Views** (an **integer**, by default – **0**)
- Has an **Uploader** (a **User**).

Implement the entities with the **correct datatypes**, and implement **repositories** for them.

2. Templates

Index Template (route = "/") (logged out user)

MeTube™   Home   Login   Register

Welcome to MeTube™!
The simplest, easiest to use, most comfortable Multimedia Application.

Login if you have an account or Register now and start tubing.

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Login Template (route = "/login") (logged out user)

MeTube™   Home   Login   Register

Login

Username

[   ]

Password

[   ]

[Login]

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Register Template (route = "/register") (logged out user)

MeTube™   Home   Login   Register

Register

Username

[   ]

Password

[   ]

Confirm Password

[   ]

Email

[   ]

[Register]

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Home Template (route="/home") (logged in user)

MeTube™   Home   Profile   Upload   Logout

Welcome, $(username)

Key User Requirements
Roko

Key User Requirements
Roko

Key User Requirements
Roko

Key User Requirements
Roko

Key User Requirements
Roko

Key User Requirements
Roko

Profile Template (route="/profile") (logged in user)

MeTube™			Home	Profile	Upload	Logout

@Pesho
(pesho@gmail.com)

#	Title	Author	Actions
1	Key User Requirements	Roko	Details
2	Key User Requirements	Roko	Details
3	Key User Requirements	Roko	Details

Tube Details Template (route="/tube/details/{id}") (logged in user)

MeTube™			Home	Profile	Upload	Logout

Run This Show

Kat Deluna
151835 Views

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Tube Upload Template (route="/tube/upload") (logged in user)

NOTE: All the templates have been given to you as `.html` files. You need to make `.jsp` files from them.

NOTE: The templates do **NOT require additional CSS** for you to write. Only **bootstrap** and the **given css** are enough.

Functional Requirements

The `Functionality Requirements` describe the functionality that the **Application** must support.

The **application** should provide `Guest` (not logged in) users with the functionality to:

- `Login`
- `Register`
- **View** the **Index** page.

The **application** should provide `Users` (logged in) with the functionality to:

- `Logout`
- **View** all **Tubes** (**Home** page)
    - The **Home** page holds **image thumbnails**.
- **View** their **Profile** (Clicking on [`Profile`] button on **Home** page)
    - **Only** the **Tubes** uploaded by the **User** should be **viewed.**
    - The **username** and the **email** of the **user** should be viewed in the **format specified** in the screenshots above**.**
- **View details** about **Tube**
    - (Clicking on a **Tube**'s picture on **Home** page)
    - (Clicking on the [`Details`] button on **Profile** page)
    - **Each time** you view **details** about a **Tube**, you should **increment** it's **views** by **1**.
    - The **Details** page holds a **video iframe**.
- **Upload** a **Tube**.
    - The upload is done with a **youtube video link**.
        - (**Example**: "`https://www.youtube.com/watch?v=uGhKqb2Ow3E`")
    - The last segment of the video is its **id** - `uGhKqb2Ow3E`.

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o   You can use that **id** to **extract** the **thumbnail** in order to view it on the **Home** page.
o   You can use that **id** to **create** an **iframe** in order to view it on the **Details** page.
o   Check how to implement these things on the internet, if you do not know.

The **application** should **store** its **data** into a **MySQL** database, using **Hibernate** native.

Security Requirements

The **Security Requirements** are mainly access requirements. Configurations about which users can access specific functionalities and pages.

- **Guest** (not logged in) users can access **Index** page.
- **Guest** (not logged in) users can access **Login** page.
- **Guest** (not logged in) users can access **Register** page.
- **Users** (logged in) can access **Home** page.
- **Users** (logged in) can access **Profile** page.
- **Users** (logged in) can access **Upload** functionality.
- **Users** (logged in) can access **Details** functionality.
- **Users** (logged in) can access **Logout** functionality.