

Ahsanullah University of Science and Technology
Department of Computer Science and Engineering



**CSE3224 : Information System Design and Software
Engineering Lab, Spring 2020**

Year: 3rd Semester: 2nd

Lab Section: B2

Group: 06

Project Name: E-Tuition

Submitted By:

Inzamum Ul Haque	17.02.04.087
Latifur Rahman Lemon	17.02.04.102
Fahmeed Mahmud Alvee	17.02.04.104
Abir Hossain	17.02.04.106

Date of Submission: 21 January 2021

1. Introduction to project

In this days, we all are passing through global pandemic. Due to the pandemic, many of educated and qualified people are losing job nor getting poor amount of esteem. The students are also stuck because of long-term institutional break. Undergraduated students have been disoriented to earning money. Therefore, we are going to launch our project for their overcome from this situation. We are creating a *Live* platform for students & tutors to participate in several type of courses, evaluation etc. Students could be able to enroll the courses by an amount of payment. By enrolling, students can participate in live sessions & able to access inside the course materials. Tutors also will control their owned courses by our project. It facilitate users to fulfill his educational needs at shortest amount of time by staying at home.

2. Requirements Specifications

Introduction:

Online education platform deals with mainly school, college, university students & the interested youth tutors. It has record of each student who felt the necessity of this platforms during this pandemic. There will be two segment- teachers & students. The tutors have to registration with some requirements. They can create multiple courses. Students have to enroll the courses by payment firstly. By this give & take condition both segments will be beneficial including the project owner. By going through the website both- tutors & students can go through anyone's need and can help each other.

Stakeholders of the Proposed System:

There are different types of stakeholders in our project. These are given below:

1. Tutors/Teachers
2. Students
5. Database administrator

Functionality Grouping according to the users:

We have already mentioned that we have five types of user according to the functionality such as,

➤ Tutor/Teacher can perform the following functions-

- Login and Access
- Course creation
- Add new post/announcement
- Share Course materials
- Evaluation
- operate LIVE class
- Course cancelation

➤ Student can perform the following functions-

- Login and Access
- Search for preferred & special courses
- Join LIVE session
- See a new post
- Participate in evaluation
- Download course materials
- Unenroll course

- Database administrator can perform the following functions-
- Login and Access
 - Can have full control to the database
 - Can modify contents
 - Collaborate with users
 - Can manage user accounts.
 - Can give permission for requirement approvals
 - Have a admin control panel.

Functional Requirements:

Login/Access Account:

Requirement No.	Functional Requirements
FR01-01	The system shall allow the seller, buyer and others to register an account and login to their account with matching their passwords and id.
FR01-02	The system shall enable users to edit their login information and passwords and retrieve passwords if being forgotten.
FR01-03	The user can also sign up using other medium like Google account.

FR02: Manage Post:

Requirement No.	Functional Requirements
FR02-01	The system shall enable seller agencies to add, change or delete their post.
FR02-02	The system shall enable users to boost their post.

FR03: Courses:

Requirement No.	Functional Requirements
FR03-01	The system shall allow users(tutors/teachers) to publish a post after approval of admin.
FR03-02	They will be able to search specific courses. Top-rated courses will be pop-up on top of list
FR03-03	They will be able to add course materials, sharing Live classes, proceeding evaluation.

FR04: Rating and Reviews:

Requirement No.	Functional Requirements
FR04-01	Registered users(students) can give ratings to courses as well as the system on their experience
FR04-02	User can see others' reviews of the course before enrolling.

Non-Functional Requirements:**NFR01: Performance:**

Req. No.	Functional Requirements
NFR01-01	Average load time of the starting page of the system must be less than 2/3 seconds.

NFR01-02	The log in information shall be verified within five seconds.
NFR01-03	Queries shall return results within five seconds
NFR01-04	The system should be able to do smooth searching.

NFR02: Security:

NFR02-01	Database connection close. After data use the database connection will close
NFR02-02	No general user can get access to update the database.
NFR02-03	The users should get up to date information and emergency contact from the system & communicate them.

NFR03: Portability:

NFR03-01	System must run on any device support web system.
-----------------	---

NFR04: User Friendly Interface:

NFR04:	The system should have a decent interface and should provide good experience to the users.
---------------	--

NFR05: Defects-Maintenance:

NFR05-01:	Post Release defects of the system must not exceed 1 critical bug per month.
NFR05-02	Post Release bug fixing should not take more than 5 hours.

Overall Constraints:

- No system for online payment.
- No suggestion for better course.

3. Interview and Questionnaire:**Sampling Decisions:**

We used target-oriented method for our research. Our target research included college, universities, direct email and Social platforms.

Sample Design:

- **Sample Size:** The survey was conducted among variety of people.
- **Parameters of Interests:** The main target people for this survey was the people who uses internet the most for effective purpose.
- **Sampling Technique:** The “Simple Random Sampling” technique is used here.

Data Collection Tool Used:

To collect the data we have used **Google forms**. The Google form included both open-ended and close-ended questions. The Google forms is attached on the next page, from which all the respondents have answered.

Questionnaire on “E-Tuition”

This survey is tracking the opinion about our youth generation giving and taking Online Education. We are creating an online platform to help newcomer teachers and students to get an opportunity to learning and earning. So, we want your valuable opinion. Thank you.

Personal Info:

1. Name:_____
2. Email:_____
3. Age:
 - Below 16
 - 16-20
 - 21-25
 - Above 25
4. Gender:
 - Male
 - Female
 - Prefer not to mention

General Information:

1. Occupation:
 - Teacher
 - Student
2. Where do you live?
 - Village area
 - Town area
3. Describe your internet connection? (Weak to Strong)
 - 1
 - 2
 - 3
 - 4
 - 5
4. Have you ever participated online classes?
 - Yes
 - No
5. Do you feel comfortable attending online classes? (Less to More)
 - 1

- 2
- 3
- 4
- 5

6. Do you prefer online classes over offline classes?

- Strongly Agree
- Slightly Agree
- Slightly Disagree
- Strongly Disagree
- Prefer not to mention

7. Which device do you use for online classes?

- Computer
- Mobile
- Tab

8. Do you think online education is more organized than offline?

- Agree
- Disagree
- Neither agree or disagree

9. Suggest any idea to Develop such online platform(or leave empty)

:_____

10. How much time (hours) do you spend each day on an average on distance education?

- Below 3
- 3-5
- 5-7
- Above 7

For Teachers:

1. Where are you currently teaching?

- School
- College
- University
- Prefer not to mention

2. Do you prefer private tuition along with your regular job?

- Strongly Agree

- Agree
 - Neither Agree nor Disagree
 - Disagree
 - Strongly Disagree
3. Do you prefer online private tuition rather than offline private tuition?
- Agree
 - Neither Agree nor Disagree
 - Disagree
4. Do you think it is comfortable to take "Online Live" class?
- Yes
 - No
 - Maybe
5. Do you think online private tuition will help building your teaching experience? (Less helpful to more helpful)
- 1
 - 2
 - 3
 - 4
 - 5

For Students:

1. Current study status?
- High School
 - College
 - University
2. How much money (monthly) do you spend in private tuition (offline)?
- below 2,000₮
 - 2,000₮ to 5,000₮
 - 5,000 to 10,000₮
 - above 10,000₮
3. Would you prefer rather less expensive online tuition?
- Agree
 - Disagree
 - Neither agree nor disagree
4. Do you agree that it is beneficial from learning "Online Live" class?
- Agree
 - Disagree

- Neither agree nor disagree

5. How long do you think a course length should be? (Less lengthy to more lengthy)

- 1
- 2
- 3
- 4
- 5

6. Do you want to teach in online as a part time job?

- Yes
- No
- Maybe

Data Analysis:

Personal Info:

1. Age:

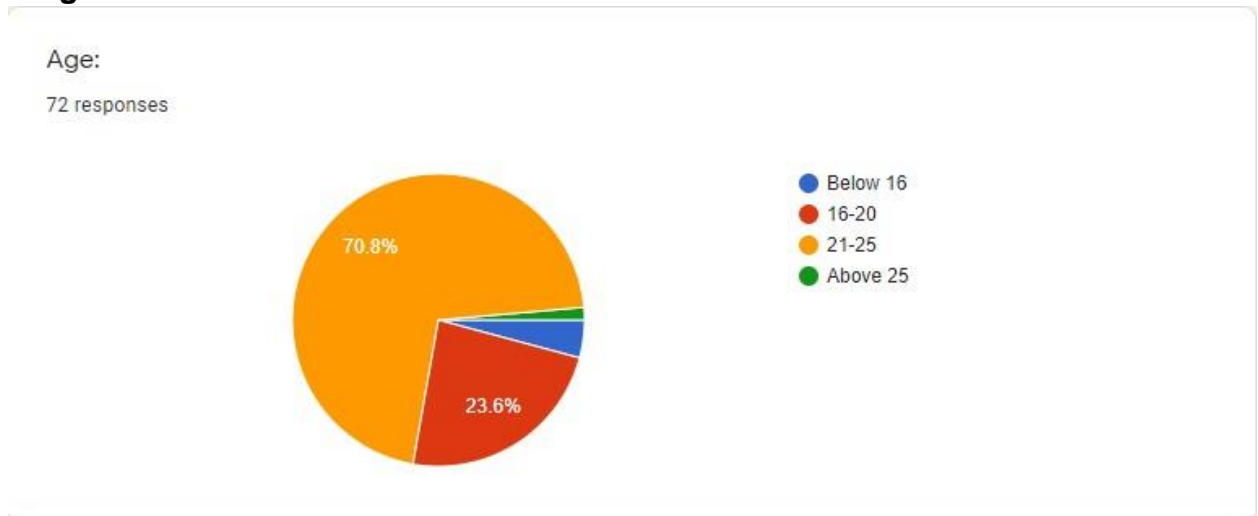


Illustration:

From 72 responses, the percentage follows:

70.8% were age range 21-25, 23.6% were Above 25, 16-20 and Below 16 were rest.

2. Gender

Gender:

65 responses

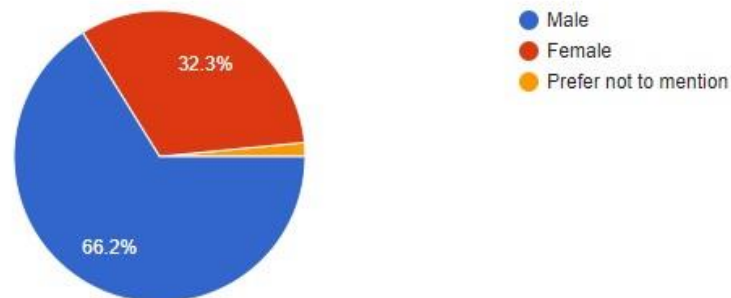


Illustration:

From 65 responses, the percentage follows:

66.2% were Male and 32.3% were Female, and the rest did not mentioned.

General Information:

1. Occupation:

Occupation:

72 responses

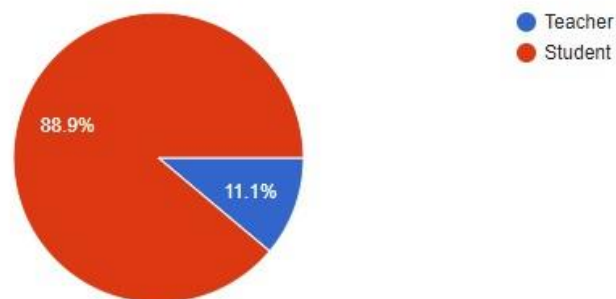


Illustration:

From 72 responses, the percentage follows:

88.9% were Students and 11.1% were Teachers.

2. Where do you live?

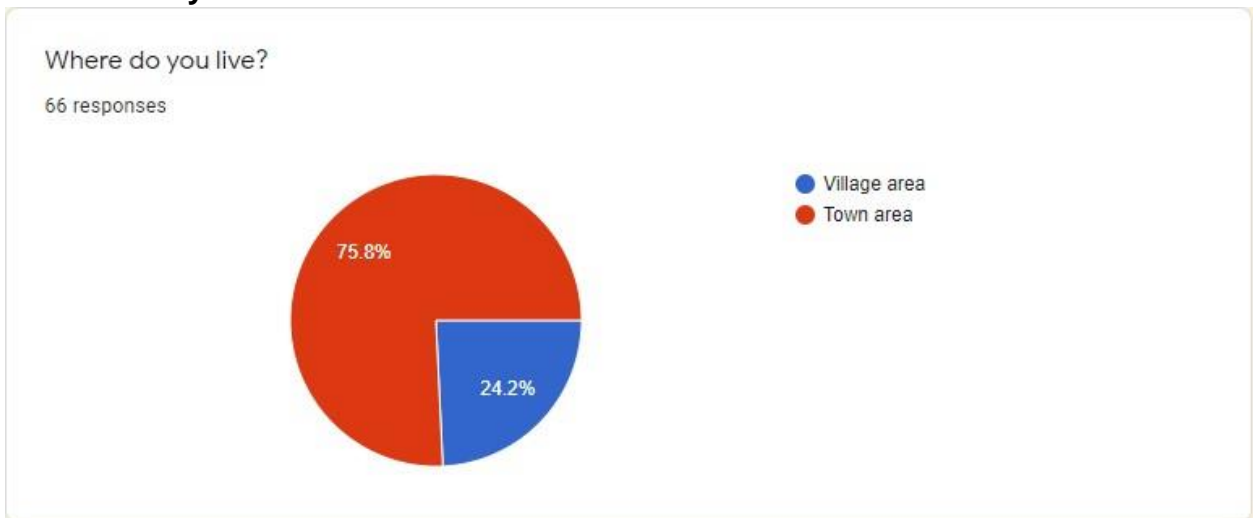


Illustration:

From 66 responses, the percentage follows:
75.8% were from Town and 24.2% were from Village.

3. Describe your internet connection?

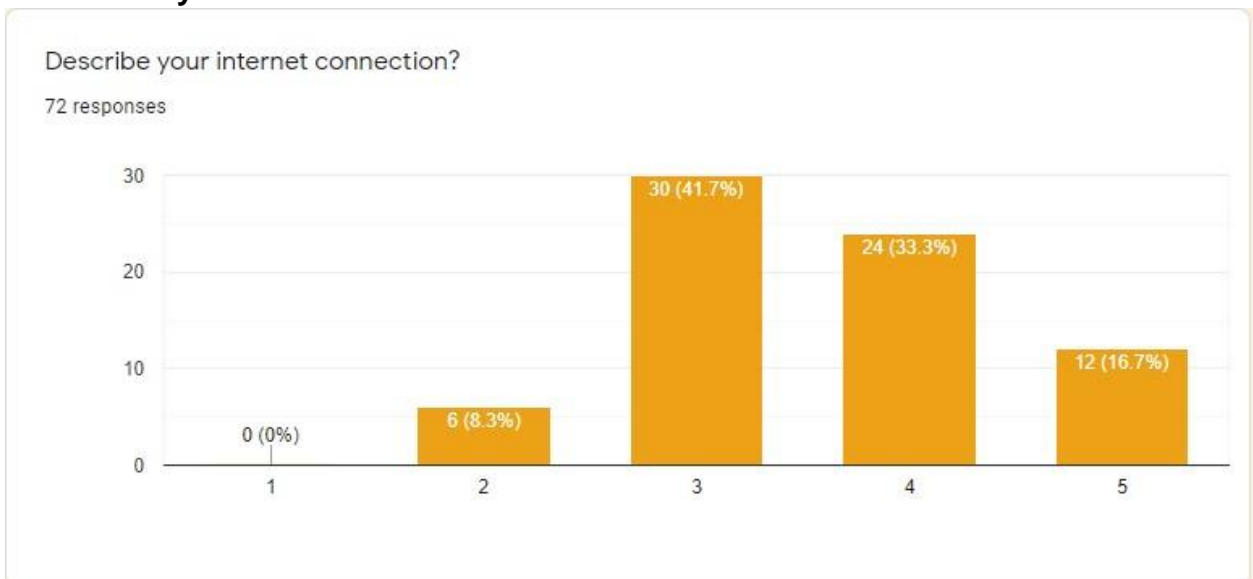


Illustration:

From 72 responses, the percentage follows:
41.7% has a medium stable internet connection.

4. Have you ever participated online classes?

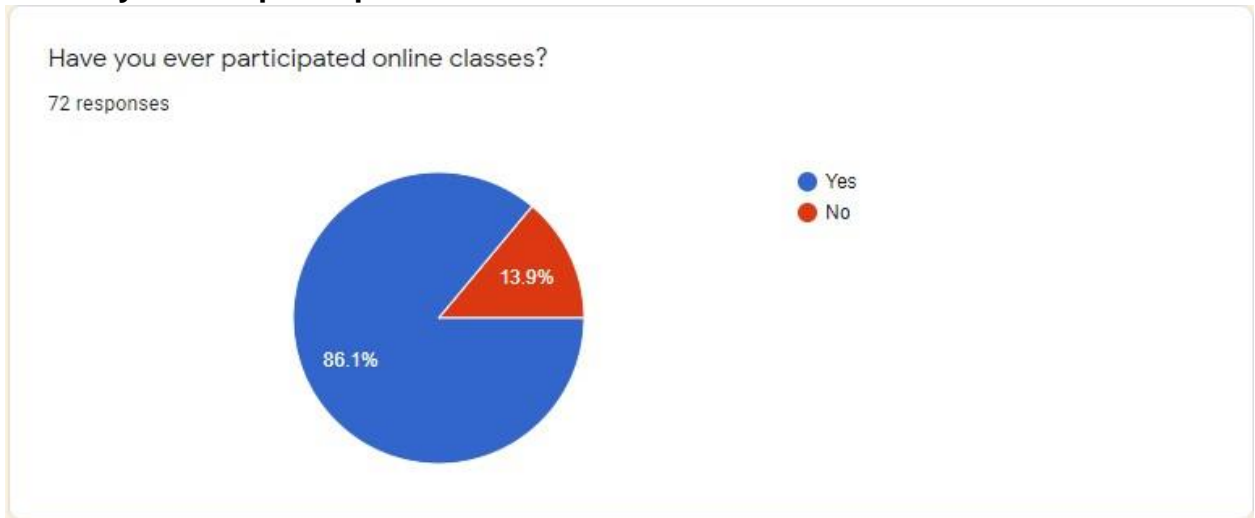


Illustration:

From 72 responses, the percentage follows:
86.1% people has participated online class and 13.9% does not.

5. Do you feel comfortable attending online classes?



Illustration:

From 59 responses, the percentage follows:
40.7% people are likely comfortable attending online classes.

6. Do you prefer online classes over offline classes?

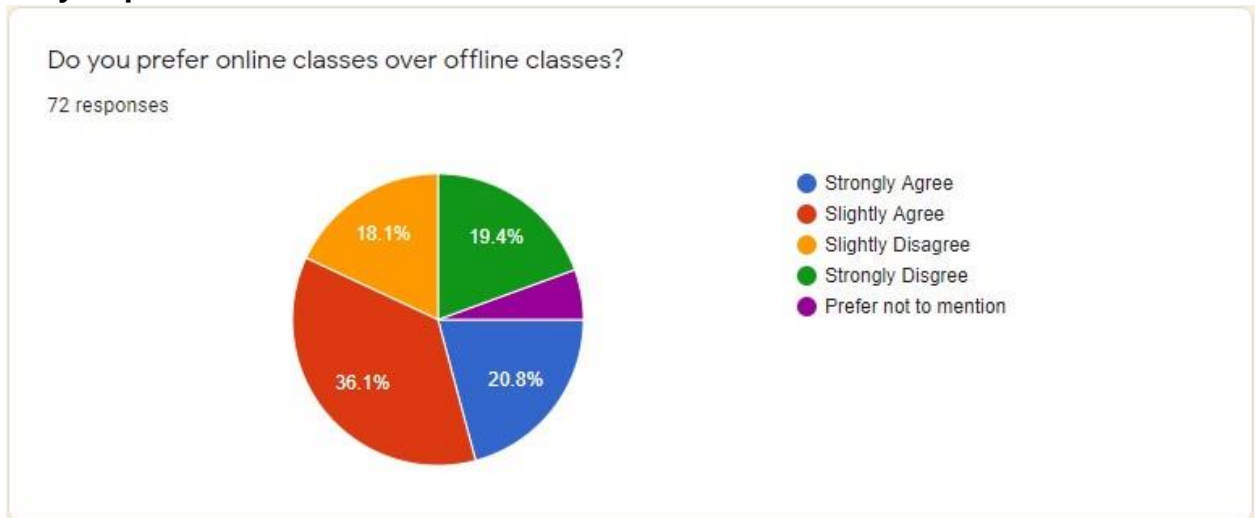


Illustration:

From 72 responses, the percentage follows:

20.8% people strongly and 36.1% people slightly agreed to prefer online class. 19.4% people does not prefer online class.

7. Which device do you use for online classes?

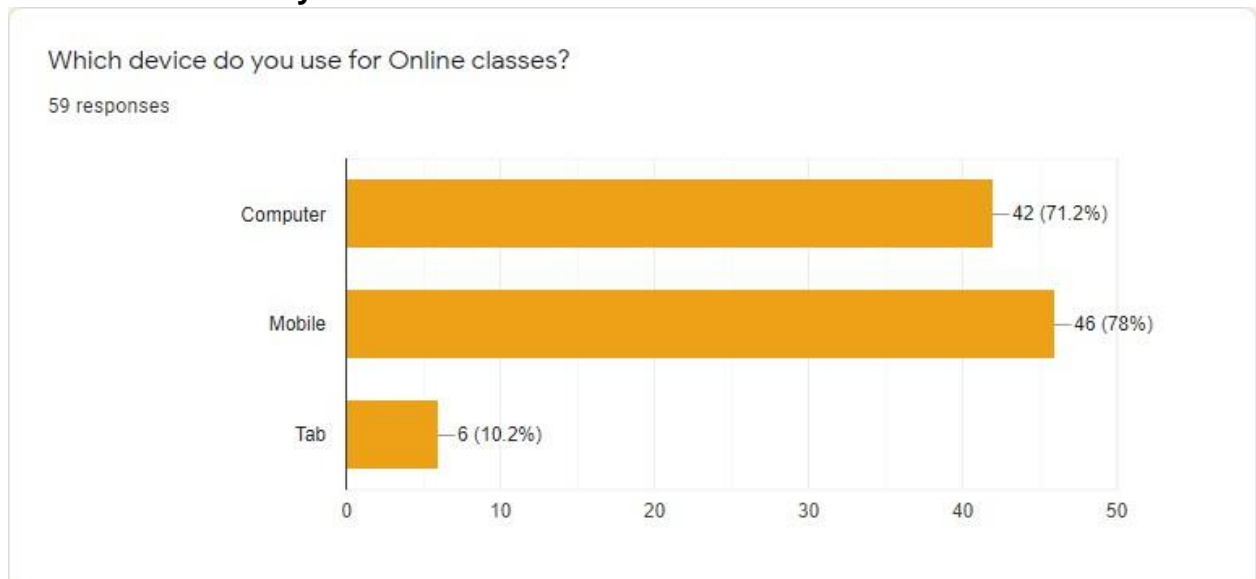


Illustration:

From 59 responses, the percentage follows:

71.2% people uses Computer and 78% people uses Mobile for online class.

8. Do you think online education is more organized than offline?

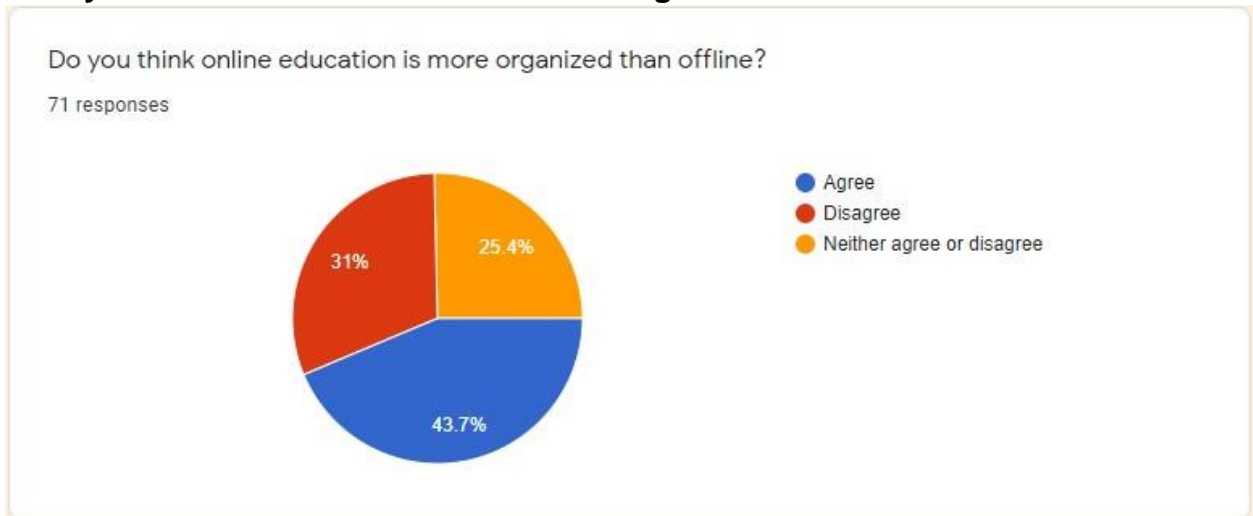


Illustration:

From 71 responses, the percentage follows:
43.7% people agreed and 31% people disagreed.

9. How much time (hours) do you spend each day on an average on distance education?

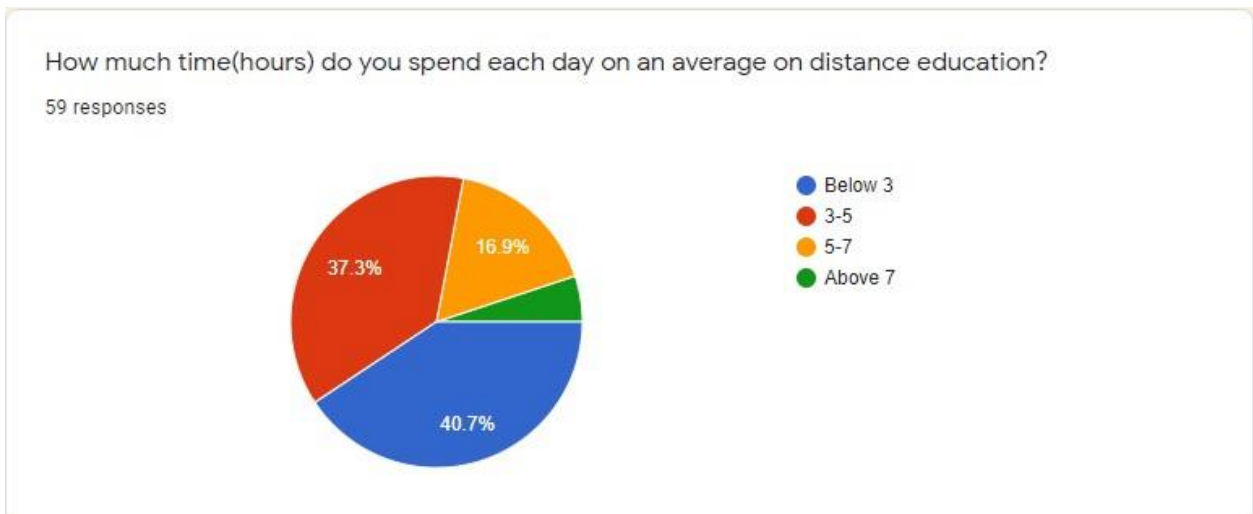


Illustration:

From 59 responses, the percentage follows:
40.7% people spend Below 3 hours and 37.3% people spend 3-5 hours on an average on distance education.

For Teachers:

1. Where are you currently teaching?

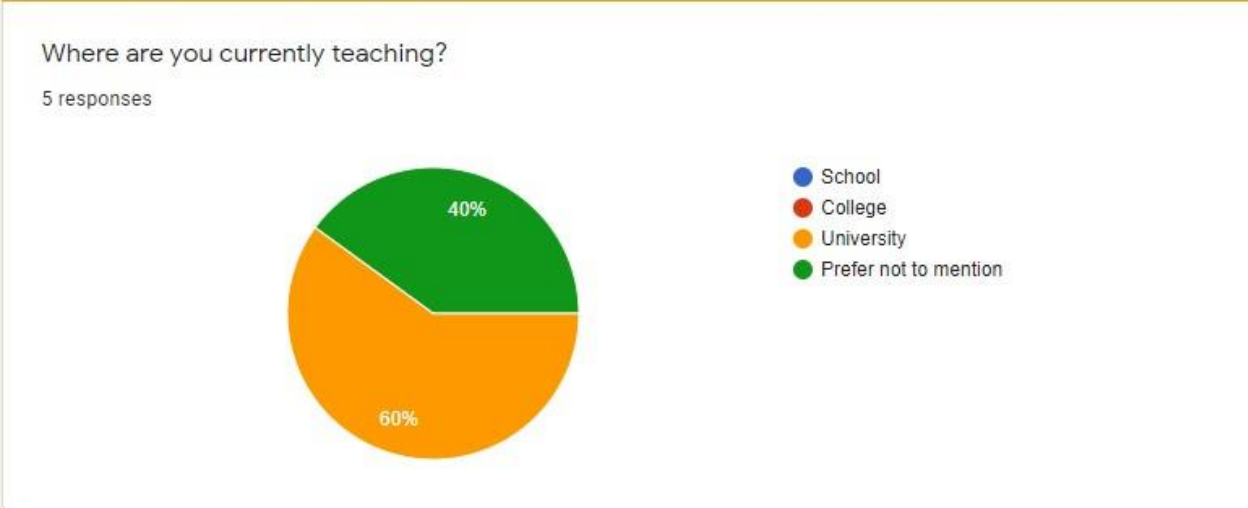


Illustration:
From 5 responses, the percentage follows:
60% were teaching in university and 40% did not prefer to mention.

2. Do you prefer private tuition along with your regular job?

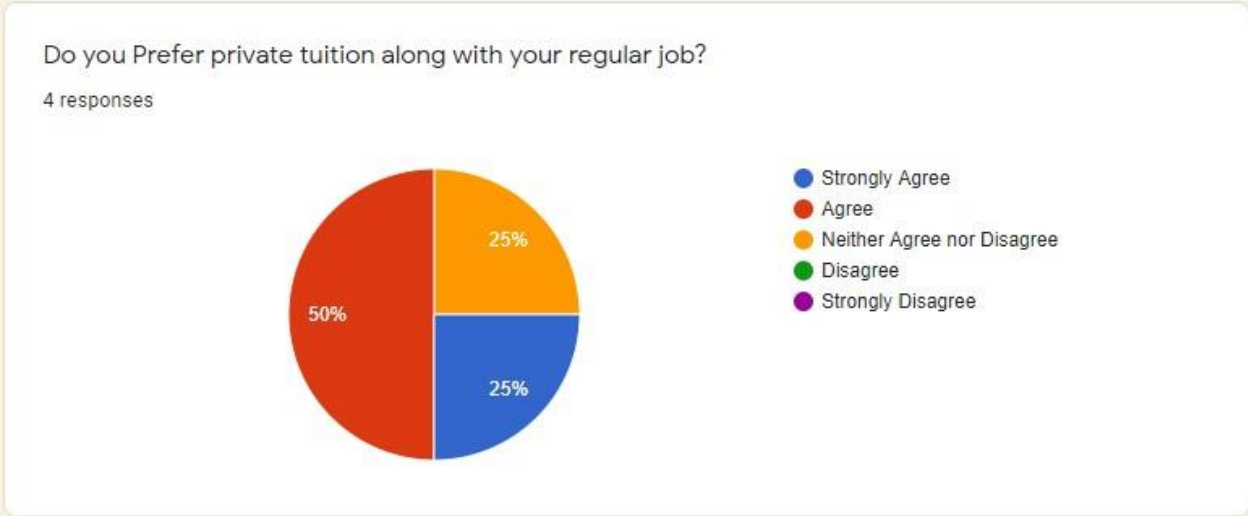


Illustration:
From 4 responses, the percentage follows:
50% were agreed and 25% were strongly agreed.

3. Do you prefer online private tuition rather than offline private tuition?

Do you Prefer online private tuition rather than offline private tuition?

5 responses

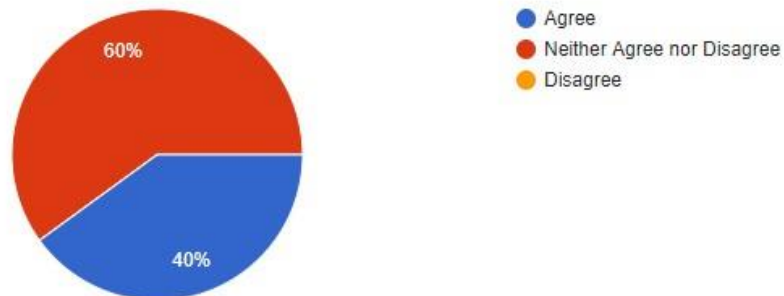


Illustration:

From 5 responses, the percentage follows:
40% were agreed and 60% neither agreed nor disagreed.

4. Do you think it is comfortable to take "Online Live" class?

Do you think it is comfortable to take "Online Live" class?

5 responses

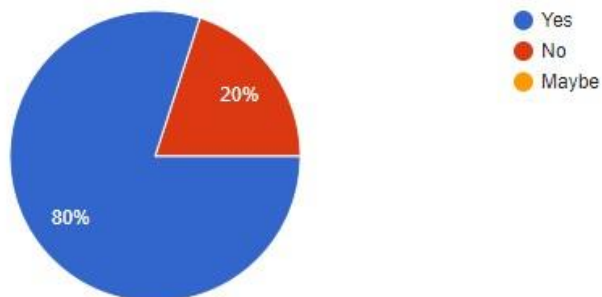


Illustration:

From 5 responses, the percentage follows:
80% were agreed and 20% did not agreed.

5. Do you think online private tuition will help building teaching experience?



Illustration:

From 5 responses, the percentage follows:
Most of them agreed.

For Students:

1. Current study status?

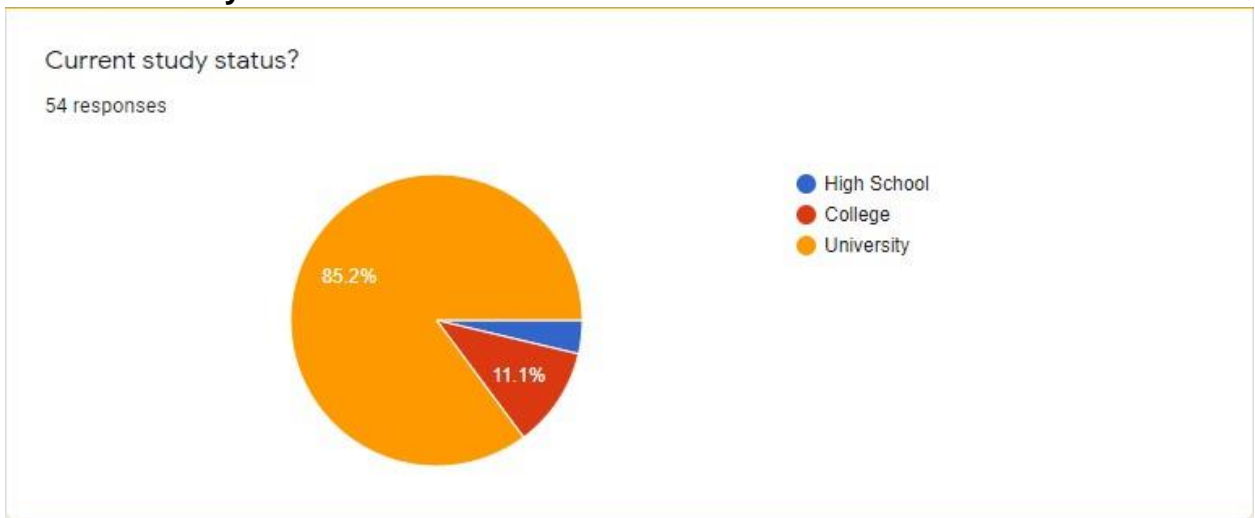


Illustration:

From 54 responses, the percentage follows:
85.2% people were from University and the rest were from School and College.

2. How much money (monthly) do you spend in private tuition (offline)?

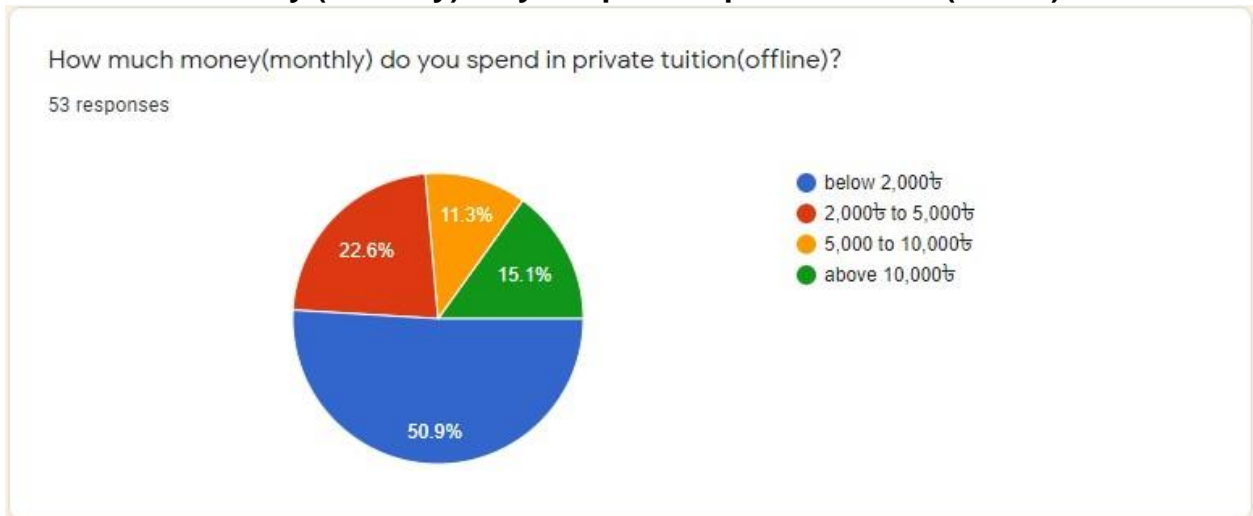


Illustration:

From 53 responses, the percentage follows:
Almost everybody spends money on private tuition.

3. Would you prefer rather less expensive online tuition?

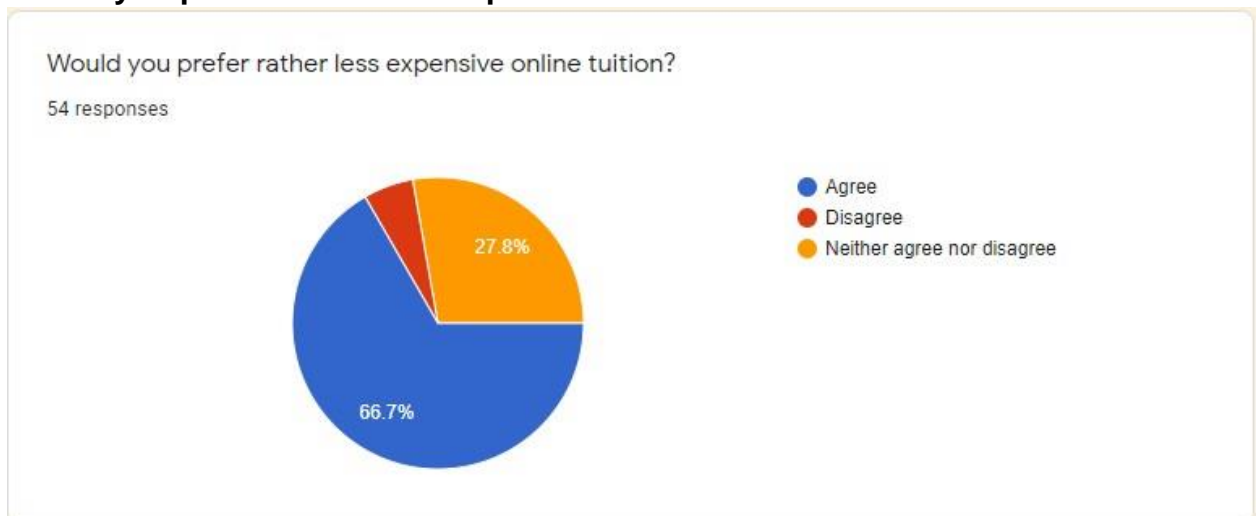


Illustration:

From 54 responses, the percentage follows:
66.7% people would prefer rather less expensive online tuition.

4. Do you agree that it is beneficial from learning "Online Live" class?

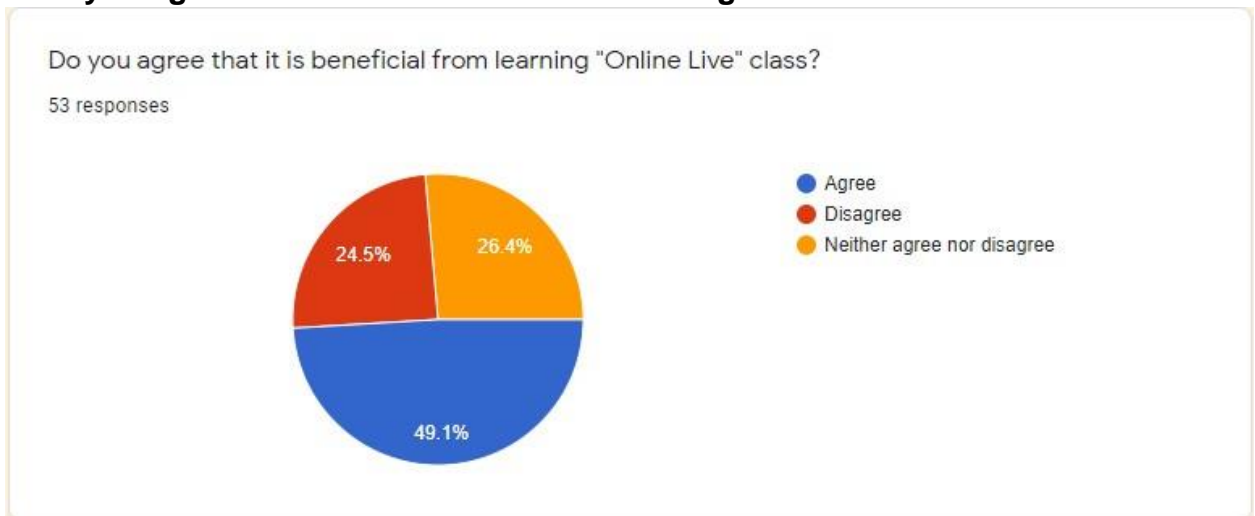


Illustration:

From 53 responses, the percentage follows:

49.1% people thinks that Live Online Classes are more beneficial and some did not share their view.

5. How long do you think a course length should be?



Illustration:

From 51 responses, the percentage follows:

Most of them thinks that online course length should not be very long.

6. Do you want to teach in online as a part time job?

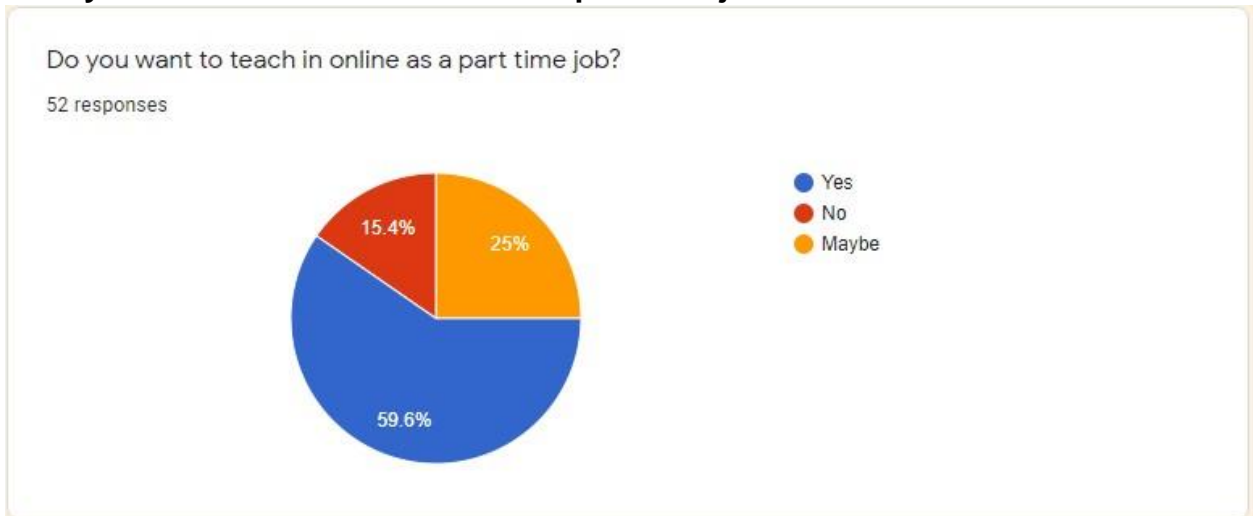


Illustration:

From 52 responses, the percentage follows:

59.6% Students would like to teach online as a part time job and 25% did not shared their opinion.

Overall Findings:

- As most of the respondents are from 20 to 30 years old, our target audience is undergraduate & postgraduate students.
- People wanted to get knowledge in short time through smart way.
- A number of the respondents of the student segment want to earn money and join as a part time tutor.
- People want to join live sessions.
- People want less expensive platform.
- People find safe transaction and customer security features in our system.

Conclusion:

With our website we have tried to solve some of current tuition problems. We are very hopeful that our system would definitely reach to all the learners & tutors and they would be able to make use of it in their beneficial way. The system will offer better functionalities than the manual system, where the users of the system will have to be computer literate so as to use the system effectively.