Project Title : Surway – The Best Way to Survey

An Online Survey Management System

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Abstract

Online survey or internet survey, is one of the most popular data-collection sources, where a set of survey questions is sent out to a target sample and the members of this sample can respond to the questions over the world wide web. Respondents receive online surveys via various mediums such as email, embedded over website, social media etc.

Organizations implement online surveys to use the internet in order to gain insights and feedback about upcoming products or services, change in marketing strategies, enhancement in current features etc. With the progress made by the internet, more and more organizations depend on the data received and analysed from online surveys to make integral changes in their functioning. For efficient data collection, organizations must choose an advanced and efficient online survey platform.

Online surveys have a greater reach than other types of market research techniques. Think about it: it's far simpler to send a survey to thousands of people via the Internet than it is to mail a copy to everyone individually or to try to interview respondents face-to-face. Indeed, companies can easily screen and select survey participants based on varying parameters according to their needs and then send a link to a survey to anyone (with a email address) in any location at any time.

The proposed Online Survey System will serve as a platform where a surveyor can raise a survey questionnaire and the users can post their answers and viewpoints. The posted data are collected and the system is designed in such a way that it automatically adds the votes to each alternative and displays the result of the survey as well.

Introduction

Online surveys are not feasible for accessing the entire population. Their use is limited to those with email and internet access and those lacking such access, compared with those who have access, are likely, for instance, to have lower levels of education and income, lower rates of literacy and computer literacy, to be older and to over-represent certain ethnic groups. This inherent coverage bias is a major disadvantage. It is difficult to derive a scientific sample of the wider population for an online survey because there is no suitable sampling frame available. Sampling frames (e.g., email lists) are typically available only for closed populations or specialised target groups.

When it comes down to it, online surveys are usually more accurate. Since respondents record their own answers, there is no opportunity for an interviewer or facilitator to misinterpret a response, and there is a better chance that respondents will be fully honest. After all, it's a lot easier for people to anonymously pen their thoughts than it is for them to tell those thoughts to someone in person!

The proposed Online Survey System will serve as a platform where a surveyor can raise a survey questionnaire and the users can post their answers and viewpoints anonymously and also anyone can take this survey, as the user doesn't specifically require an email address. This will therefore help the surveyor capture a wider audience. The posted data/survey results are collected and the system is designed in such a way that it automatically adds the votes to each alternative and displays the result of the survey as well.

System Requirements

Hardware

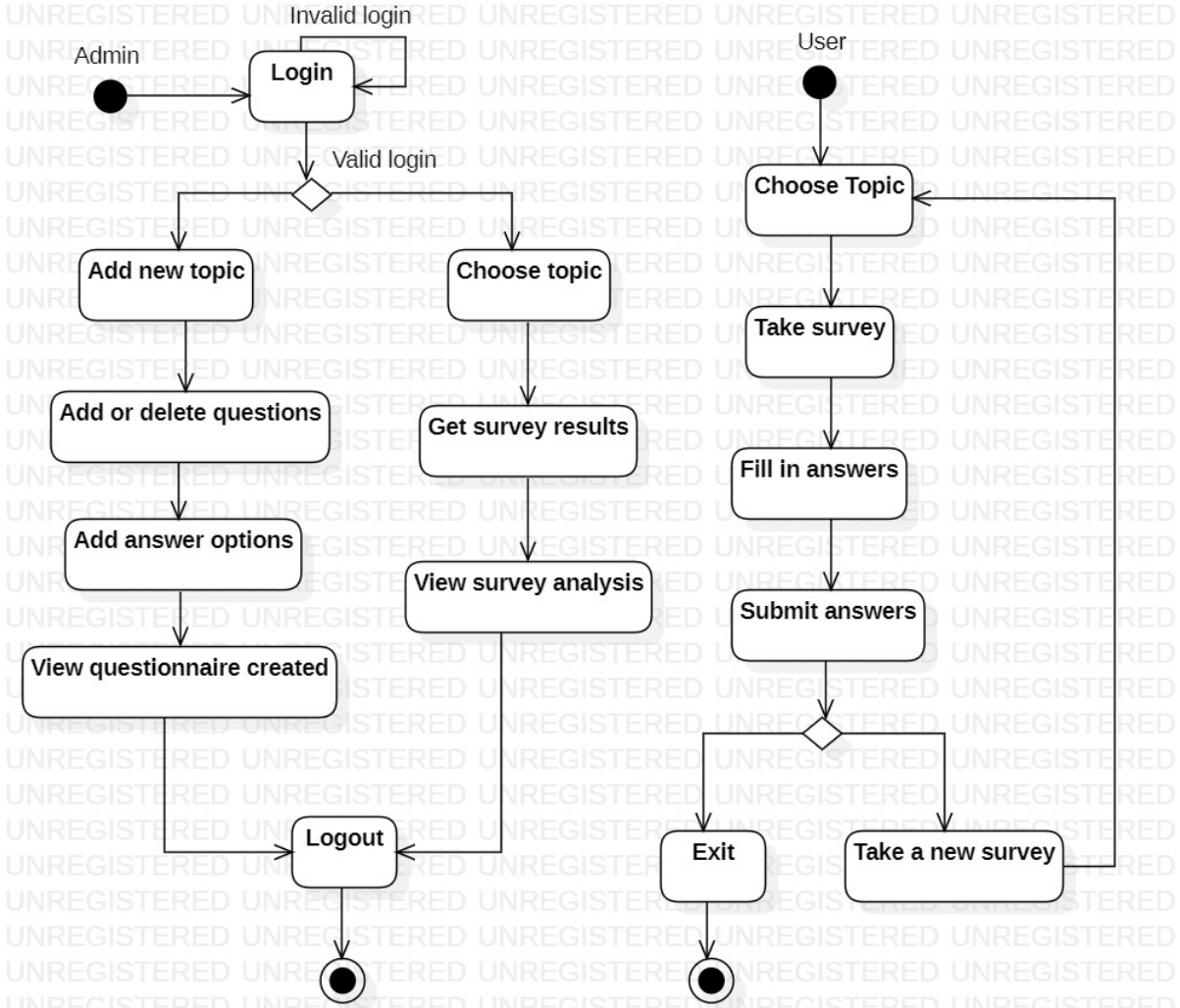
- Processor: Pentium-IV(Processor).
- RAM: 256 MB
- Speed: 1.1 Ghz
- Hard Disk: 20 GB
- Key Board: Standard Windows Keyboard
- Mouse: Two / Three Button Mouse

Software

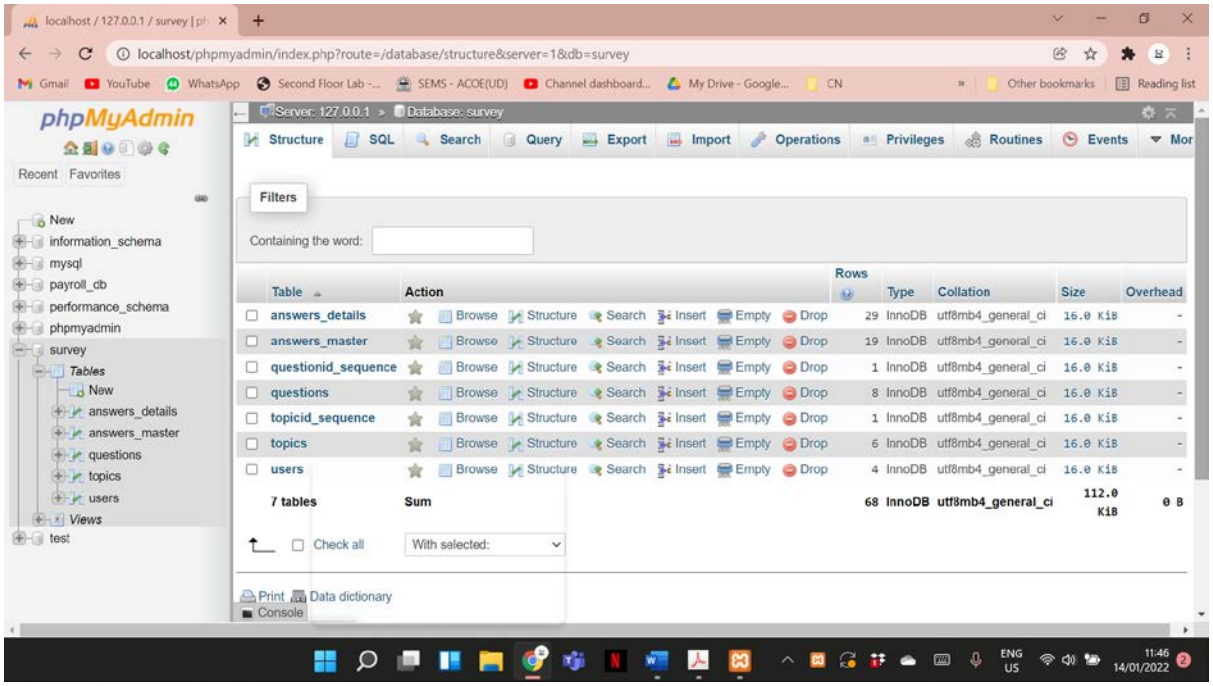
- Web Technology implemented using Java Server Pages (JSP)
- Languages used: JAVA
- Framework used: JSF (JavaServer Faces)
- Database: My SQL
- User Interface Design: XHTML, CSS, XML
- Web browser: Microsoft Edge/Google Chrome/Mozilla Firefox
- Server: XAMPP Server
- IDE: Netbeans IDE

System Design

Project Diagram



Database Tables



Tables under survey database

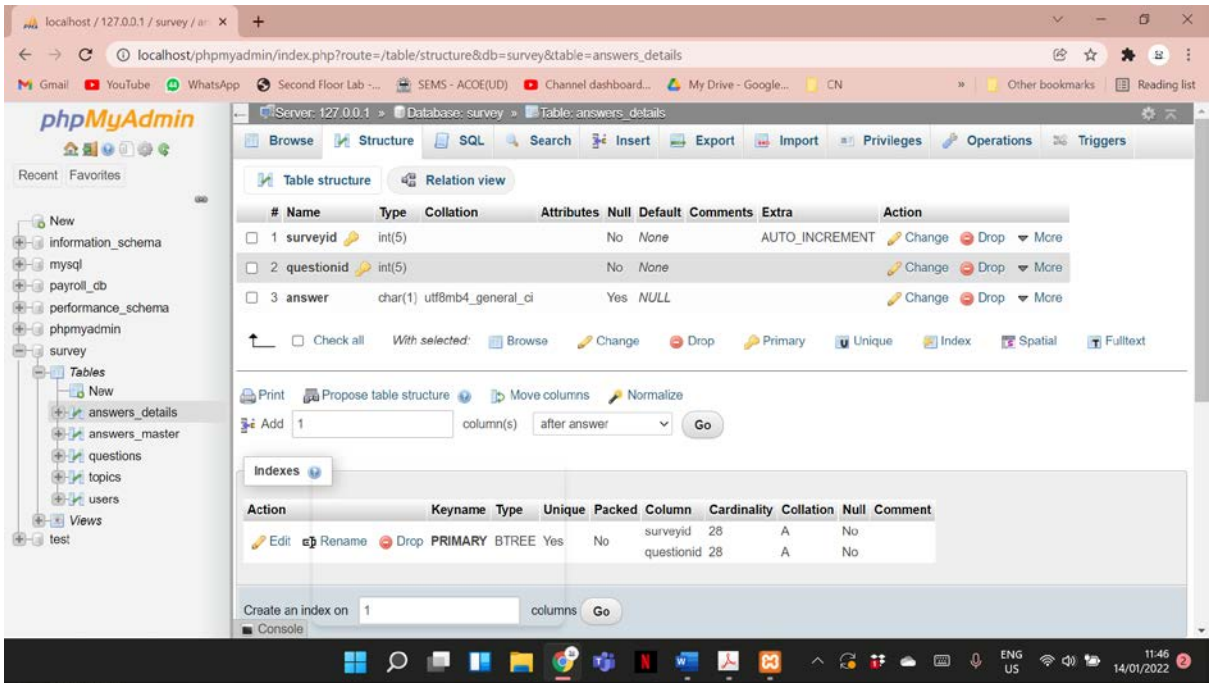


Table : answers_details

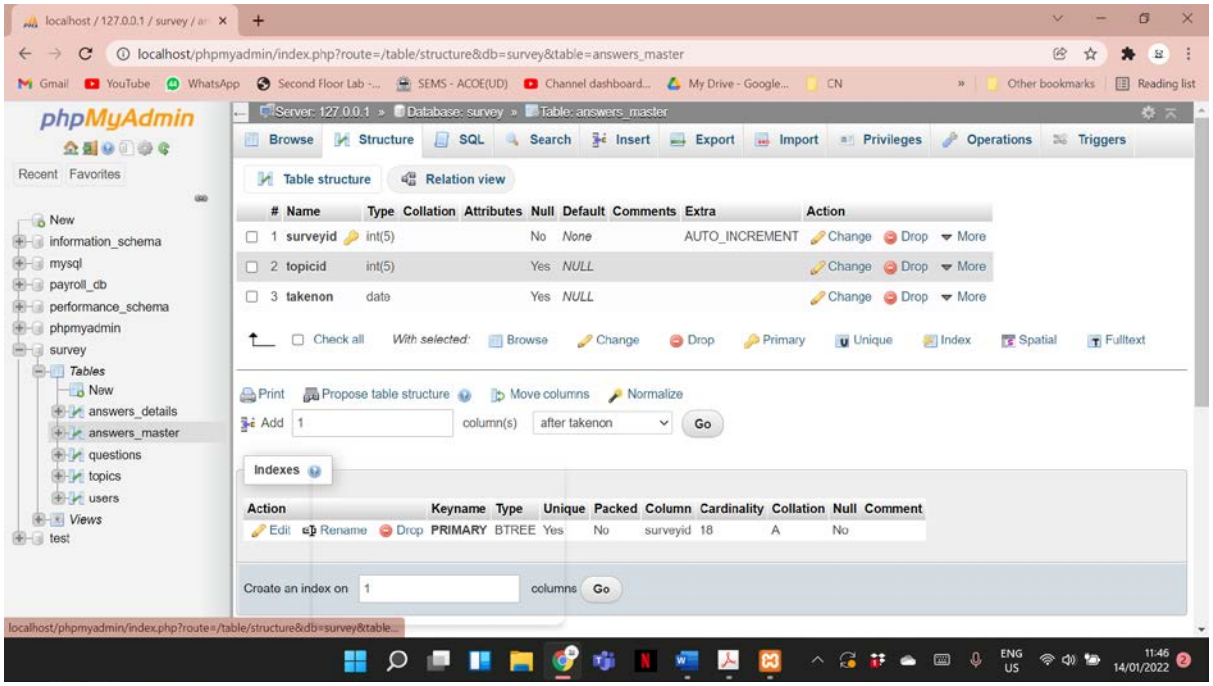


Table : answers_master

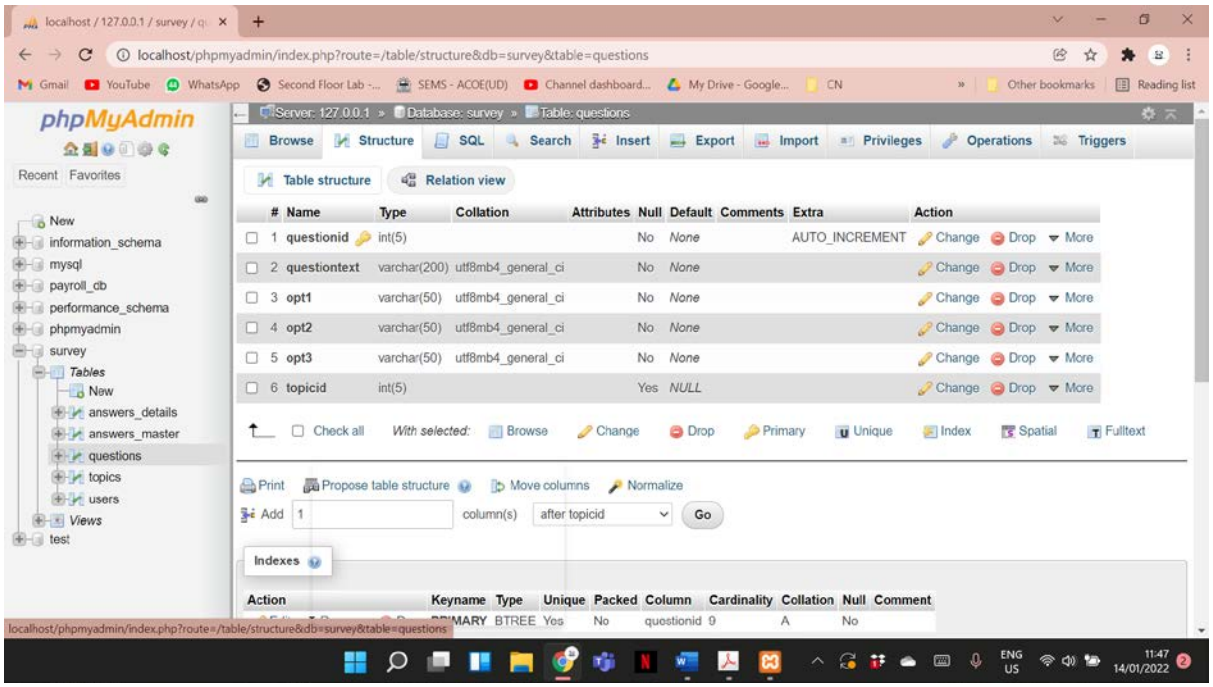


Table : questions

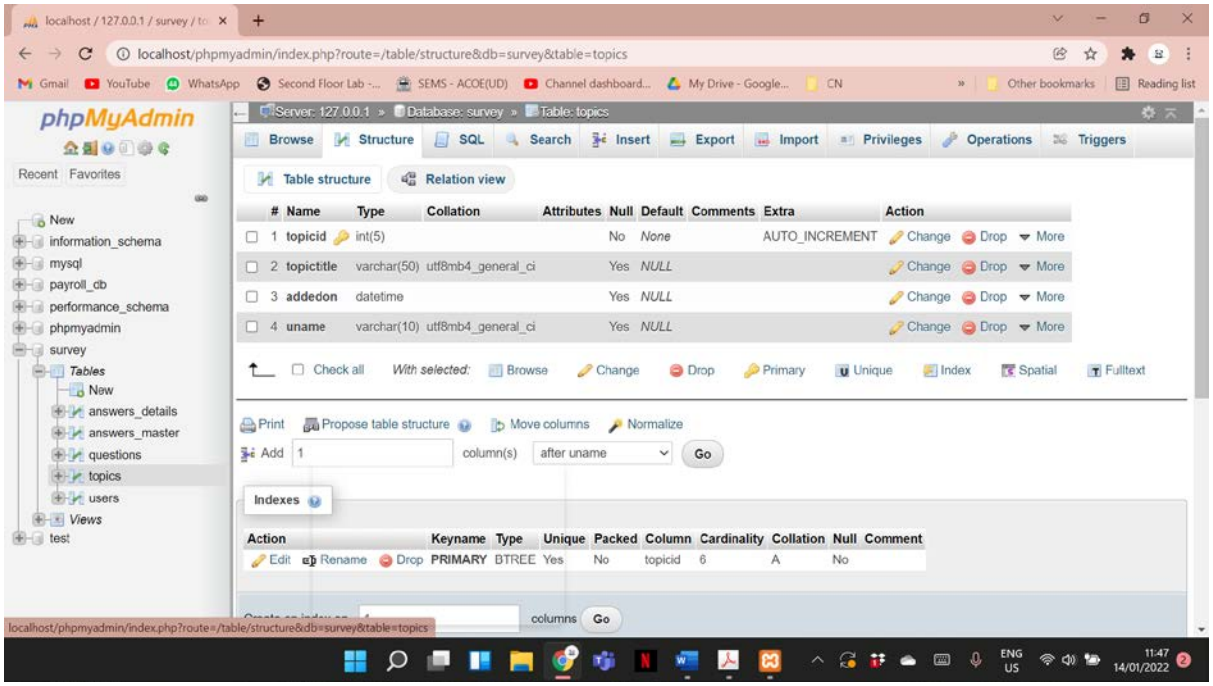


Table : topics

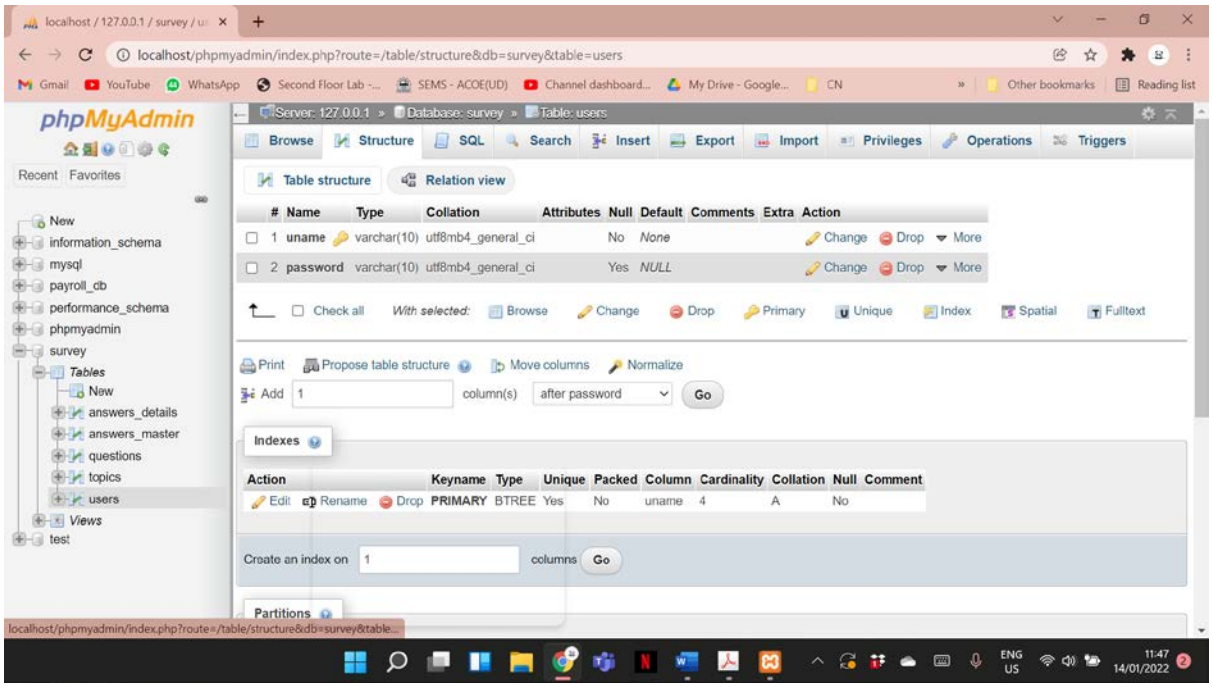
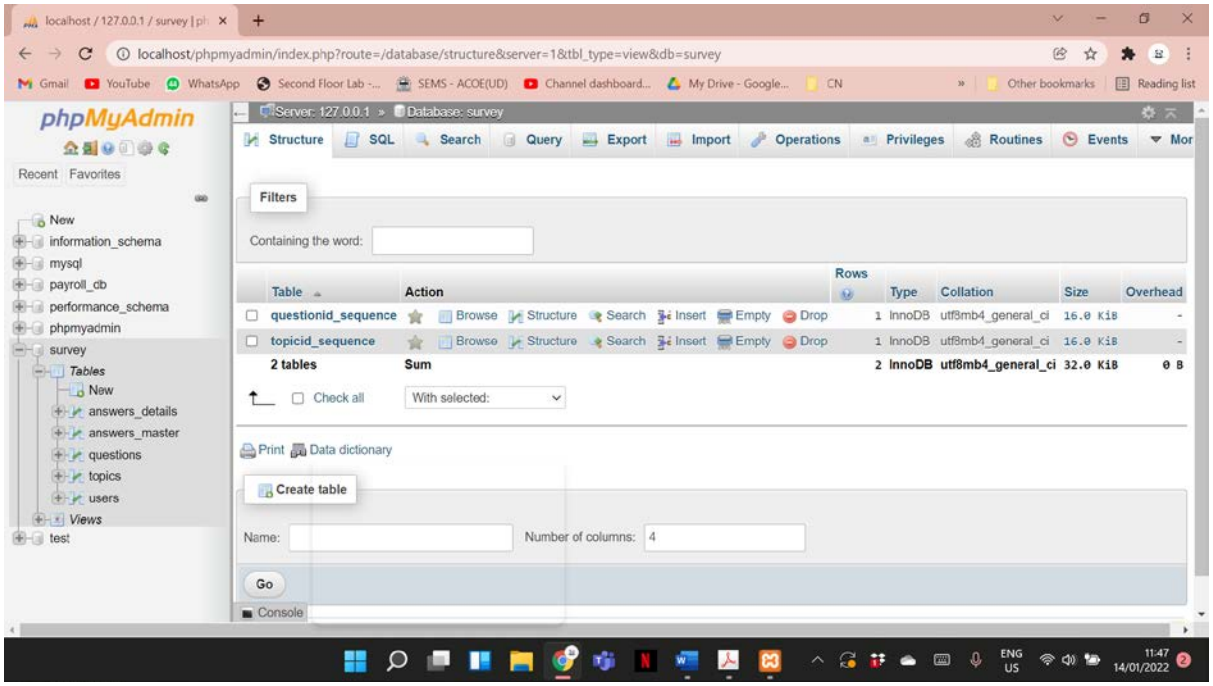


Table : users



Views under survey database

System Implementation

Flow of Website

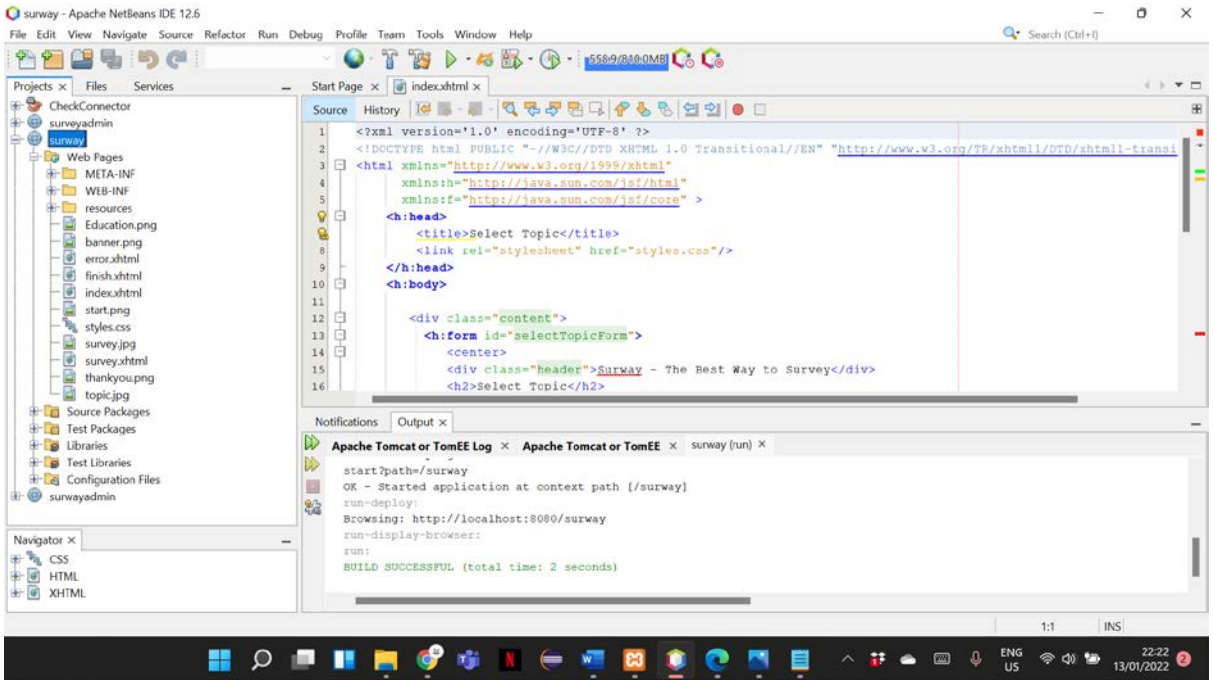
User side

Index page allows the user to select the topic they are willing to undertake the survey.
After choosing their topic click on the survey icon to participate in the survey.
Then the user will be directed into survey page and can view the questions and answer them
Click on the Next button to check the next question, Previous button to check the previous question, Finish button to complete the survey and Cancel to exit the survey.
After completing the survey, the user will be directed to a thank you page and inserts the survey data into database.

Admin side

Login page gets the login credentials from the admin (userid & password), if valid login it takes you to then homepage. Homepage allows you to view the topics, questions in each topic, add topics, add questions, delete questions, delete topics, check the survey results and logout.

Sample Screenshots



Clean, build and run "surway"

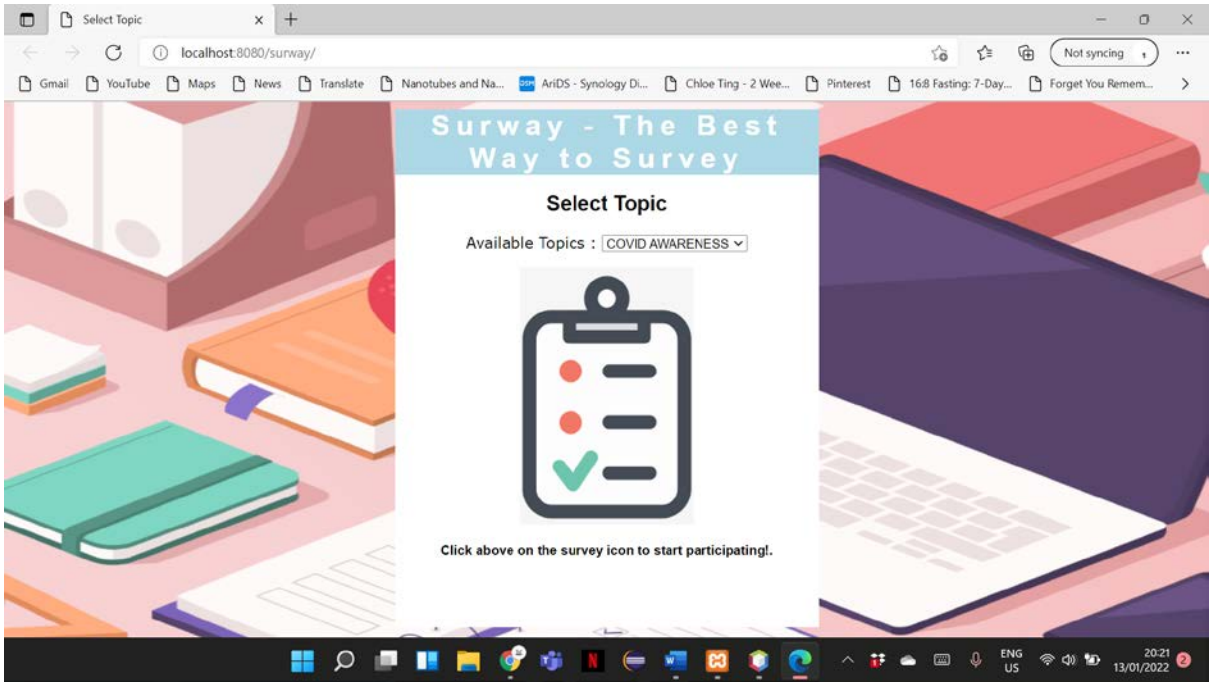


Fig 5.1.1. User side

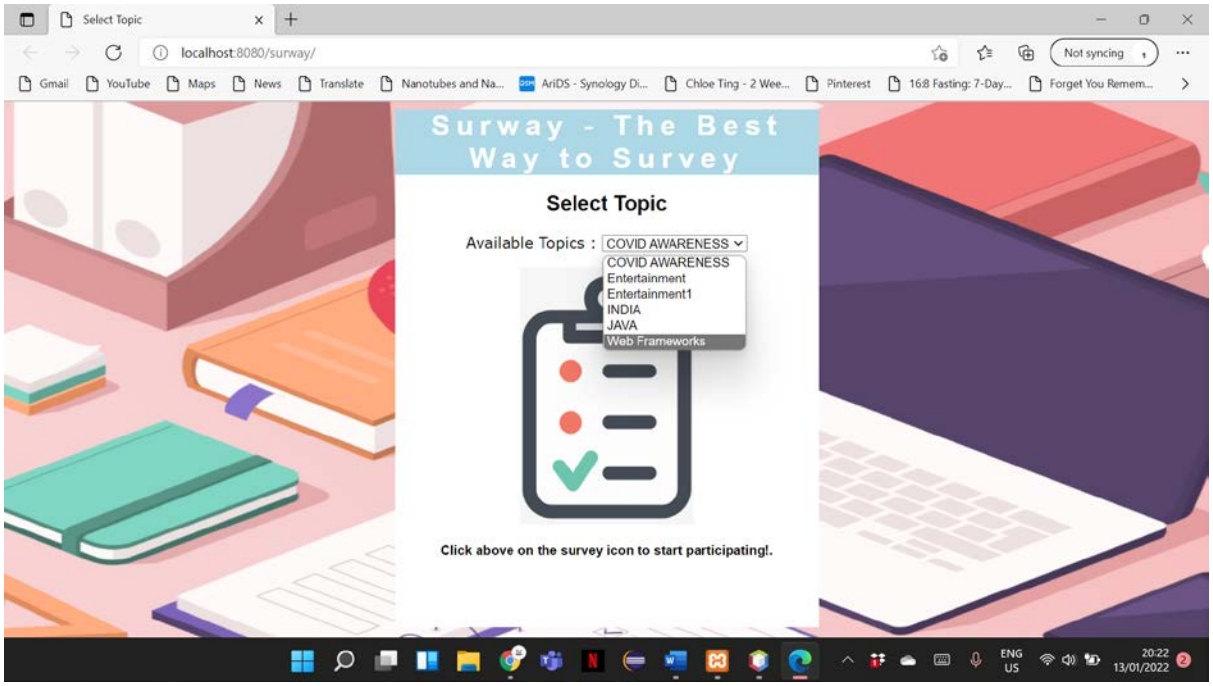


Fig 5.1.2. User selects topics

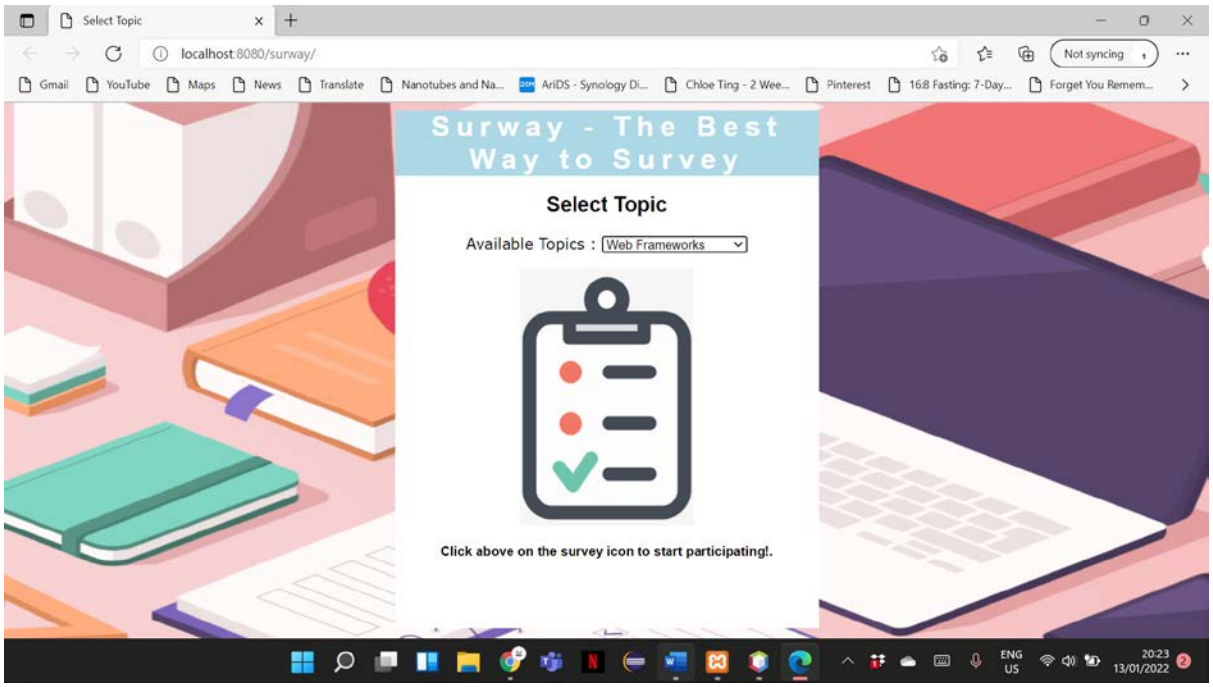


Fig 5.1.3. Select topic

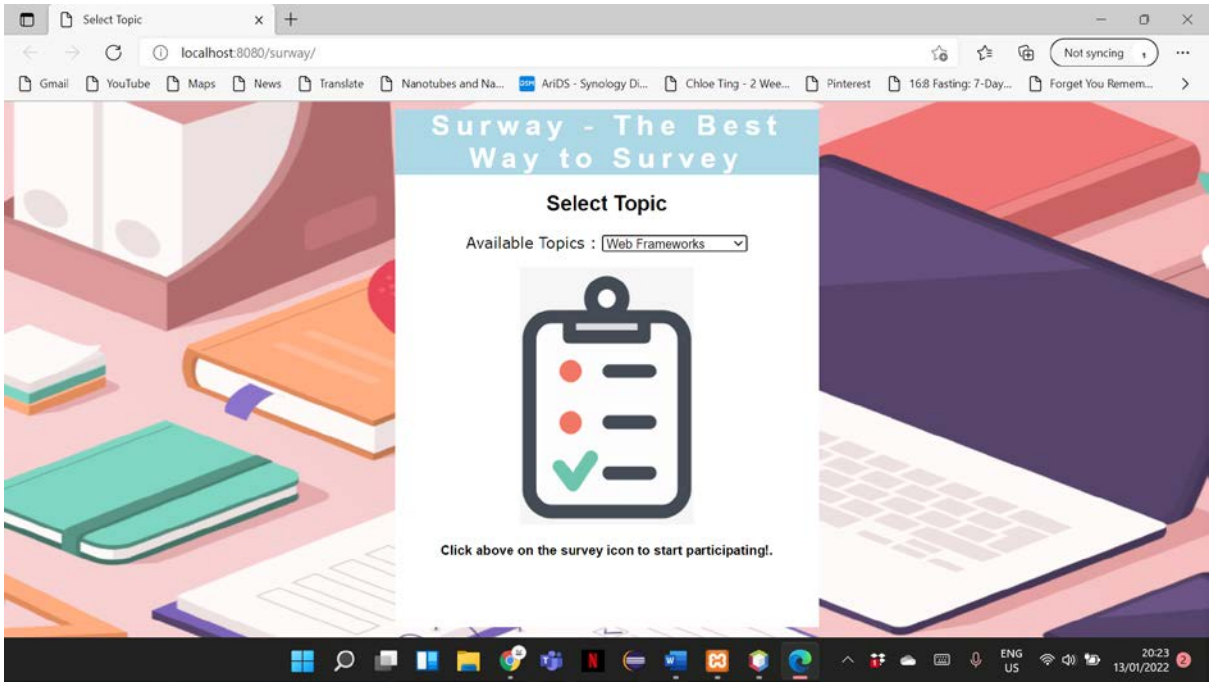


Fig 5.1.4. Click on the survey icon to take the survey.

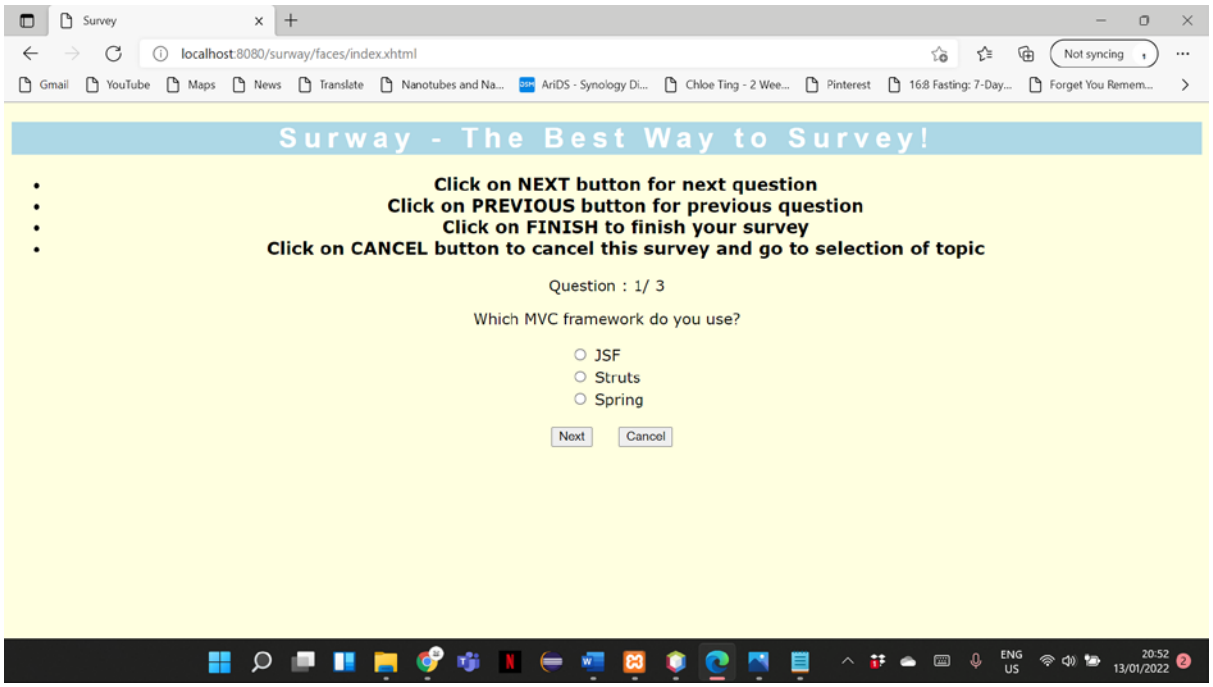


Fig 5.1.5. User clicks next without selecting a option

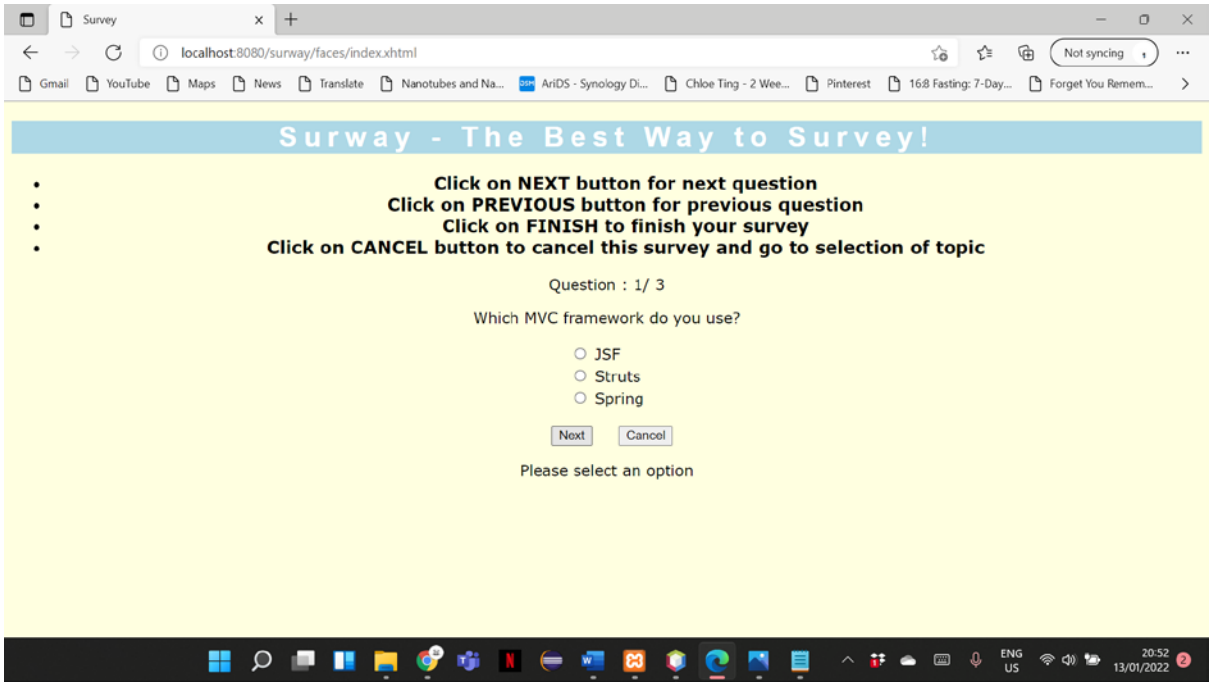


Fig 5.1.6. "Please select an option" is displayed

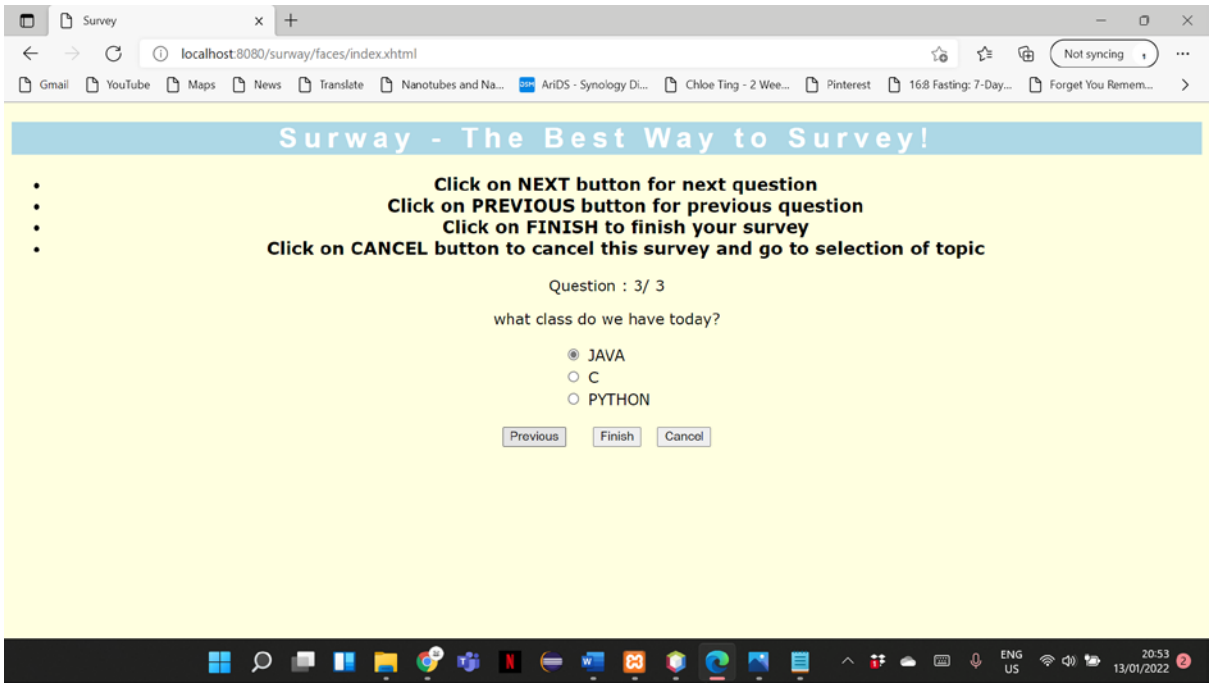


Fig 5.1.7. User clicks Previous button

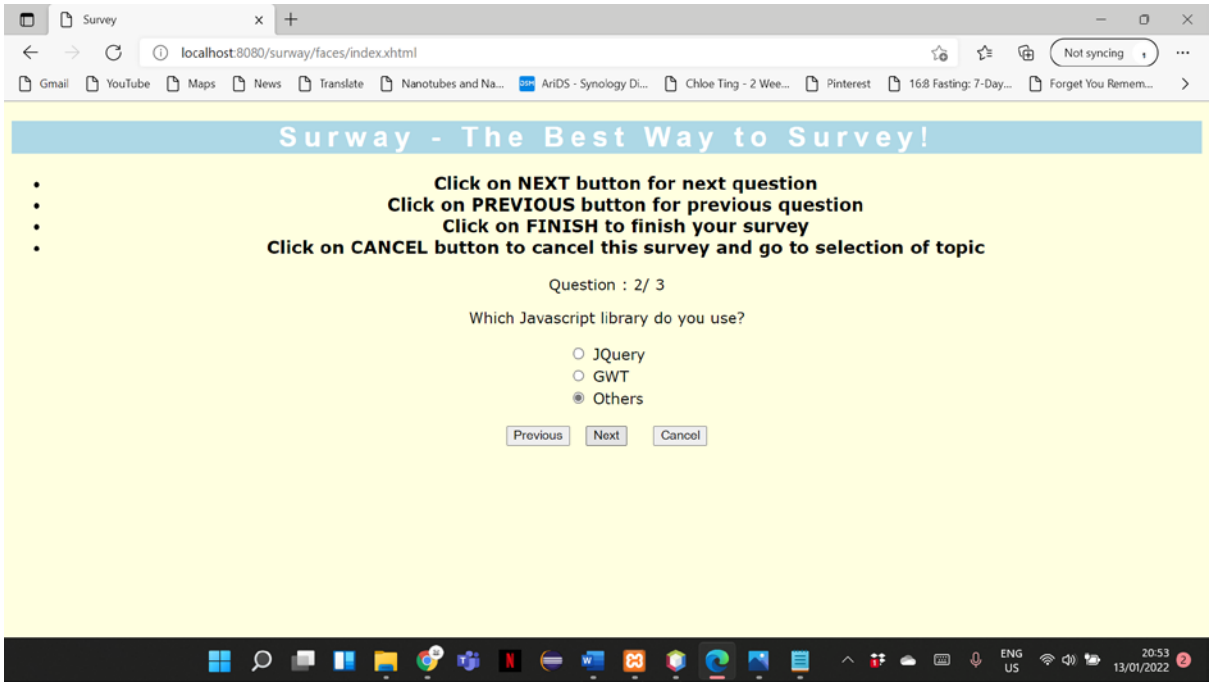


Fig 5.1.8. User Clicks Next button

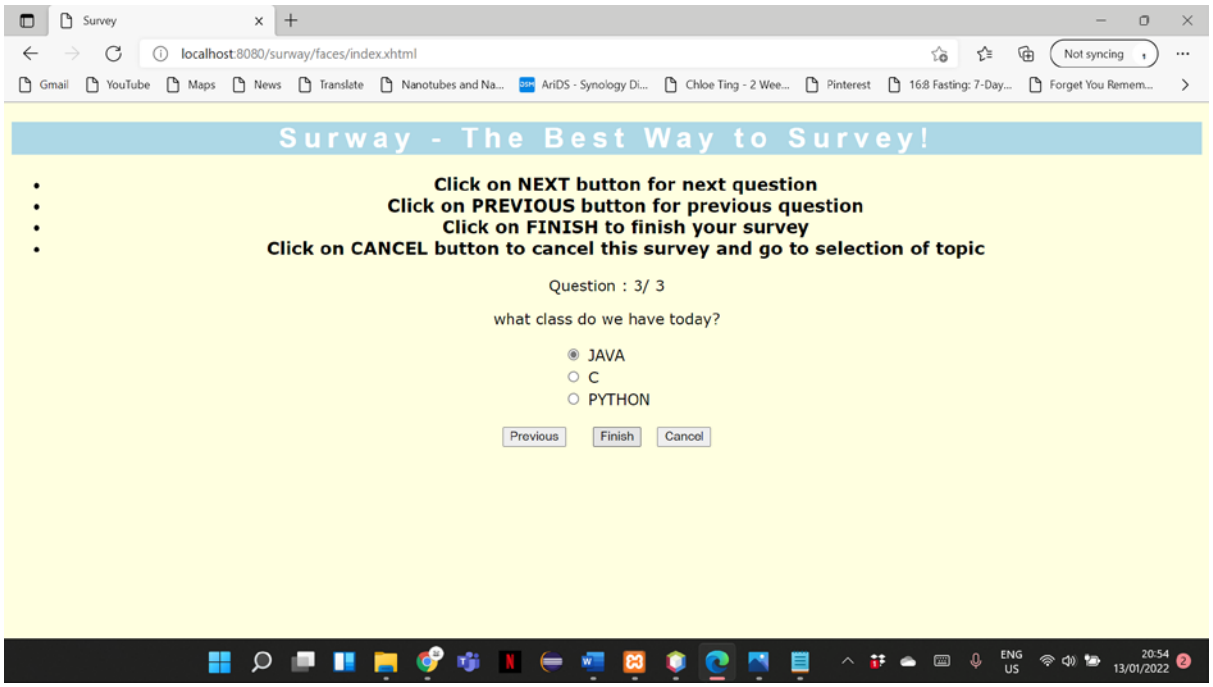


Fig 5.1.9. User clicks Finish Button

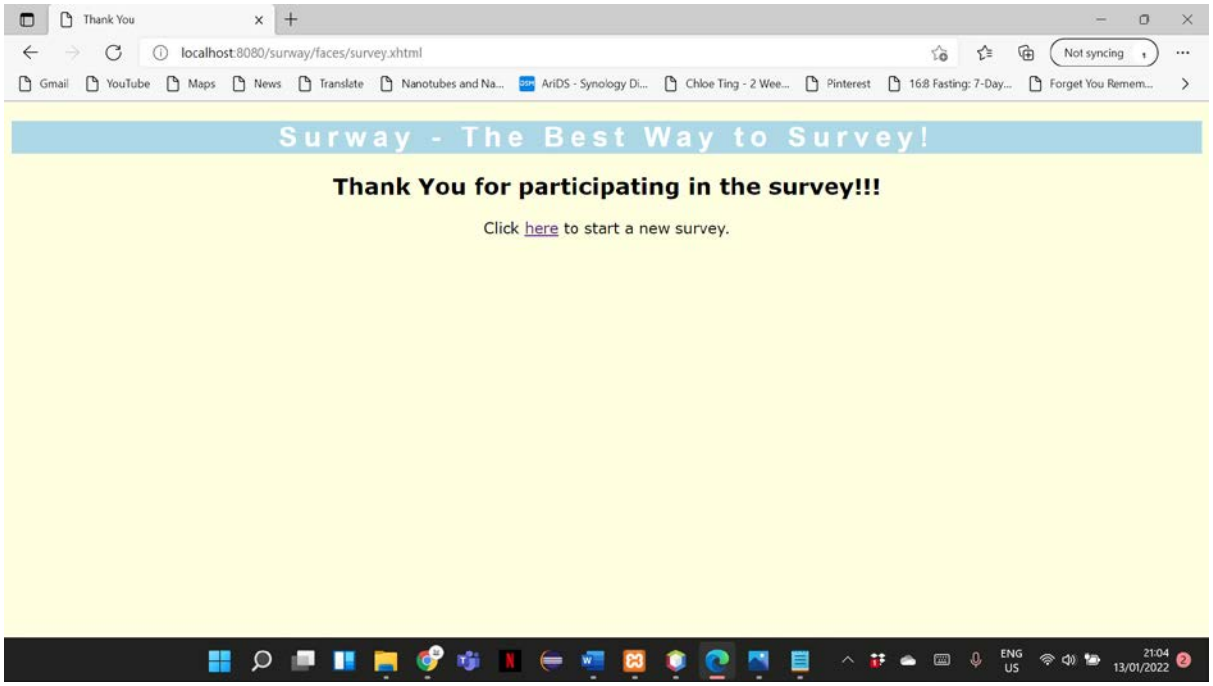
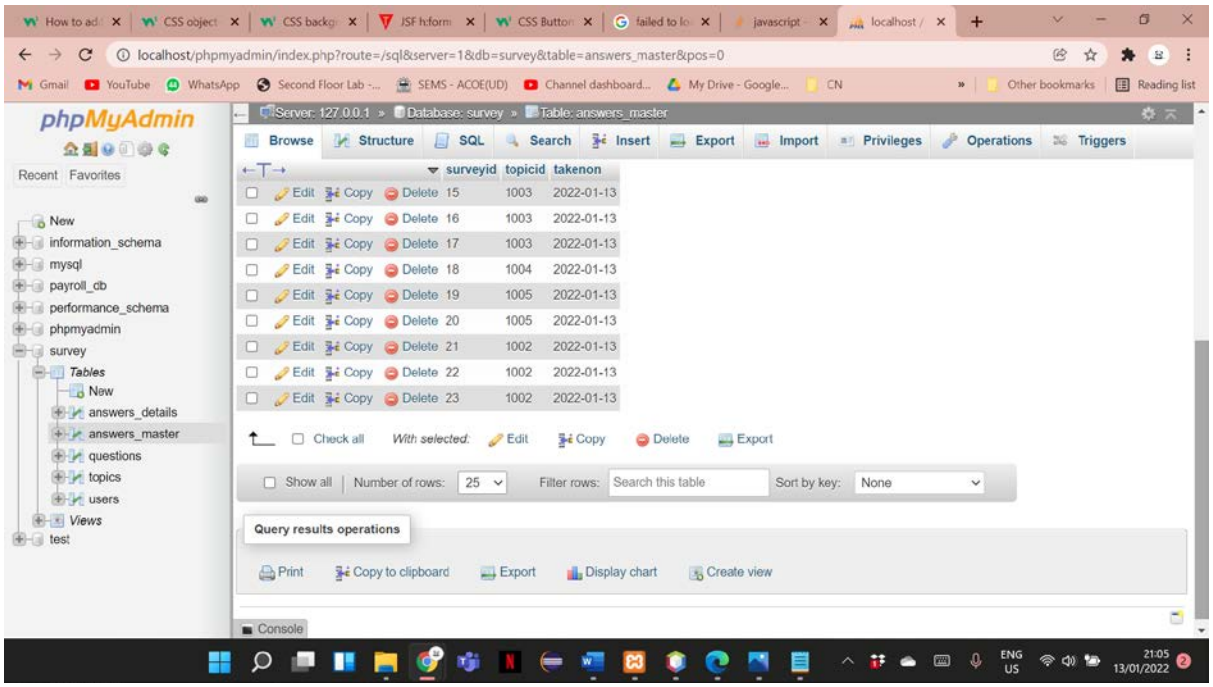


Fig 5.1.10. User gets directed to Thank You page



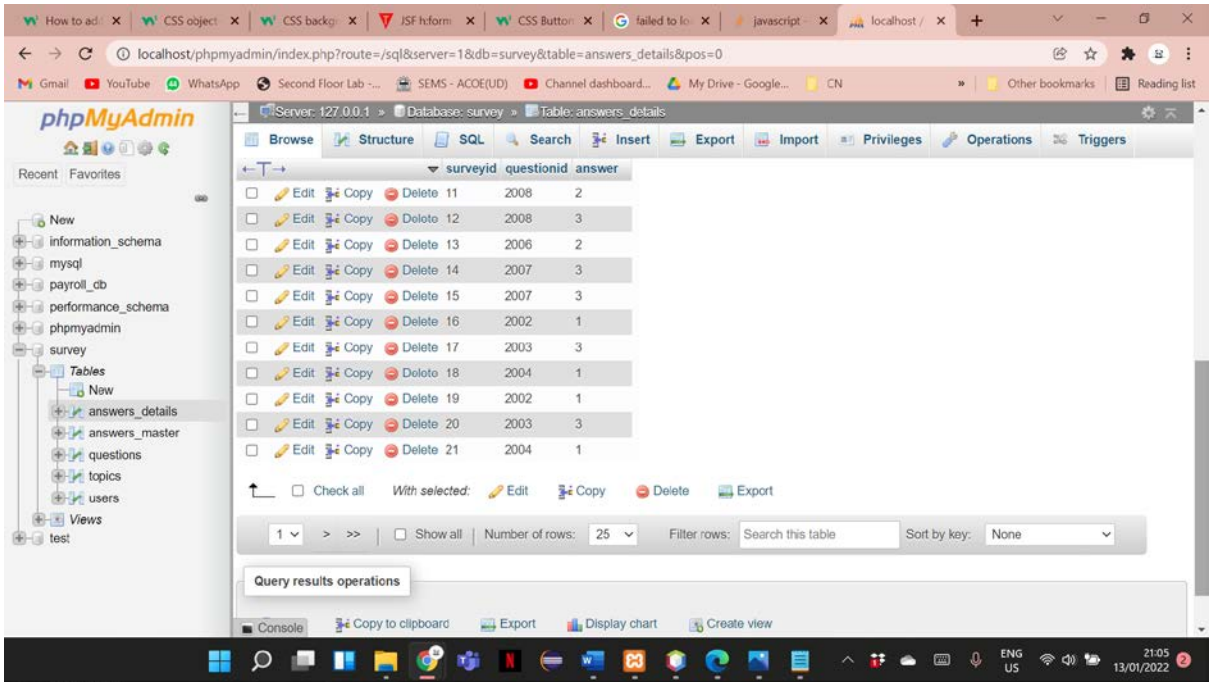
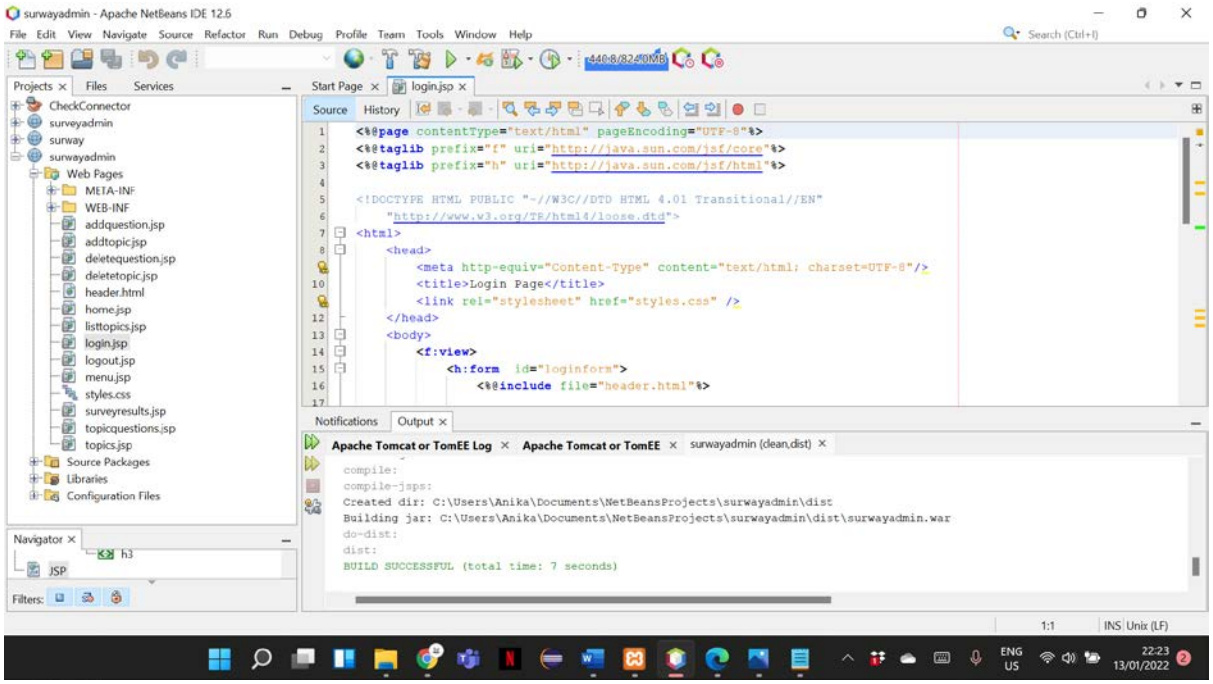


Fig 5.1.11. Users answers have been inserted directly into the answers database tables.



Clean, build and run "surwayadmin"

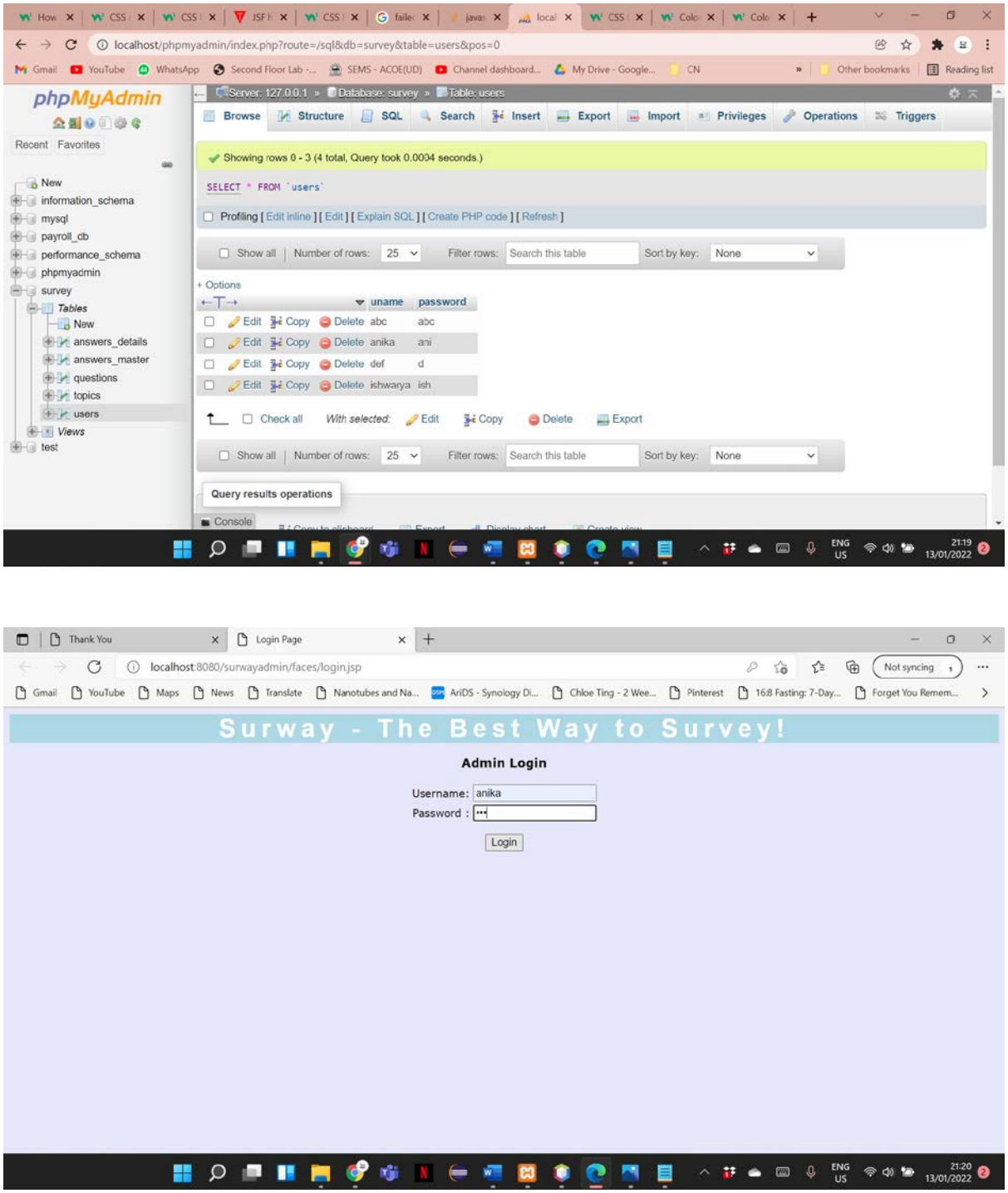


Fig 5.2.1 Admin enters a valid login credentials.

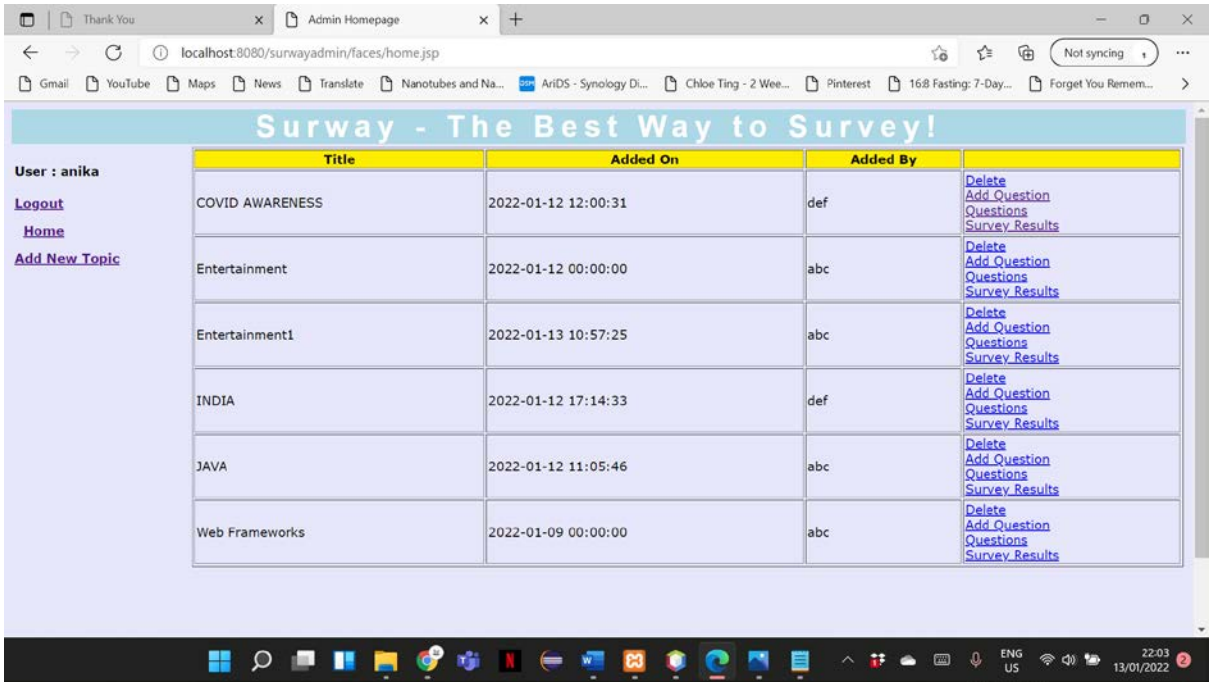


Fig 5.2.2. Admin Homepage

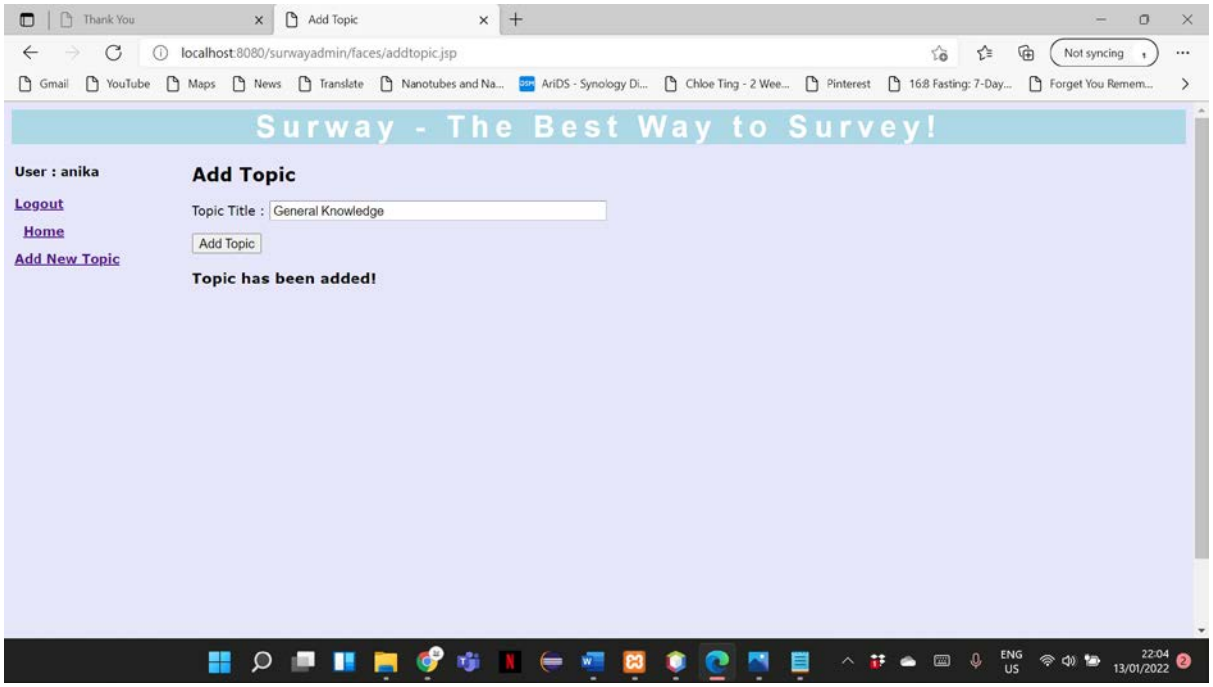


Fig 5.2.3. Admin adds a new topic.

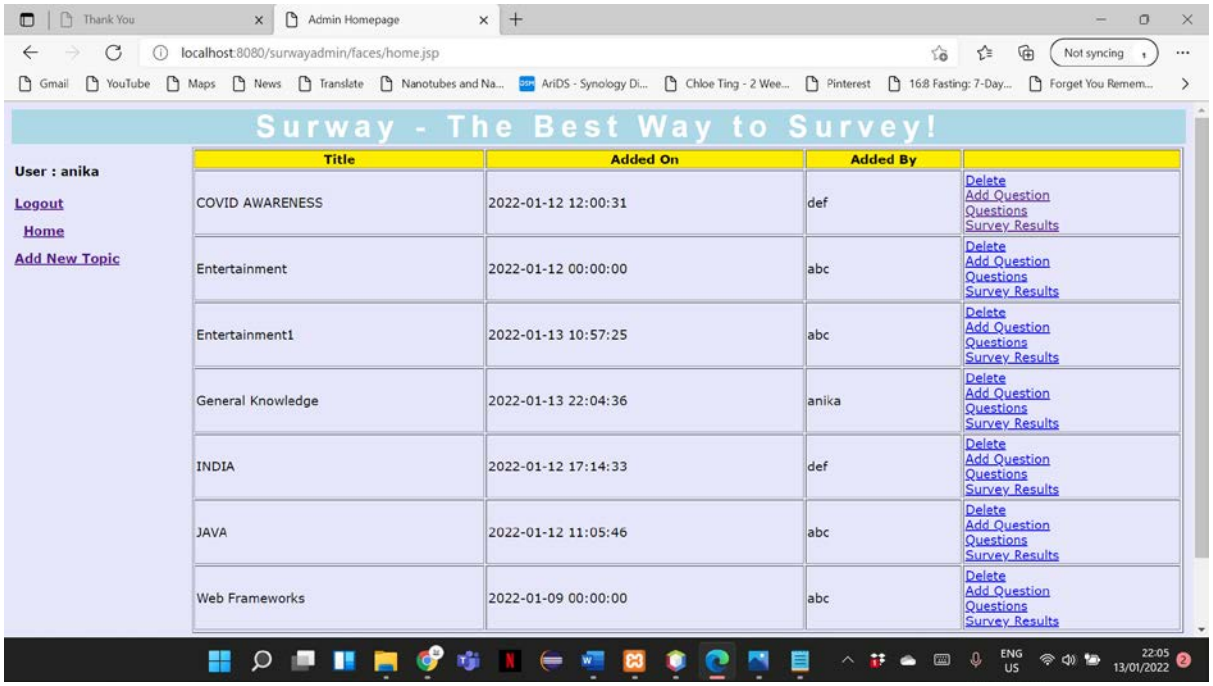


Fig 5.2.4. Topic "General Knowledge" gets added in the homepage

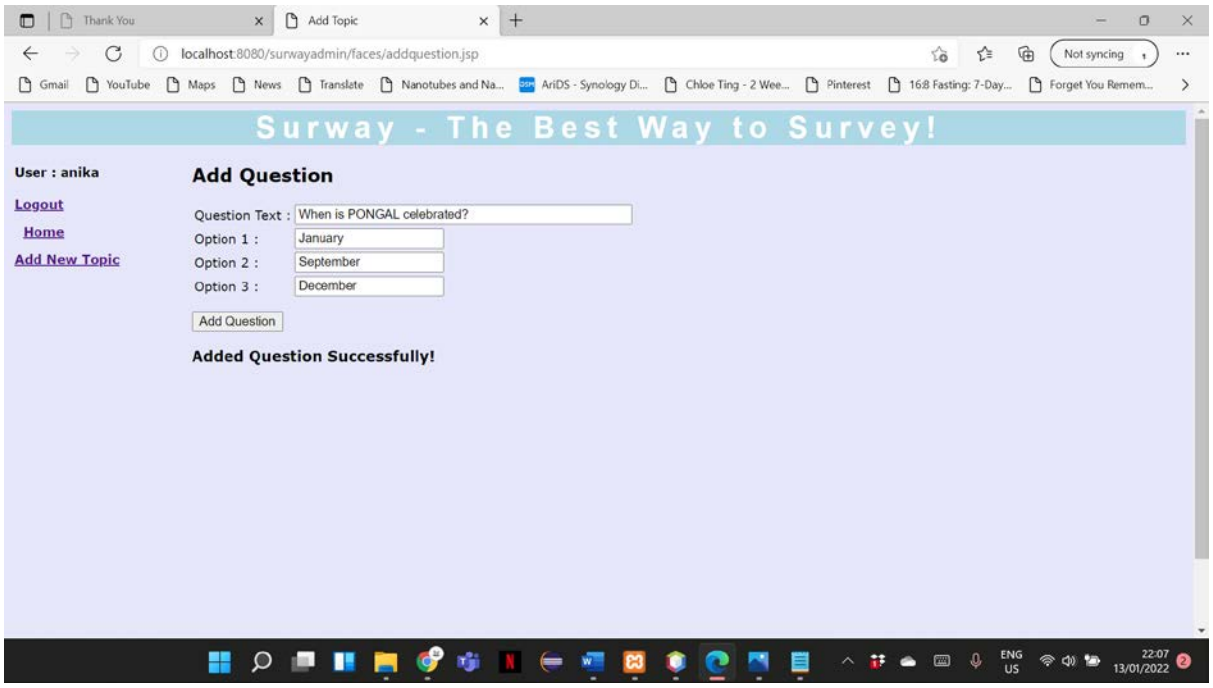


Fig 5.2.5. Adding a question under General Knowledge.

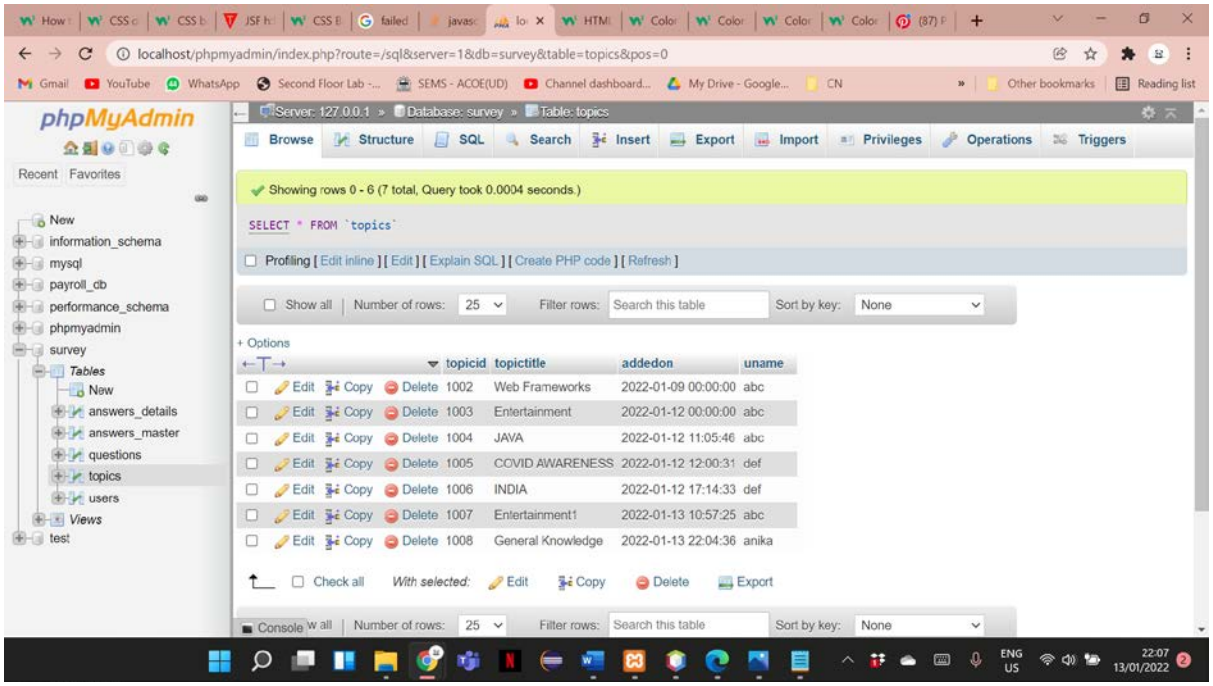


Fig 5.2.6. Added topic General Knowledge is found in database "topics"

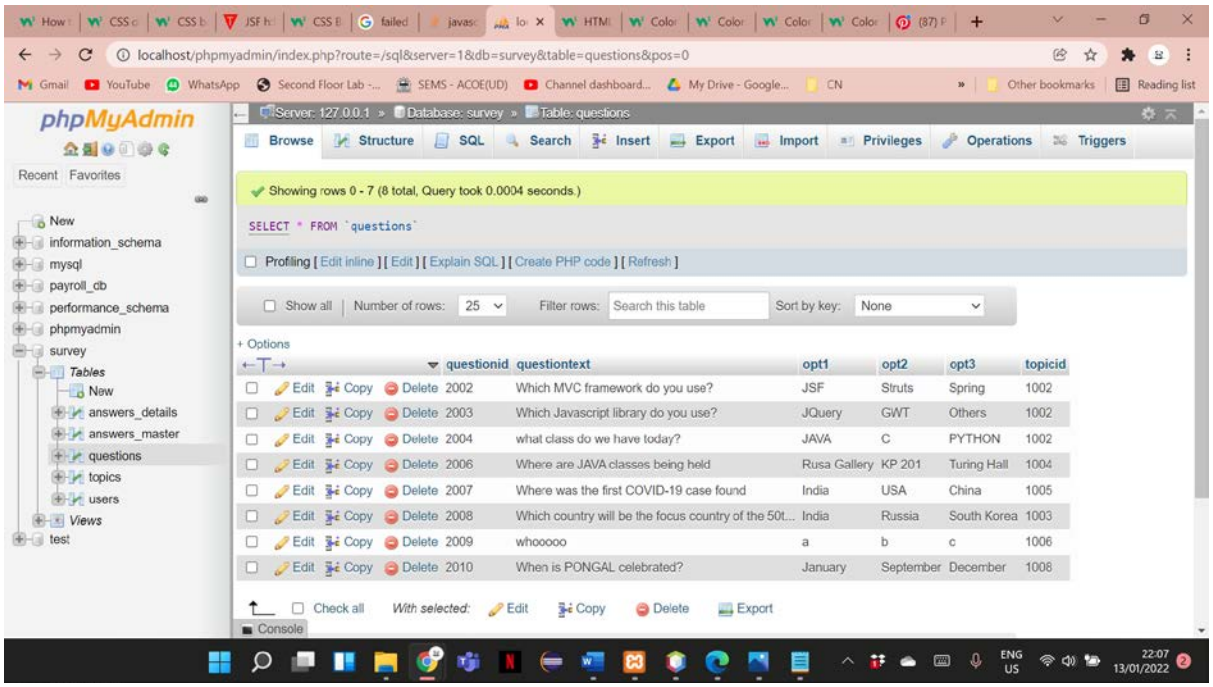


Fig 5.2.7. Added question under topic "General Knowledge" i.e topicid = 1008 is found in database "questions"

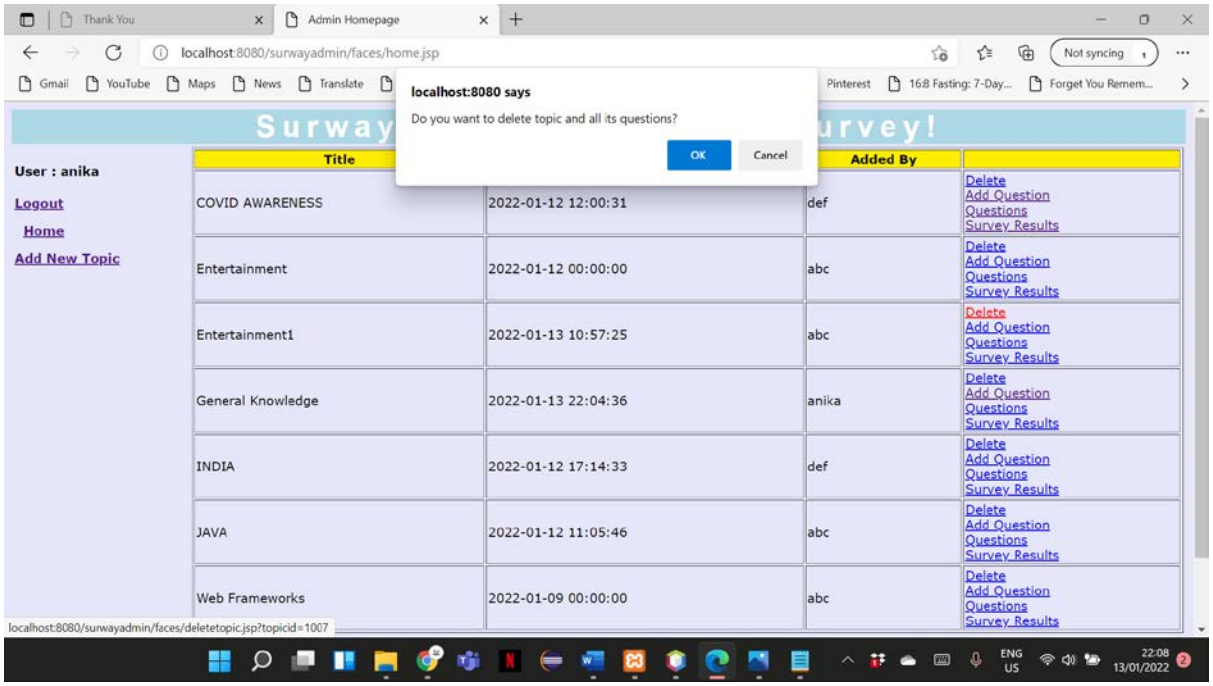


Fig 5.2.8. Admin tries to delete topic "Entertainment1" and questions under it.

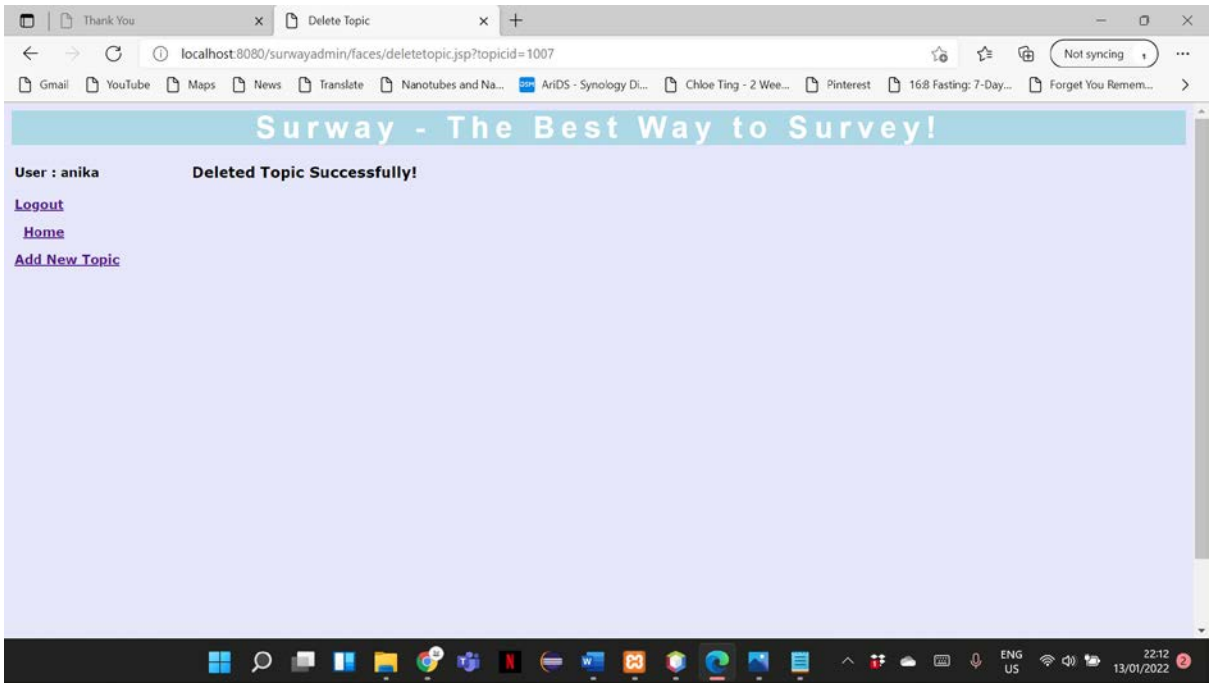


Fig 5.2.9. Topic deleted successfully

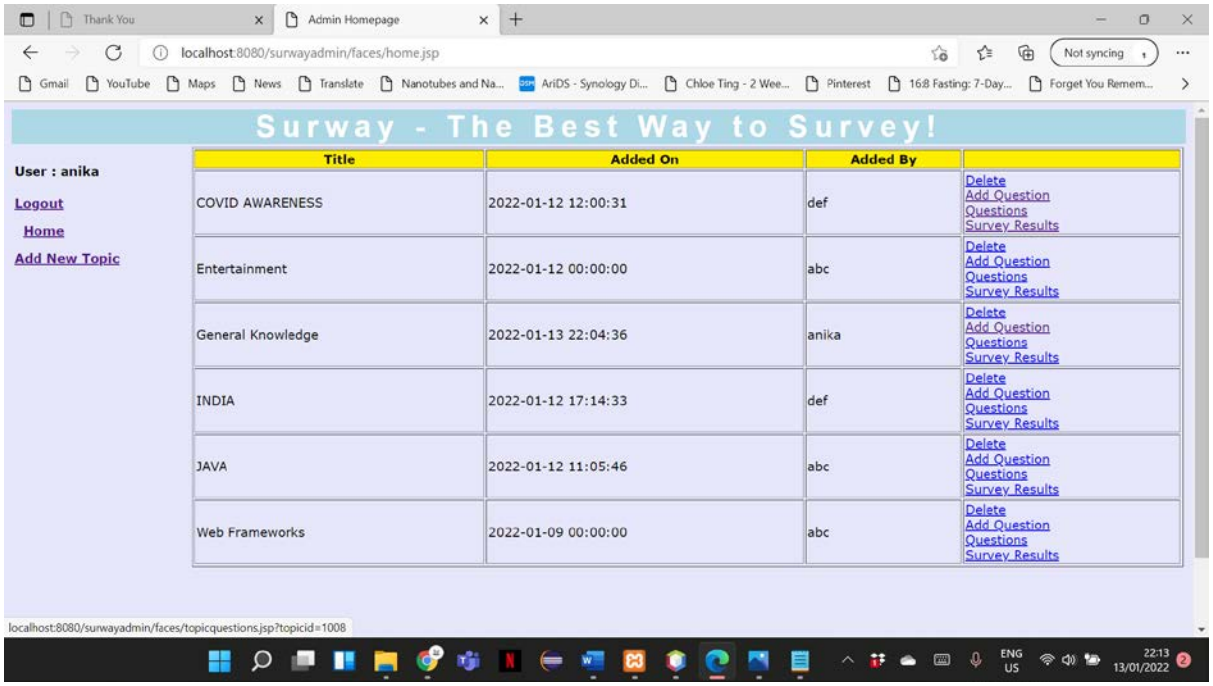


Fig 5.2.10. Admin clicks questions to view the added questions

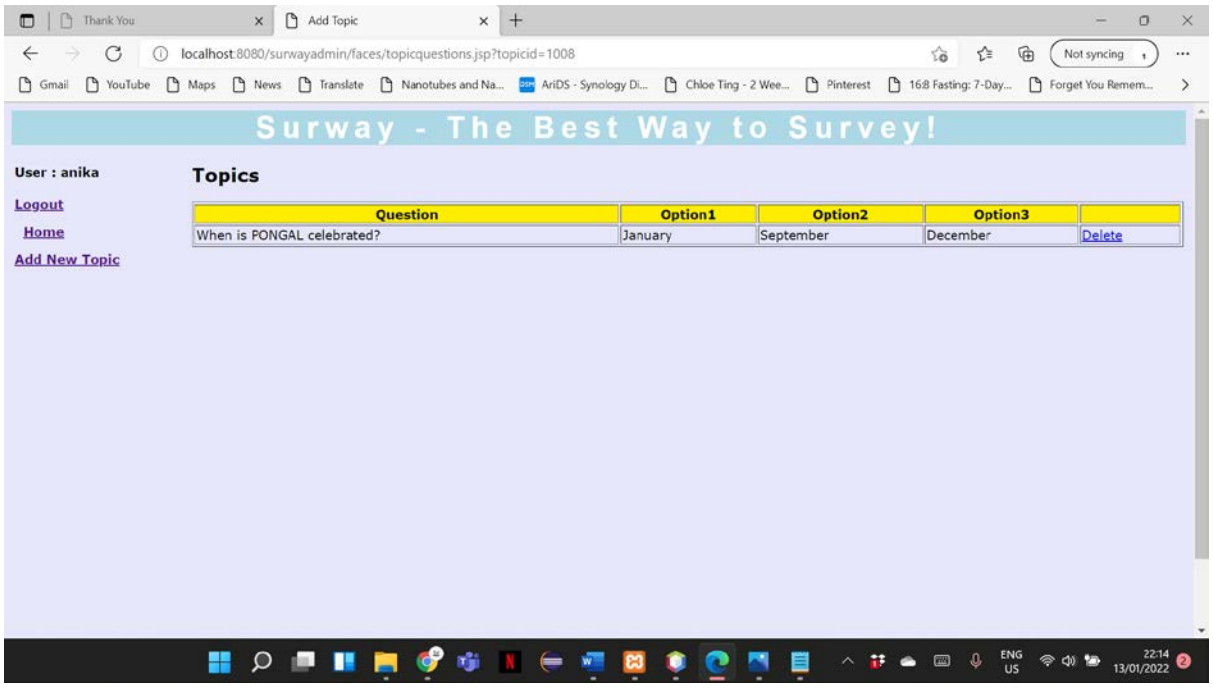


Fig 5.2.11. Added question under topic "General Knowledge" is found

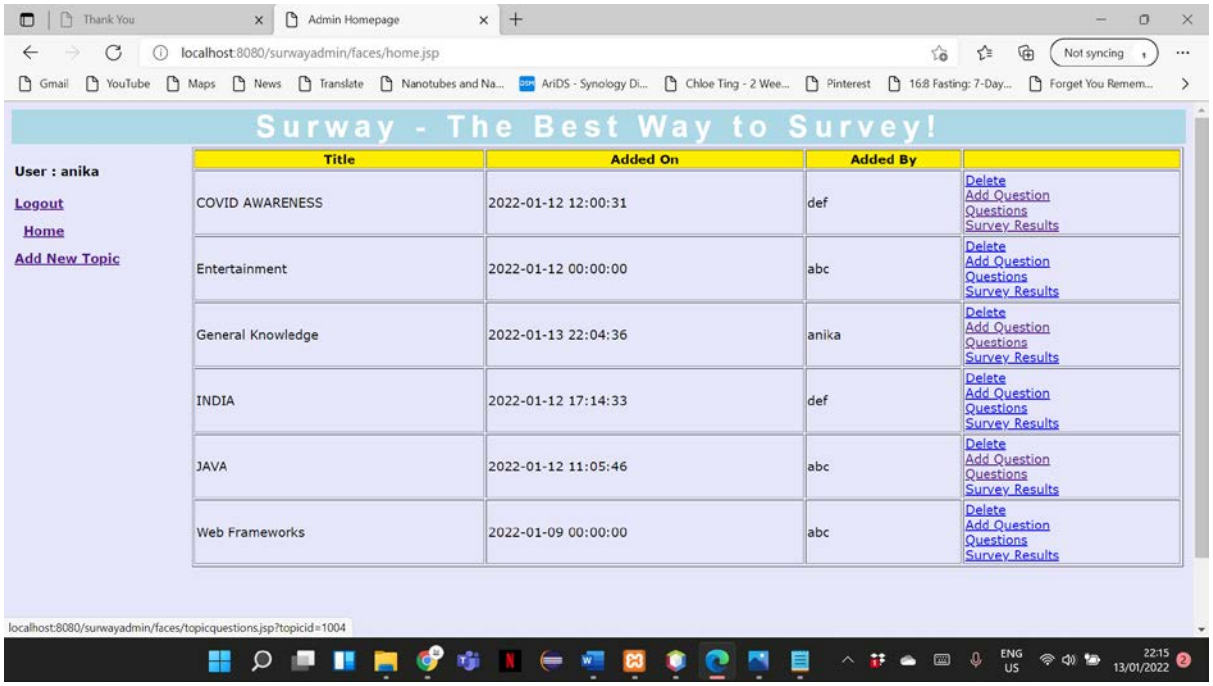


Fig 5.2.12. Admin clicks home and gets directed to homepage

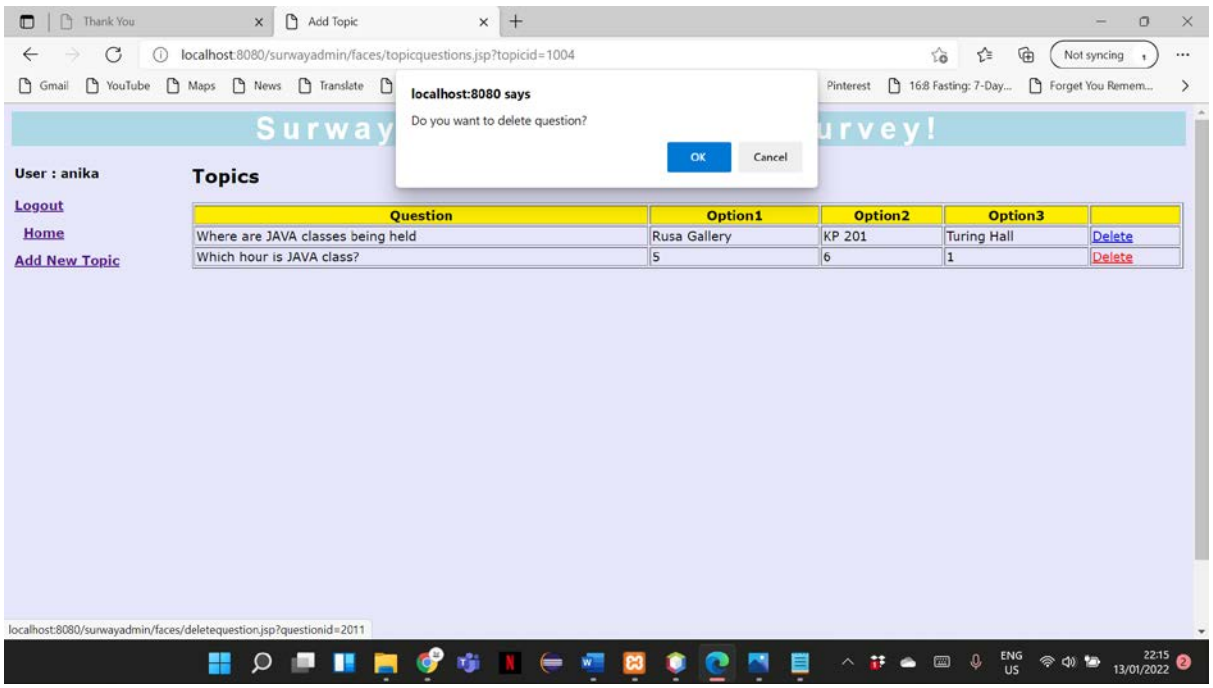


Fig 5.2.13. Admin tries to delete a question from topic "JAVA"

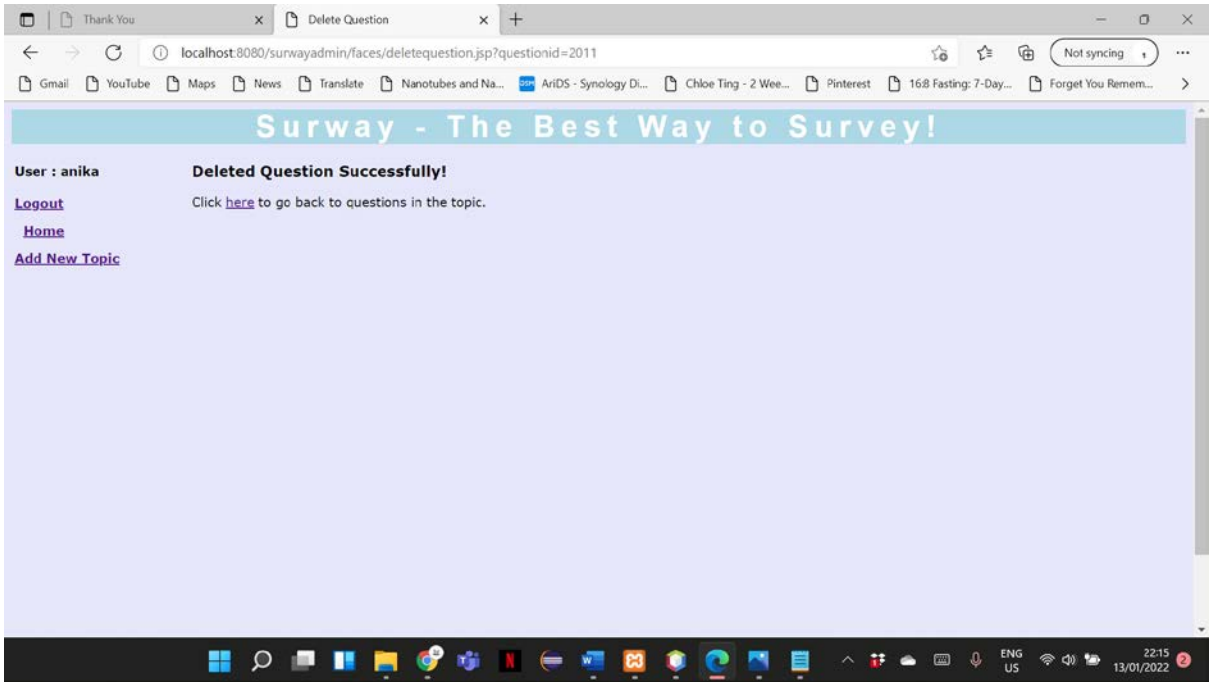


Fig 5.2.14. Question deleted successfully.

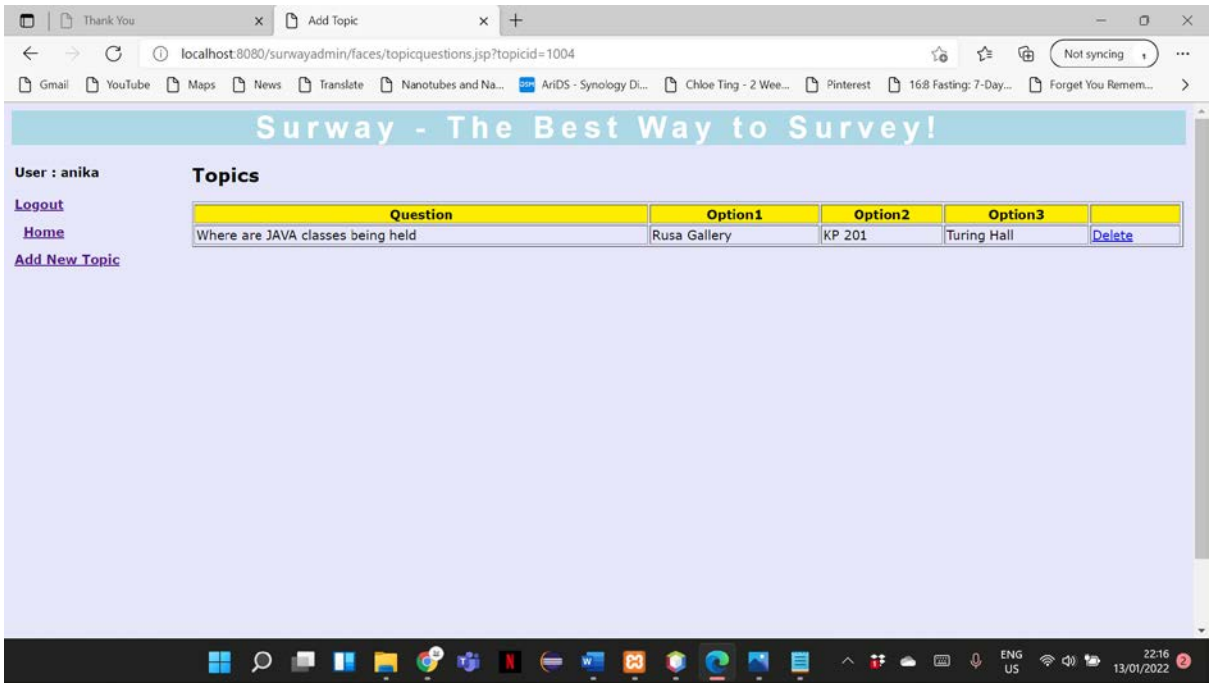


Fig 5.2.15. Admin clicks "here" to view the questions after deletion

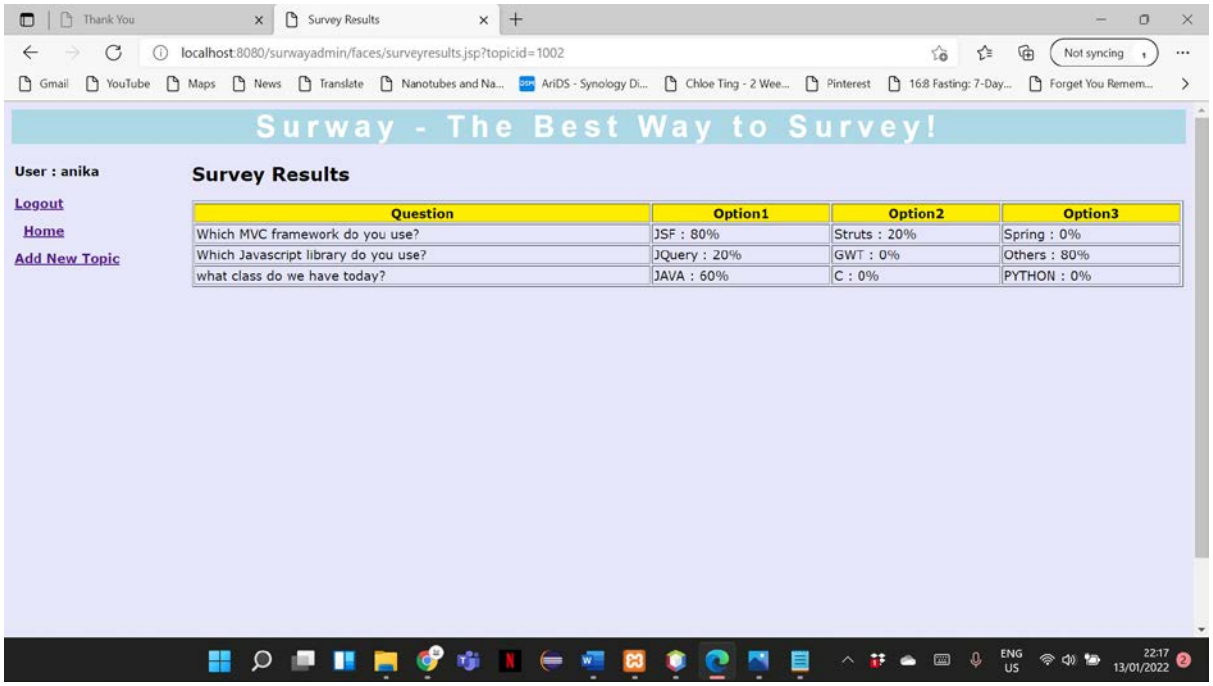


Fig 5.2.16. Admin checks out the survey results of topic "Web Frameworks"

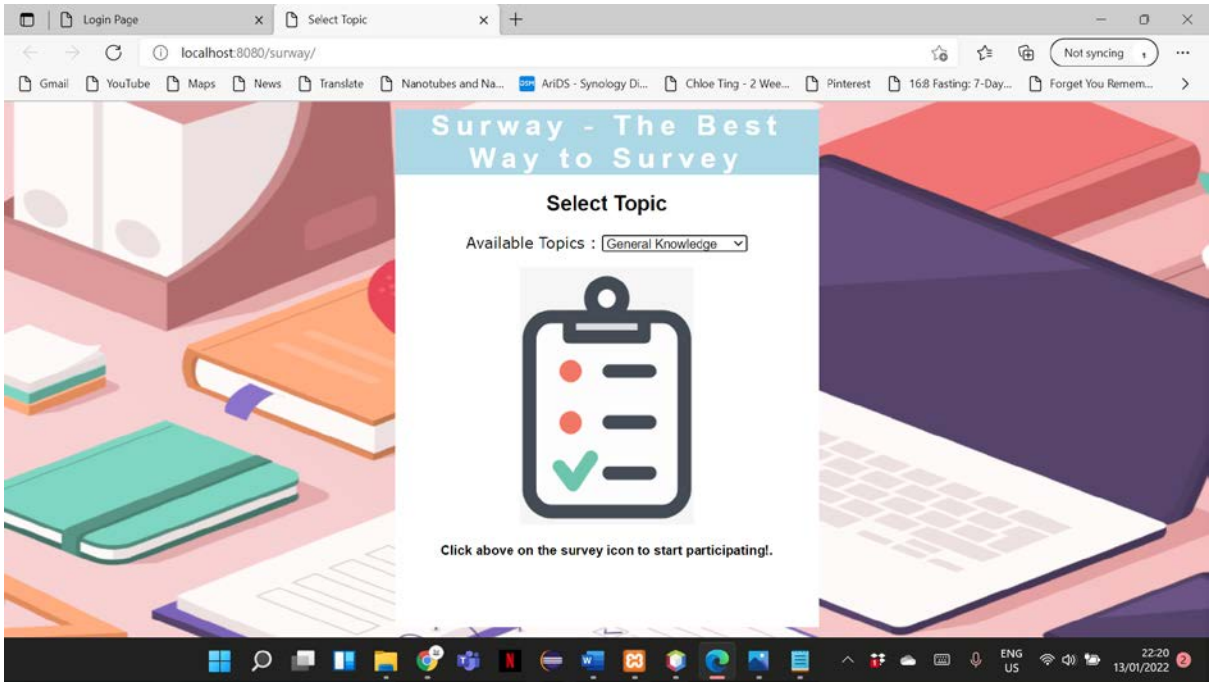


Fig 5.2.17. Topic "General Knowledge" and questions added by the admin can now be found in the user side

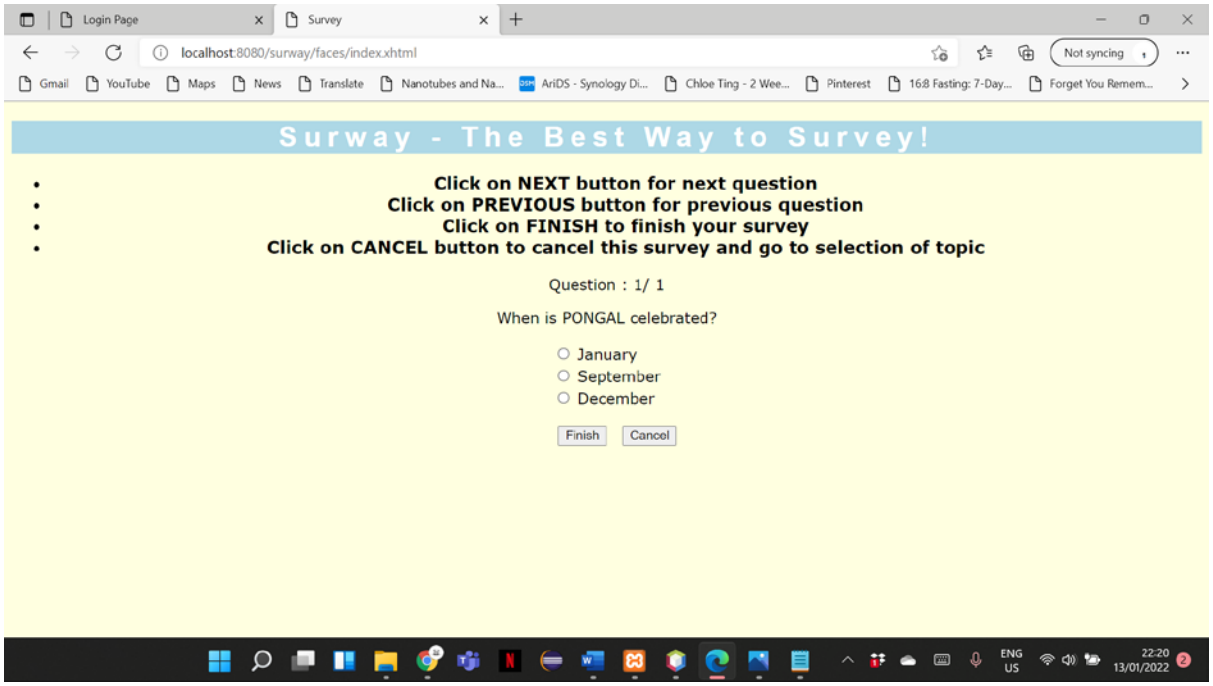
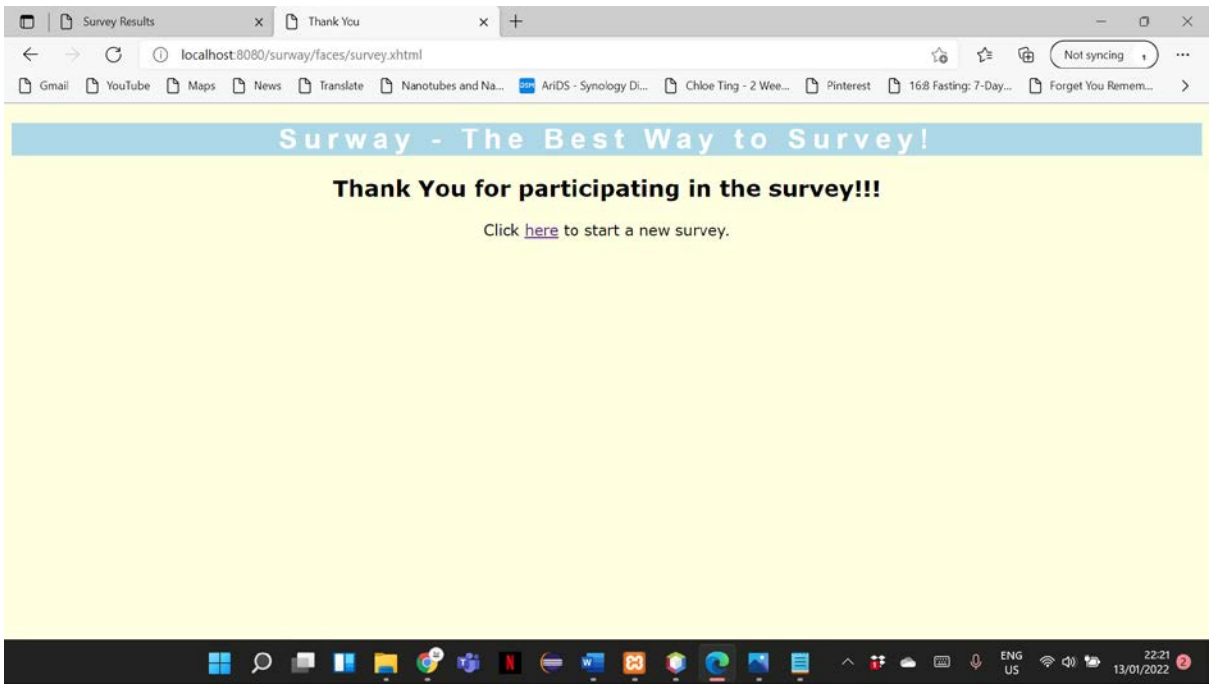


Fig 5.2.17 & Fig 5.2.18. Topic "General Knowledge" and questions added by the admin can now be found in the user side



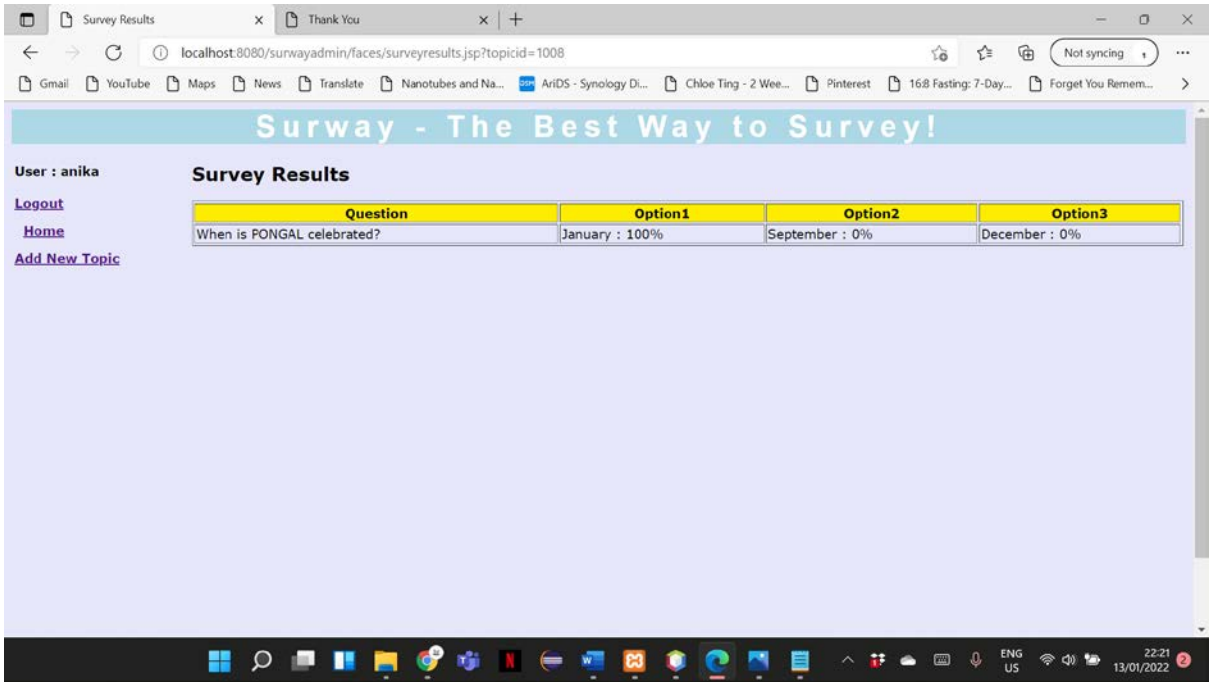


Fig 5.2.19 & Fig 5.2.20. Users survey results can now be found on the admin side.

How to run the project

Surway folder consists the files for user side and surwayadmin consists the files for admin side. Open the folders separately and add JSF, Servelet libraries and mysql-connector jar. Clean, build and run the project in Netbeans IDE on Tomcat Server.

Conclusion

The convenience and reach of online surveys, coupled with their accessibility, make them particularly suited to produce quick results. There is no wait time for surveys to be mailed back or for responses to be manually entered into a data system and then analysed. Because answers are typed directly into an electronic database system, companies have instant access to facts and figures, thus eliminating the time other data collection methods need for transcribing survey answers. The proposed system will therefore target a wider and huger audience yielding more results,