

SWE 645

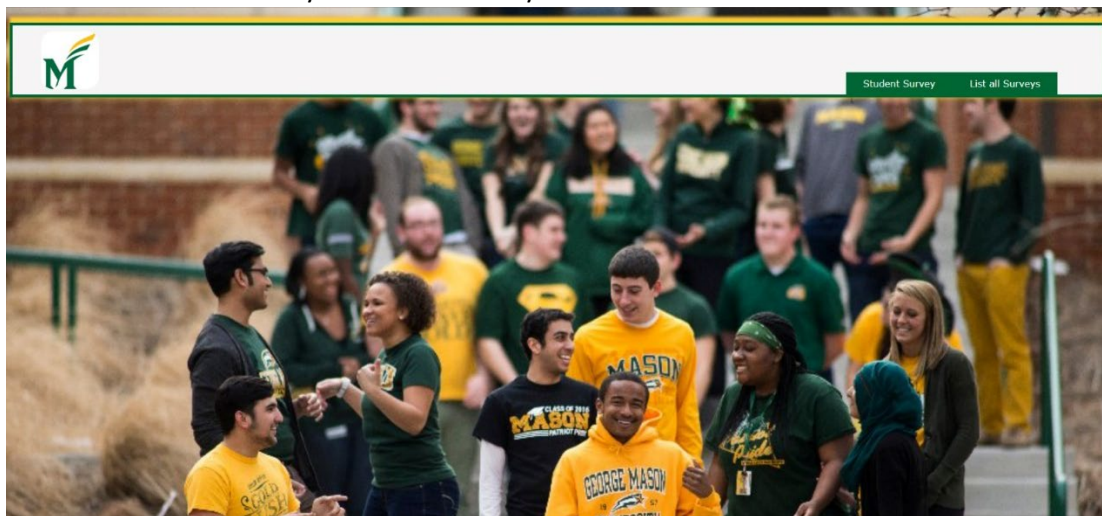
Assignment 3

Team Members:

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Result:

For front-end design we'll use Angular UI. The index page of the Assignment 3 will contain two links which are: Student Survey and List all Surveys.



When we click on “Student Survey”, It'll open a page where we'll fill in the information required. If we submit the page before filling in the required fields, it will display an error message.

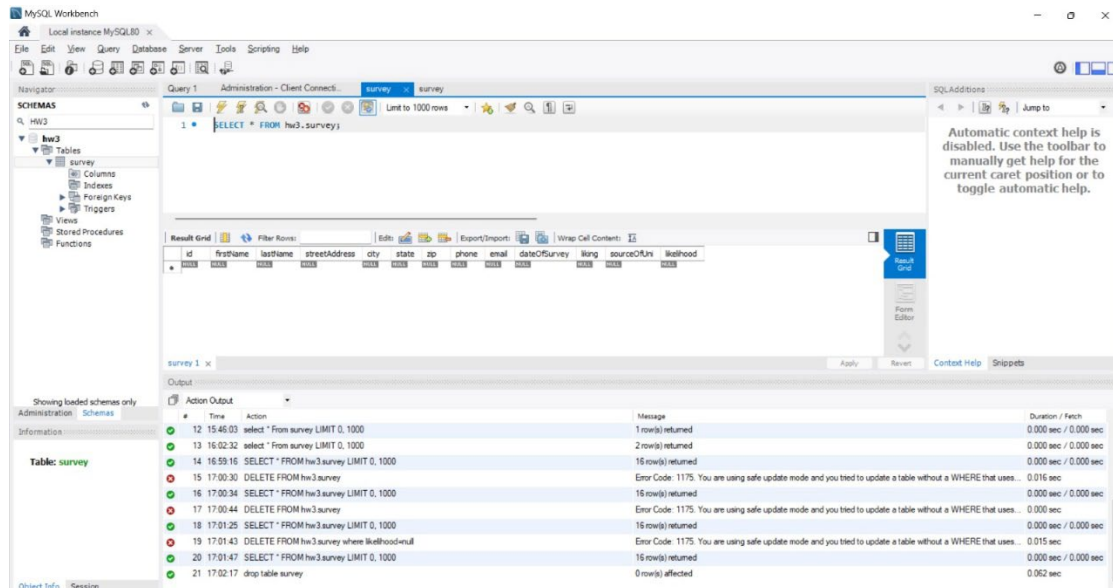
The image shows the 'Student Survey Form' page. The form is a white overlay on the same background image of students. It has a title 'Student Survey Form!' and a subtitle 'Thanks for taking out time to complete this survey. We appreciate your feedback!'. The form contains several sections: 'Name' with fields for 'First Name' and 'Last Name'; 'Address' with fields for 'Street Address', 'City', 'State', and 'Zip Code'; 'Contact' with fields for 'Telephone Number' and 'Email Address'; and 'Date of Survey'. There are also checkboxes for 'Students', 'Location', 'Campus', 'Atmosphere', 'Dorm rooms', and 'Sports'. Below these are radio buttons for 'How you became interested in the university?' (Friends, Newspaper, Internet, Other) and a dropdown for 'How will you recommend this school to other prospective students?'. At the bottom, there is a text area for 'Any Comment or Suggestion' and a 'Submit' button. The page footer shows 'localhost:4200/list-all-surveys' and 'Go to Homepage'.

Error Message will be like in the image given below

When we click submit after filling in all the information, it will save the data and we can see this data by clicking on “List all Surveys”

First Name	Last Name	Street Address	City	State	Zip	Date Of Survey	Phone	Email	Liking	Source Of Uni	Likelihood	Comments
Preeti	Bhattacharya	11136 Church St	Fairfax	United States of America	22030	2008-03-02T05:00:00.000+00:00	4698917535	pbhatta2@gmu.edu	very likely	Internet	Location,Campus	My comment box
Paras	Kath	3327 willow crescent drive	fairfax	Virginia	22030	1997-09-04T04:00:00.000+00:00	7033897515	pkath@gmu.edu	likely	Internet	Campus,Atmosphere,Sports	

Image attached below is showing us the MySQL database where we are saving all the data.



Front End:

Pages:

1. When you execute the assignment. You'll reach a home page
2. Click on survey tab to open the survey page.
3. Start filling in the all the information. Make sure to fill in the required field and click on submit
4. To see the history of all the surveys filled, click on list of surveys tab

Steps for Setup

First, we have to download and install Angular and Node.JS for this assignment. Once this is done, type the following commands in the terminal.

`node --version`

`npm --version`

Above command will check the version and make sure you're on latest version.

Details on how to implement the code:

After Type `"npm install -g @angular/cli"` to install Angular on your machine. Now, make a new project and type `"ng serve"` to start a server on localhost at port 4200. We've also declared paths on `app-routing.module.ts` so that it can direct to another page on the server.

Back End:

For back-end we've used MySQL workbench for database integration and SQL development, Springboot framework to create a web application which will persist the data that is coming from Angular part. We've used RESTful APIs written in Java for integration of backend with the frontend angular code.

Steps for Setup

1. Install Java Extension Pack in Visual studio code and after that install spring boot extension pack
2. After that click on create new project and select the project type as MAVEN
3. Write some group ID and artifact ID
4. Select the dependency which you want to install
5. Finalize the project and save it. You'll get the folder of springboot application containing src folder, pom.xml, mvnw.cmd

How to implement the code:

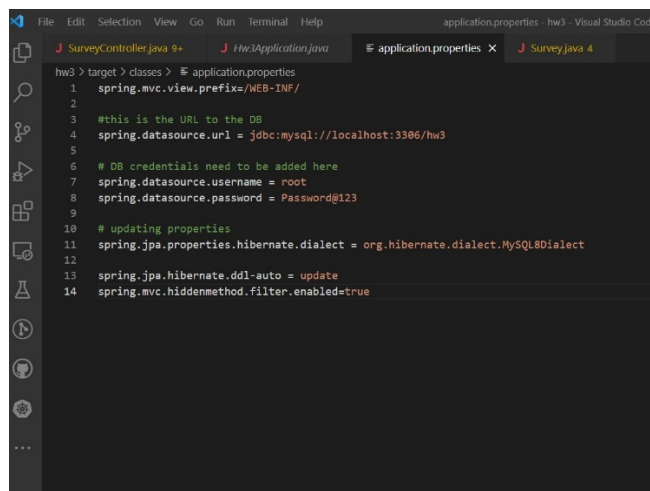
We have downloaded the Spring Boot skeleton application from the Spring Boot Initializer and we have selected Spring Boot Web and Spring REST and MySQL dependencies.

We have created the Model class of Survey and Survey Repository to connect to data base and we have given JDBC connection parameters in Appilcation.properties file. We have also written RestConnect component class for REST API requests.

After creating the project we run the main SpringBootApplication. The project successfully runs and our background application is up.

In the terminal, type in mvn spring-boot:run which will the run the springboot application

We have made a file which consist of the credentials for the database



```
File Edit Selection View Go Run Terminal Help
application.properties - hw3 - Visual Studio Code
J SurveyController.java 9+ J Hw3Application.java application.properties X J Survey.java 4
hw3 > target > classes > application.properties
1 spring.mvc.view.prefix=/WEB-INF/
2
3 #this is the URL to the DB
4 spring.datasource.url = jdbc:mysql://localhost:3306/hw3
5
6 # DB credentials need to be added here
7 spring.datasource.username = root
8 spring.datasource.password = Password@123
9
10 # updating properties
11 spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.MySQL8Dialect
12
13 spring.jpa.hibernate.ddl-auto = update
14 spring.mvc.hiddenmethod.filter.enabled=true
```

Video demonstrating the working of assignment is included in the folder.