

Ahsanullah University of Science & Technology

Department of Computer Science & Engineering



Bachelors Home

CSE 3224

Information System Design

&

Software Engineering Lab

Submitted By:

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Date of Submission: **14 January, 2021**

1.Introduction to project :”Time is more important than money.You can get more money but you cannot get more time.”-Jlm Rohn . We are going to develop a web application on **Bachelors Home** using the idea of sharing room. which will help bachelors (both men and women) not to search room/seat by walking street to street in search of to-let; our website helps you to find your suitable room/seat in your desired location from wherever you are, so will save your valuable time.

2.Requirements Specifications:

2.a.Introduction: Bachelors Home deals with maintenance of records of details of each user who had reserved a seat, search for seat, post for sharing room . For searching a room or post for sharing room you have to registration first. Then after login you can search for a seat in your desired area or post for sharing room. To make this system at first we observed how bachelor people search for room, what is the problems occur. In fact I am also bachelor coming from Chittagong for studying in AUST. I also have to face numerous problems in search for seat. Considering all the problems and scenario we try how to reduce problems of searching for a seat? What is our limitation and so on. We are offering this proposal of Bachelors home. By using this software, user can search for his suitable seat , know some information about his room-mate, search room in his desired location(here desired location means- location near his working zone or educational institution) reserved seat from anywhere having internet .

2.b.Types of stakeholders of the Proposed System : There are different types of stakeholders in our project .These are given below:

- 1.User (post for sharing room/ search room)
- 2.Operator
- 3.Database administrator

2.c.Functionality Grouping according to the users: we have already mentioned that we have three types of user according to the functionality such as,

- The User can perform the following functions-
 - Register, Login and Access
 - Add, Update and Delete post
 - Add room photos
 - Search for new room/seat

- See notification (who accept the deal of sharing room)
 - Give rating
 - Give feedback
- Operator can perform following functions:
- Can operate the software
 - Help and support user at any problem
- Database administrator can perform the following functions :
- The administrator give acknowledge to any payment user made on the system
 - The administrator will verify all the registered user, and allow them to login to the system.
 - Show the data of whole system.

2. d.Functional Requirements :

FR01:Login/Access Account:

Requirement No.	Functional Requirements
FR01-01	The system shall allow the users to register an account and login to their account with matching their passwords and UserId.
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 upload profile picture also.

FR02:Accepting Deal :

Requirement No.	Functional Requirements
FR02-01	User will accept deal from the website.
FR02-02	They will be able to see the picture and details of room from the post for room-mate.
FR02-03	The system shall allow the users to choose their suitable room in desired location.
FR02-04	They will be able to see the room after accepting deal and have a meeting with the person who post for room-mate.

FR03: Rating and Reviews:

Requirement No.	Functional Requirements
FR03-01	Register user can give ratings to the person(user) who post for room-mate after accepting deal.
FR03-02	User can see the review of the person who post for room-mate.

2.e. 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 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.

NFR03-Portability:

NFR03-01	System must run on any device of windows based operating system ; And from any web browser also.
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NFR04-User Friendly Interface:

NFR04-01:	The system should have a decent interface and should provide good experience to the users.
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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.

2.e. Overall Constraints:

- No system for online payment.
- No suggestion for rooms/seat.

3.Interview and Questionnaire:

3.a.Sampling Decisions:

We used target-oriented method for our research. Our target research included university students and Garment Worker via direct email and facebook , messaging.

3.b Sample Design :

- **Sample Size:** The survey was conducted among 157 bachelor people ;among them 28 female student, 63 male student, 47 Garment worker (male) and 19 Garment Worker(female).
- **Parameters of Interests:** The main target people for this survey was the bachelor people who uses internet (mobile and PC) the most for various work.
- **Sampling Technique:** The “Simple Random Sampling” technique is used here.

3.c.Data Collection Tool Used:

To collect the data we have used **Google Form** via google form link .The question in google form included both open-ended and close-ended questions .The question is attached below, from which all the respondents have answered.

Questionnaire on “Bachelor Home”

(We are going to develop a web application on the based on room sharing named **Bachelor Home** . We would be very grateful if you spend some of time answering the questions. This will help us to develop the website .This google form ensures your privacy. We won't disclose the information provided here . If you find any question inconvenient, you may skip the question.)

(Personal Information)

Name: _____

Email Id (if any):_____

(Demographics Information)

1.Gender

- ☐ Male
- ☐ Female
- ☐ Other

2. Age Group

- ☐ 15-20 years
- ☐ 20-30 years
- ☐ 30-40 years
- ☐ Above 40 years

3.Place you live now

- ☐ Dhaka
- ☐ Chittagong
- ☐ Sylhet
- ☐ Rajshahi
- ☐ Rangpur
- ☐ Barisal
- ☐ Mymensingh
- ☐ Dinajpur
- ☐ Other.

4.Place you came from

- ☐ Dhaka
- ☐ Chittagong
- ☐ Sylhet
- ☐ Rajshahi
- ☐ Rangpur
- ☐ Barisal
- ☐ Mymensingh
- ☐ Dinajpur
- ☐ Other.

5.Occupation :

- ☐ Student
- ☐ Businessman
- ☐ Employee
- ☐ Employer
- ☐ Other:

6.Monthly Income (BDT)

- ☐ No Income
- ☐ Below 10,000
- ☐ 10,000-20,000
- ☐ 20,000-25,000
- ☐ 25,000-35,000
- ☐ 35,000-45,000
- ☐ 45,000-60,000
- ☐ Above 60,000

(Project Related Information)

(This section will help us to design our website in a most utilized way)

7.Do you use Internet??

- ☐ Yes
- ☐ No

8.For what activities do you use the internet the most ?

- ☐ Entertainment
- ☐ Education
- ☐ Social
Networking
- ☐ Job Purpose
- ☐ Business Purpose
- ☐ Shopping
- ☐ Travelling
- ☐ Other.

9.Are you a bachelor ?

- ☐ Yes
- ☐ No

10. Where you live?

- ☐ College/University hostel
- ☐ Boarding room
- ☐ Outside(sharing room)

11. What types of room you prefer most?

Answer: _____

12. Are you satisfied with your room-mate?

- ☐ Yes
- ☐ No

13. If you are a student, would you like to share room with Workers(Employer, Employee, Businessman)? (Tell the reason)

Answer: _____

14. If you are a Worker(Employer, Employee, Businessman) would you like to share room with students? (Tell the reason)

Answer: _____

15. Do you prefer to search room/seat on internet?

- ☐ Yes
- ☐ No

16. Are you satisfied with your current room/seat?

- ☐ Yes
- ☐ No

17.How much money do you spend on room/seat without meal cost?

- ☐ 800 to 1000 BDT
- ☐ 1000 to 1500 BDT
- ☐ 1500 to 2000 BDT
- ☐ 2000 to 2500 BDT
- ☐ 2500 to 3000 BDT
- ☐ 3000 to 3500 BDT
- ☐ Above 3500 BDT

18.How much money do you spend on room/seat with meal cost?

- ☐ 2500 to 3000 BDT
- ☐ 3000 to 3500 BDT
- ☐ 3500 to 4000 BDT
- ☐ 4000 to 4500 BDT
- ☐ 4500 to 5000 BDT
- ☐ 5000 to 5500 BDT
- ☐ Above 5500 BDT

19. Which issues do you face when you search for a suitable room (offline)??

Answer: _____

20.What types of features will you like most in a room sharing website(share your opinion and personal point of view)?

Answer: _____

21.Give some utilities you want in your seat?

Answer: _____

22. Leave your satisfactions on the following features

Feature	Very Important	Important	Less Important	Not Important
User Security				
Safe Information				
Clear rent Information				
Notifications (if accept, delayed or cancelled deal)				
Reliability				
User Service				
Design				

29. Do you have any suggestions for our website that you would like to see in our website?

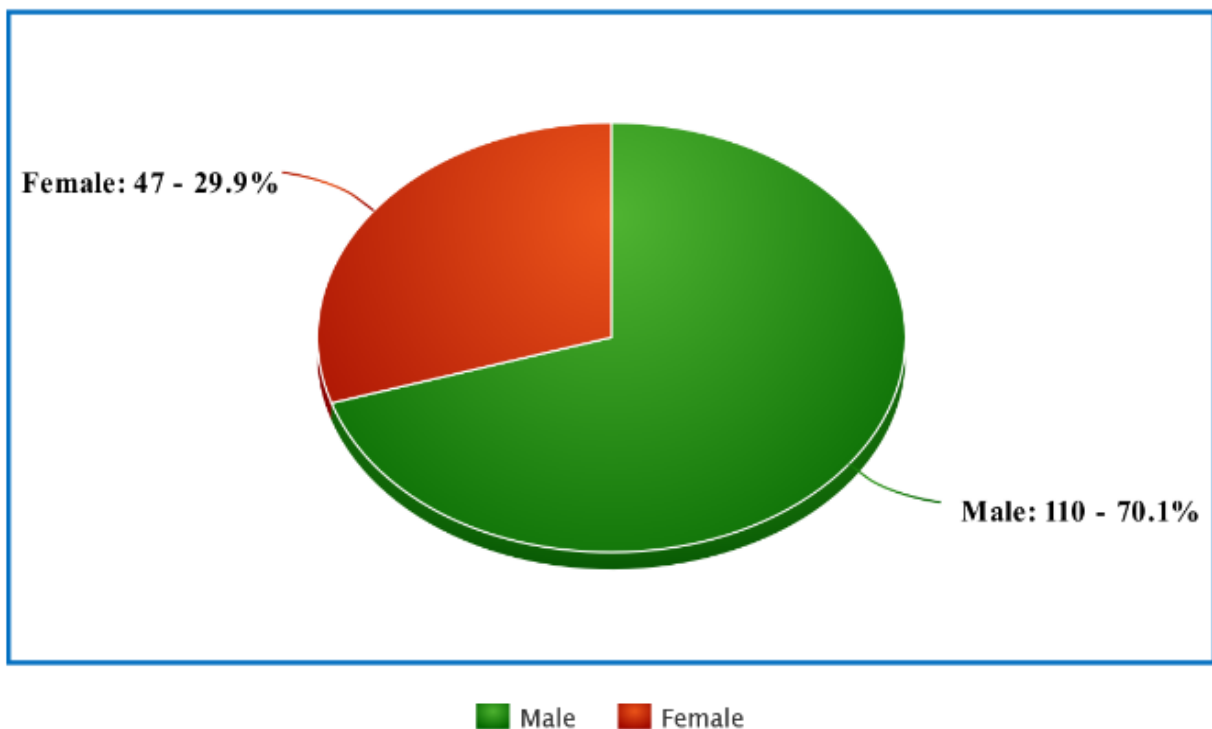
Answer: _____

3.c Data Analysis:

1. Gender:

Male	Female	Total
110	47	157

Male-Female



meta-chart.com

Illustration :

The survey is conducted on both male and female. As the questionnaire is given randomly , so the ratio of male and female is 70.1% and 29.9%.

2.Age Group :

15-20 years	20-30 years	30-40 years	Above 40 years	Total
62	67	19	9	157

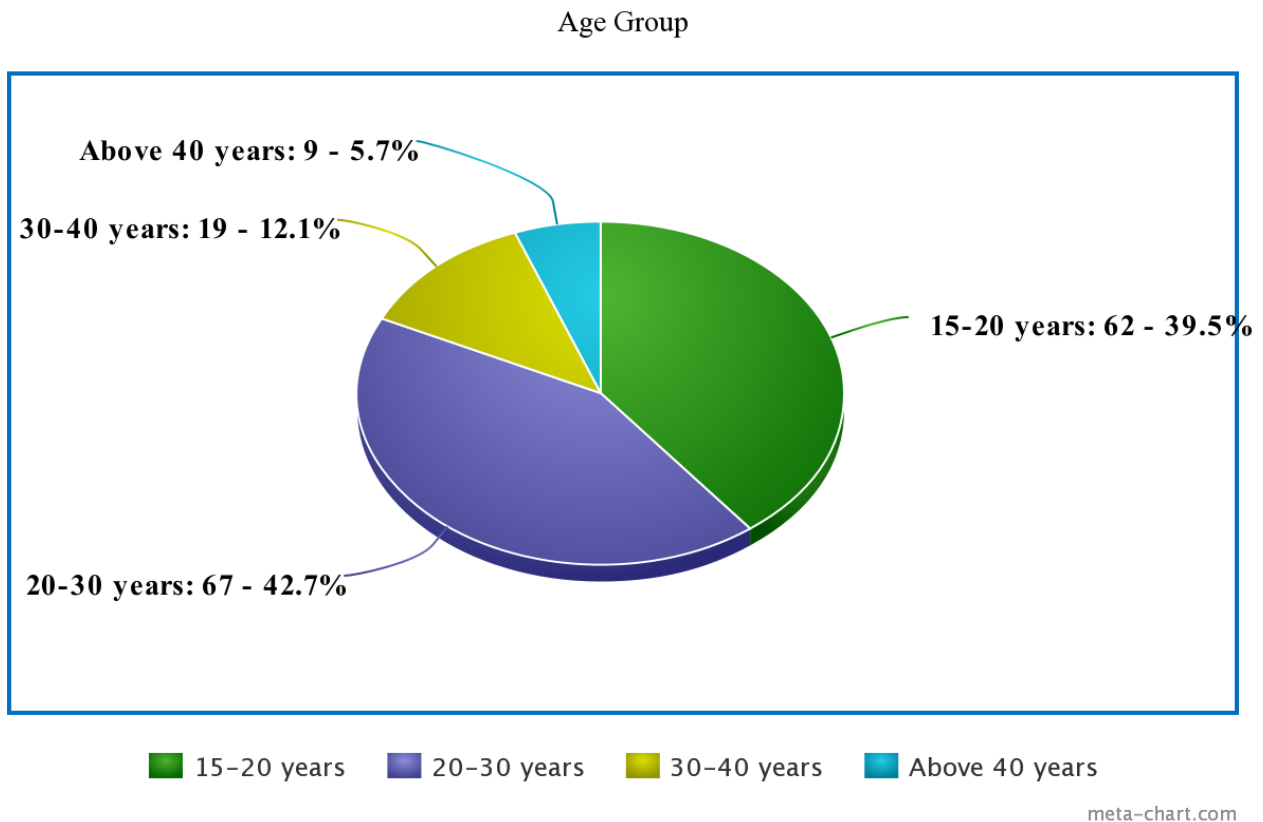
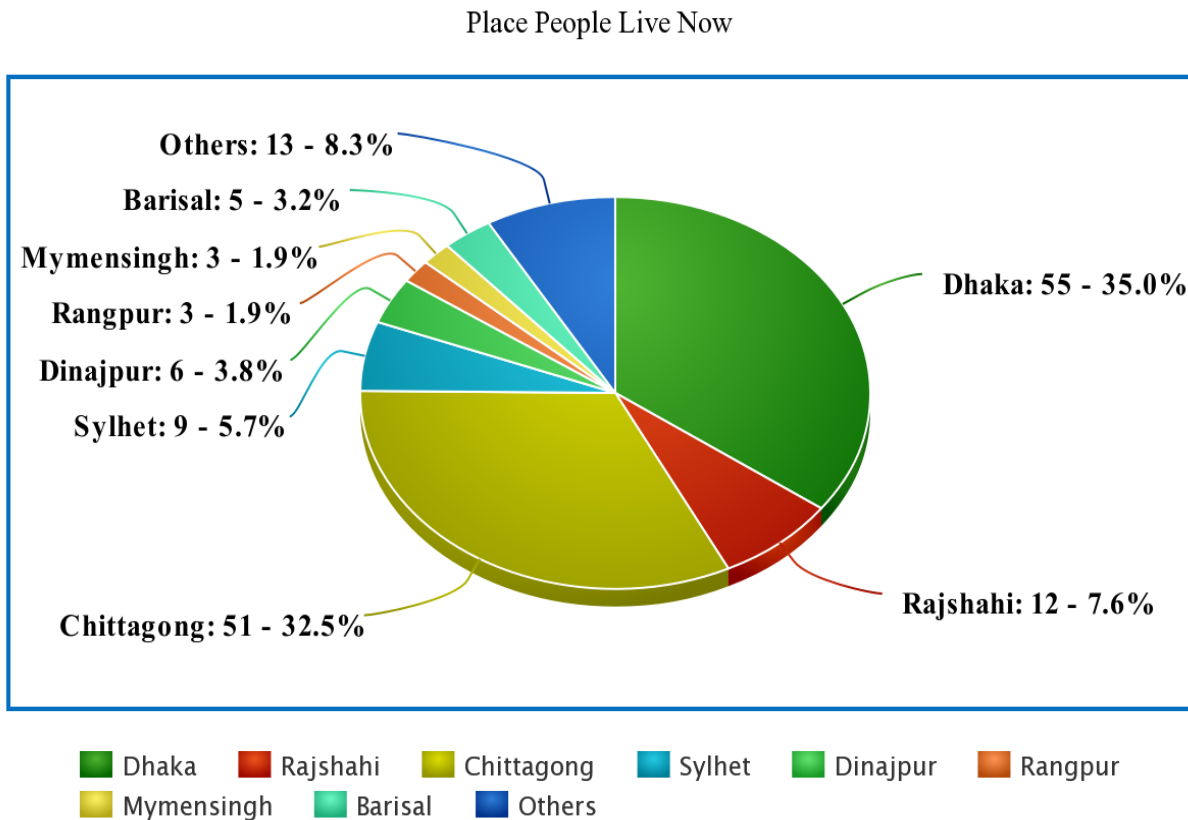


Illustration:

The pie chart shows that maximum of the bachelor at the age between 15 to 30 years. As we all know that for education or seeking for hope and job young people comes from rural place to town. So, analyzing 157 random people we see, 39.5% of the respondents are from 15 to 20 years and 42.7% of the respondents are from 20 to 30 years, 12.1% of the respondents are from 30 to 40 years, and only 5,7% above 40 year age.

3.Place you live now:

Dhaka	Rajshahi	Chittagong	Sylhet	Dinajpur	Rangpur	Mymensingh	Barisal	Others	Total
55	12	51	9	6	5	3	5	11	157



meta-chart.com

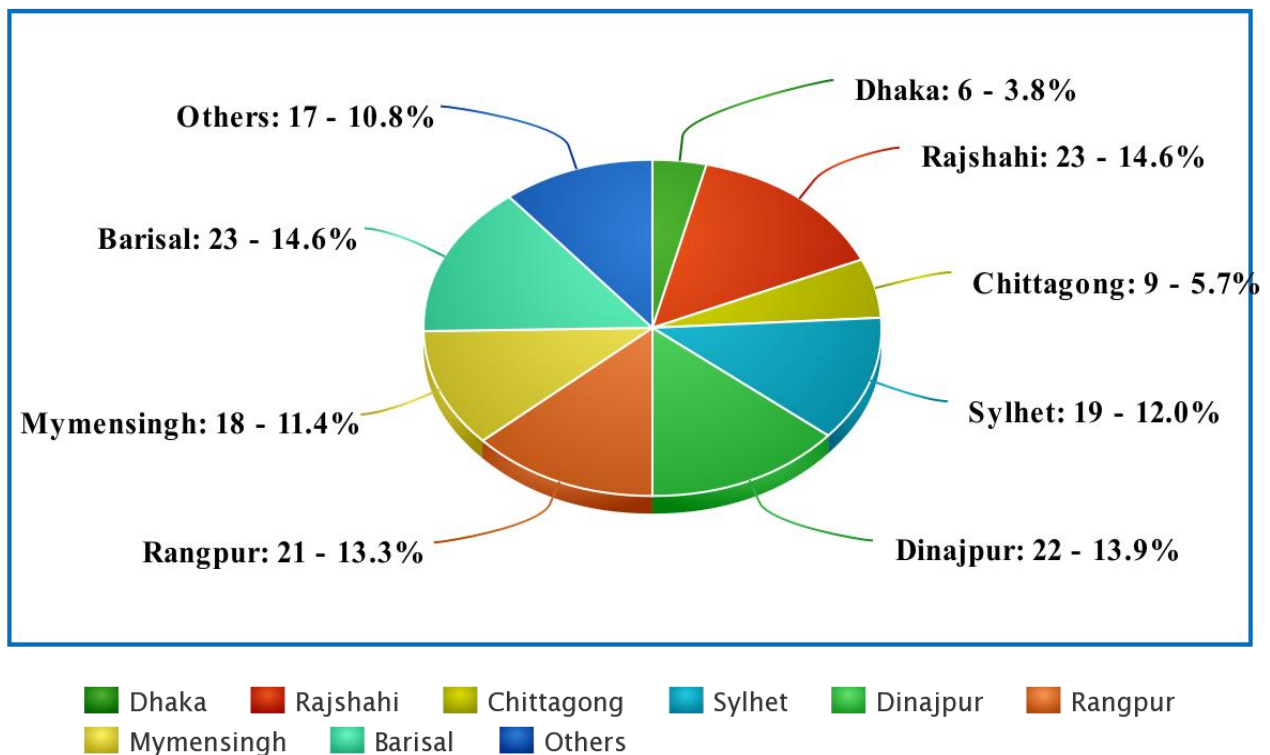
Illustration:

The pie chart shows that, 35.0% of the respondents are from Dhaka and 32.5% are from Chittagong. Majority of the people are from Dhaka and Chittagong. 3.2%, 1.9%, 1.9%, 3.8%, 5.7%, 7.6% people respond from Barisal, Mymensingh, Rangpur, Dinajpur, Sylhet, Rajshahi respectively. And 8.3% people respond from other places.

4.Place you came from:

Dhaka	Rajshahi	Chittagong	Sylhet	Dinajpur	Rangpur	Mymensingh	Barisal	Others	Total
6	23	9	19	22	21	18	23	16	157

Place you came from



meta-chart.com

Illustration:

The pie chart shows that, only 3.8% of the respondents hometown Dhaka and 5.7% are from Chittagong. That means minor people go outside from Dhaka and Chittagong. That means there are working opportunities of Higher education and job is high in Dhaka and Chittagong. Majority of the respond from Barisal, Mymensingh, Rangpur, Dinajpur, Sylhet, Rajshahi. And 10.8% people respond from other places.

4.Occupation:

Student	Businessman	Employee	Employer	Others	Total
81	5	64	7	0	157

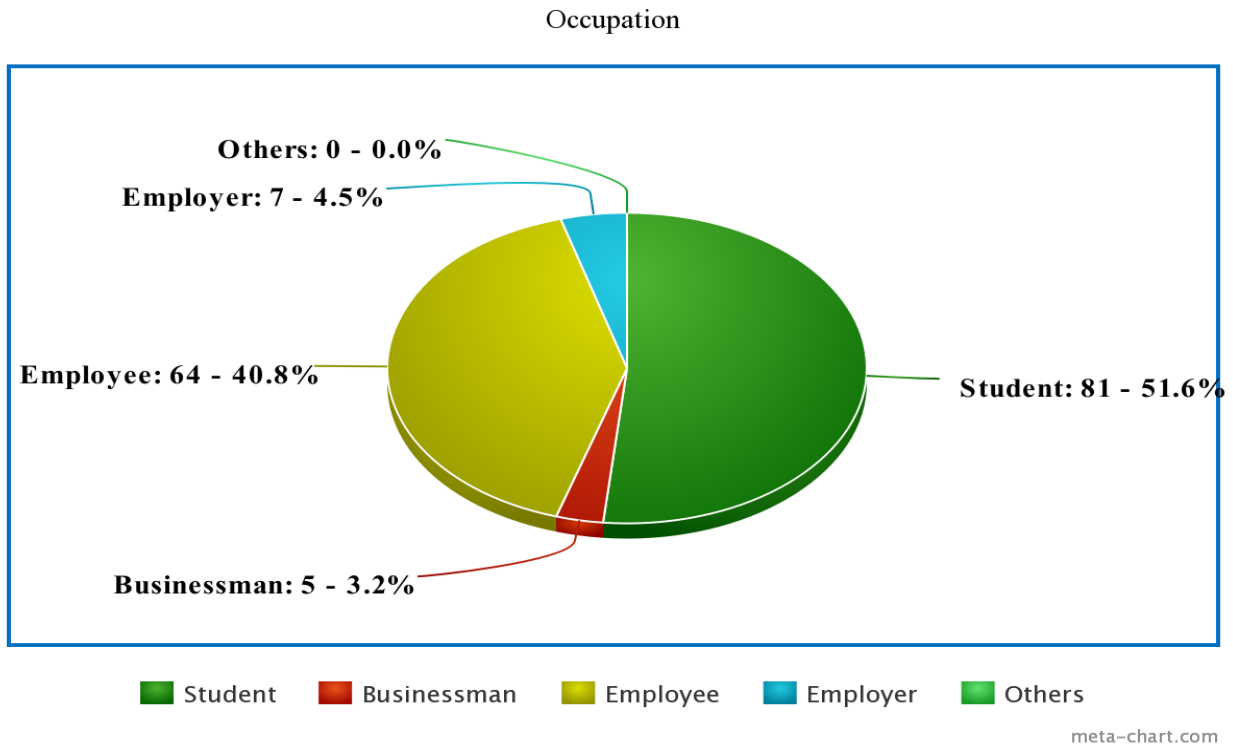


Illustration :

Majority of the Respondents are students and employee . Among the 157 respondents, 81 are from students who are basically university students and 64 are from employees who are garment's worker or Govt. employee. 51.6% students and 40.8% employees. Others 3.2% , 4.5% are businessman and Employer respectively.

5.Monthly Income :

No Income	Below 10000	10000-20000	20000-25000	25000-35000	35000-45000	45000-60000	Above 60000
47	24	53	16	8	2	5	2

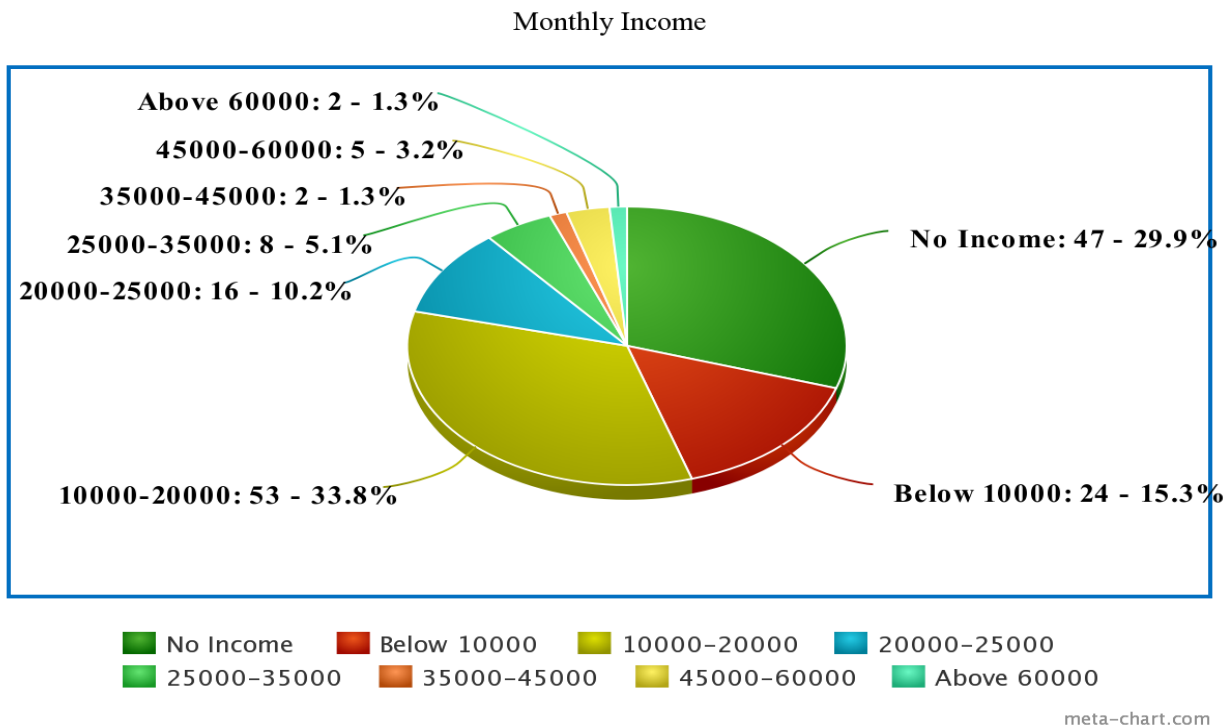


Illustration :

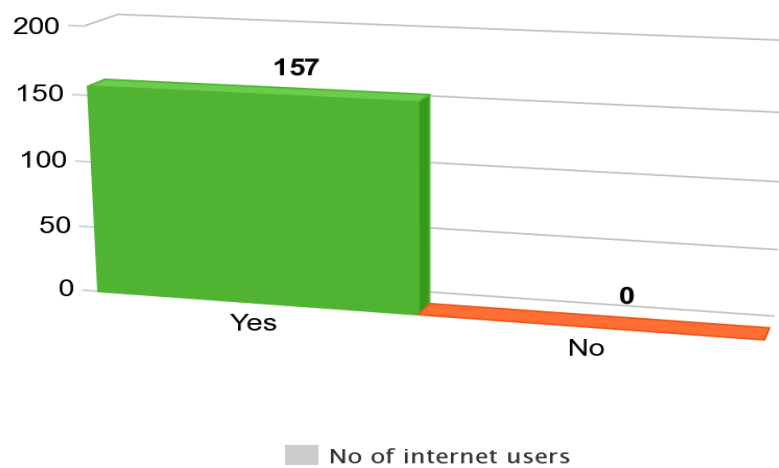
Majority of the respondents have income between 10000 to 20000; most of them are garment worker. Around 29.9% has no income all of them are students. 15.3% have income below 10000 and all of them are students some of them do part time job or give tuition. 8 respondents having income in 25000-35000; they might be govt. employee or small businessman. 9 respondents having income 35000 or more; they are employer or businessman.

(Project Related Question)

6.Do You use Internet ?

Yes	No	Total
157	0	157

Using Internet



Highcharts.com

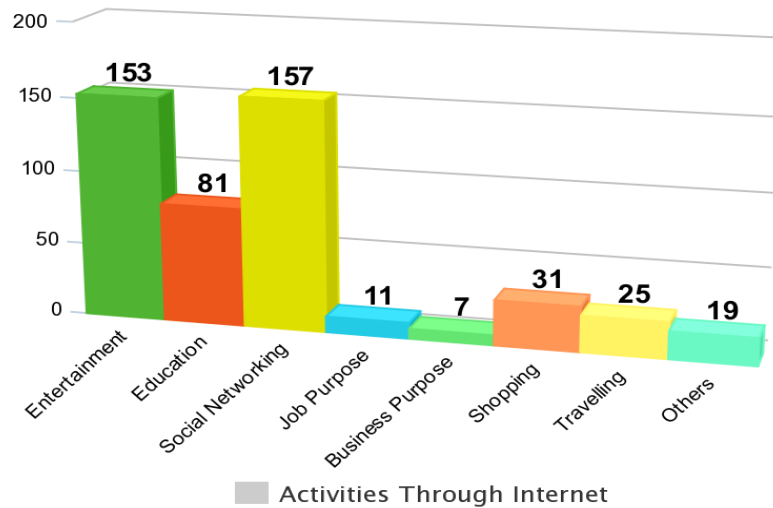
Illustration:

From this histogram, we can easily see that , all the person use Internet now a days. Now Internet has become an important thing in our day to day life.

7. For what activities do you use internet the most?

Entertainment	Education	Social Networking	Job Purpose	Business Purpose	Shopping	Travelling	Others	Total
153	81	157	13	7	31	25	19	157

Using Internet



Highcharts.com

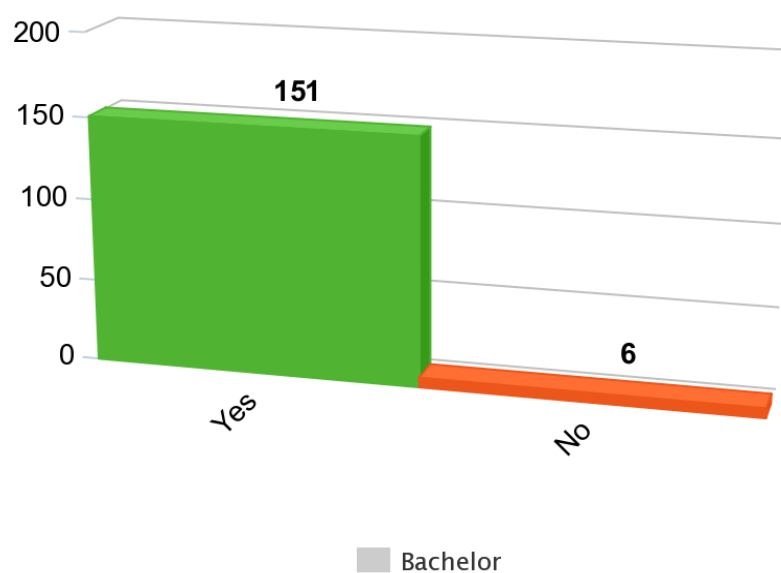
Illustration:

- ☐ The above diagram shows that, for social networking people use internet the most .
- ☐ For entertainment , people use internet the second most to remove their boredom..
- ☐ For education, student preferred internet the most .
- ☐ Women preferred online shopping.
- ☐ The other purpose for using internet is job purpose, business purpose, travelling etc.

9.Are you a bachelor?

Yes	No	Total
151	6	157

Are you bachelor?



Highcharts.com

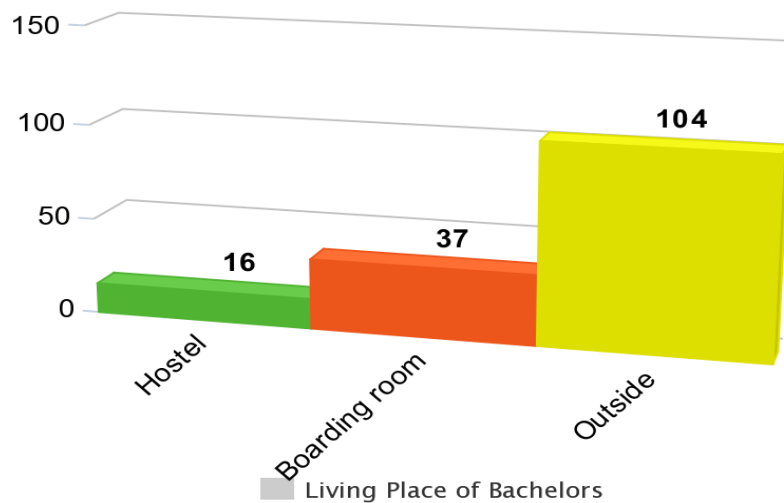
Illustration:

- ❑ From this above histogram shows that , about 96.18 % of people are bachelor.
- ❑ There are some people who's whole family shifted in town ; they are employers .The ratio of these people are 3.82% .

9.Where you live now?

Hostel	Boarding room	Outside	Total
16	37	104	157

Where you live now?



Highcharts.com

Illustration:

- ☐ The above histogram shows that , 16 students live in college/university hostel. 91 respondents are students. So,17.58% students only get seat in hostel rooms.
- ☐ There are some people who live in boarding room; maximum of them are workers .The ratio is 23.57%.
- ☐ Most of the students and workers needs to live outside in mess or sharing room .The ratio is 76.43%.

12.Are you satisfied with your room-mate?

Yes	No	Total
93	64	157



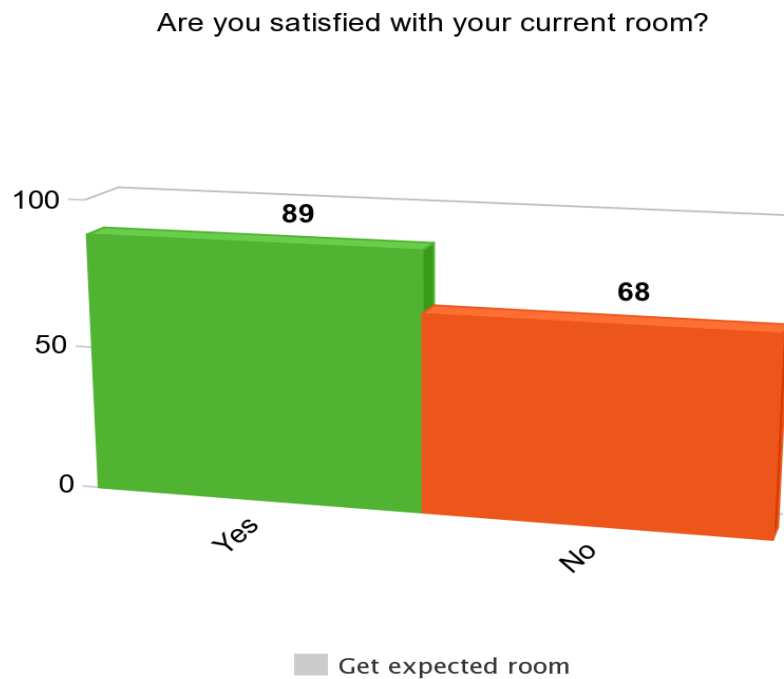
Highcharts.com

Illustration:

- ❑ From the above histogram , we can see that , most of the people 93 (59.24%) get desired room-mate.
- ❑ 40.76% does not satisfied with their room-mate. We can not ignore that number too.

16.Are you satisfied with your current room?

Yes	No	Total
89	68	157



Highcharts.com

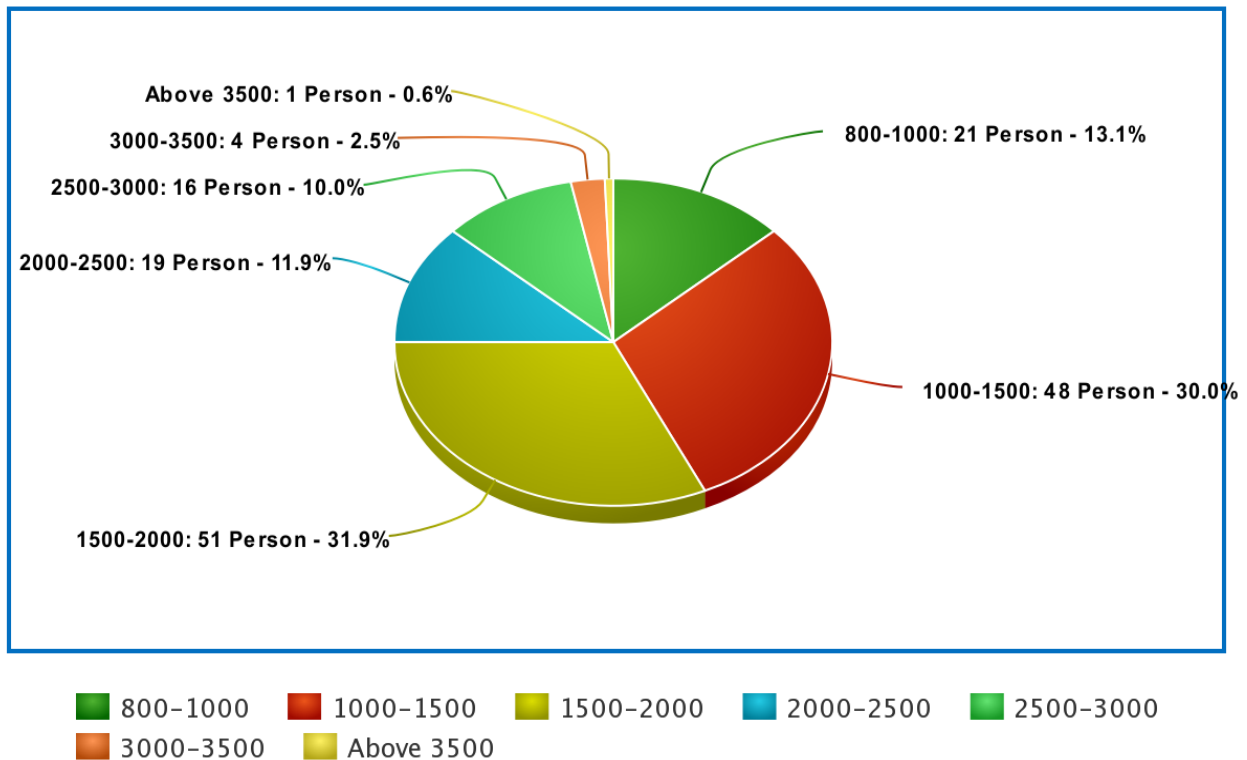
Illustration:

- ❑ From the above histogram , we can see that , 89 bachelors(56.69%) are happy to live in their current room.
- ❑ 68 bachelors(43.31%) does not satisfied with their room. They are in search of good room with beautiful environment and all the facilities they need.

17.How much money do you spend on room/seat without meal cost?

800-1000	1000-1500	1500-2000	2000-2500	2500-3000	3000-3500	Above 3500
21	45	51	19	16	4	1

How much money do you spend on room/seat without meal cost



meta-chart.com

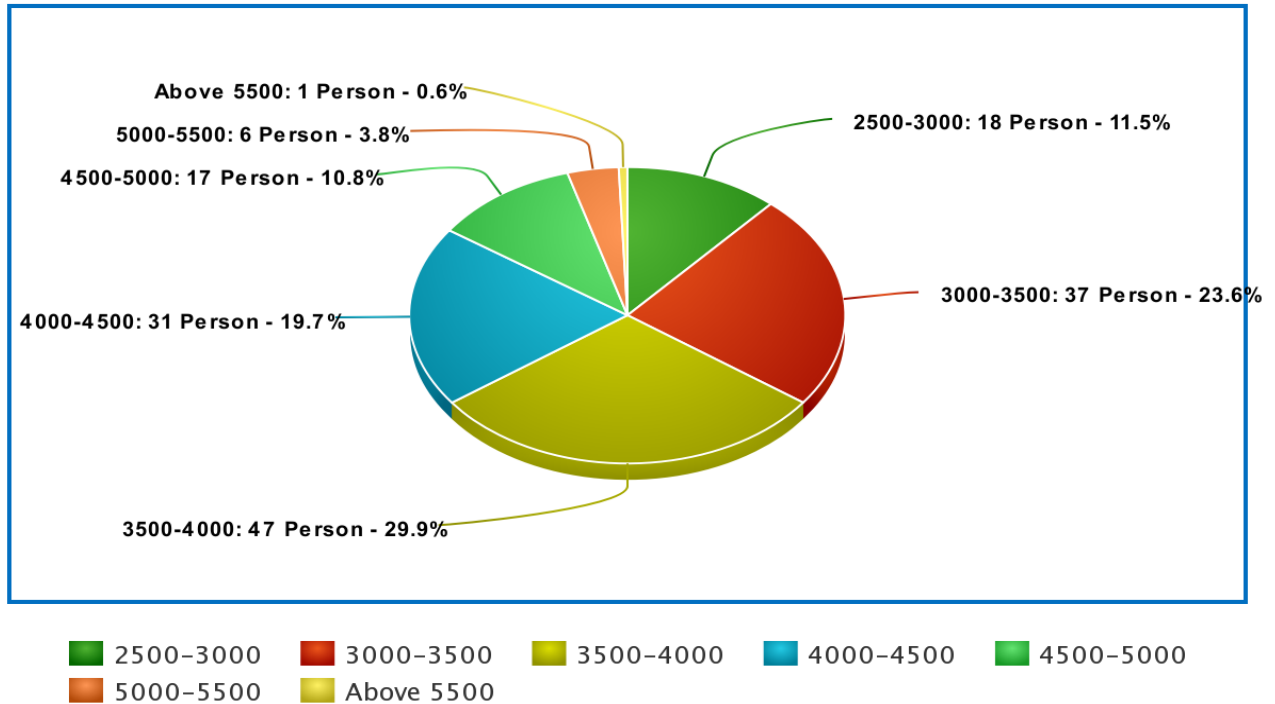
Illustration :

- ❑ This pie chart illustrates that maximum 31.9% people wants to get room 1500-2000 BDT without meal cost; maximum of them are students.
- ❑ 30.0% people want to spend in between 800 to 1000 taka for a seat without meal cost; maximum of them are poor garment workers.
- ❑ Only 0.6% people wants to spend more than 3500 BDT for a seat.

17.How much money do you spend on room/seat with meal cost?

2500-3000	3000-3500	3500-4000	4000-4500	4500-5000	5000-5500	Above 5500
18	37	47	31	17	6	1

How much money do you spend on room/seat with meal cost



meta-chart.com

Illustration :

- ❑ This pie chart illustrates that maximum 29.9% people wants to get room 3500-4000 BDT with meal cost; maximum of them are students.
- ❑ 23.6% people want to spend in between 3000 to 3500 taka for a seat with meal cost; maximum of them are garment workers.
- ❑ Only 0.6% people wants to spend more than 5500 BDT for a seat with meal cost.

22. Leave satisfaction on the following features-

Feature	Very Important	Important	Less Important	Not Important
User Security	91	57	9	0
Safe Information	107	46	4	0
Clear rent Information	67	89	1	0
Notifications (if accept, delayed or cancelled deal)	0	94	63	0
Reliability	109	48	0	0
User Service	87	57	10	3
Design	43	78	27	9

Overall Findings:

- As most of the respondents are from 15 to 30 years old, our target audience is university/college students.
- Students wants to have a comfort room with a suitable room-mates(students wants to share room with other students).
- Most of the respondents want to have room in between 1000 to 2000 without meal cost and 3000 to 4500 with meal cost.
- User want to be notified when someone accept his room-mate post.
- User want to know the validation of a post. For this they want review and rating system.

- User want to find room near their working or educational institution .People find safe transaction and customer security as the most important features in online ticket system.
- User wants to keep their information safe and secure.
- User find fast searching, saving time , comparing seats and user security as some most important features in our room sharing site.

Conclusion:

With our website we have tried to solve some of the major problems . We are very hopeful that our system would definitely reach to all the people and they would be able to make use of it . The system will offer better functionalities , more faster and user friendly than the manual system. Hope that our system reduce the anxiety of guardians and parents allow their children for higher education, outside their hometown and feel secure. If that happened our main objective will fulfilled.