

Stamford University Bangladesh
Department of Computer Science & Engineering



Hello Doctor
Online Doctor's Appointment System

Software Engineering Sessional
CSI-332

Final Report

Submitted To

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Submitted By

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Project Name: Hello Doctor

System Criteria

Online Doctor's Appointment System

Project Summery

Hello Doctor will be complete doctor chain management software/application. A user can make an appointment remotely by internet with his desired doctor. Day by day we will add more facilities like online medicine shop with home delivery call an ambulance on emergency, pay your doctor with online payment. Moreover, some doctors will be available for treat their patients by video conference.

Project Goal

We are confident that this Emergency Medical Support software system will decrease people sufferings on a emergency medical case and will make their daily life more easier.

How It Works

In this software, we will provide a list of different specialized doctors of different discipline. We engaged them under a network. Every doctor have to sing up with an account and same to users. First of all, user has to select the category of the doctor form a drop down list. Then user can set an appointment with him in a application form and got confirmation. If the users want to consult instantly they can engage with a doctor by video call on emergency doctor panel.

Required Tools to Develop

1. Operating System
2. Net beans IDE
3. DBMS
4. GPS Tracker

Requirements for maintenance

- Dedicated Server for DBMS
- Computers
- Experts Man Power

Implementation Cost

Development Cost : 5, 00000 (Approx)

Maintenance Cost Per year : 10, 00000 (Approx)

Financial Profit

After a time frame, users have to pay an yearly charge to use this Application.

Information Gathering Approach

After completing the project proposal and project feasibility part successfully, we have decided to move on to the next phase of our project, which is the information gathering and representation with the following objectives in mind.

Objectives:

- Construct meaningful interview questions
- Understanding the client & organization's view
- Understanding the current system
- Requirement & features Analysis
- Creating Use case diagram
- Creating data flow diagram

For information gathering we have chosen three methods:

1. Interviewed a professional from Ibn Sina Hospital.
 - ❖ **Interview structure was Funnel type.**
 - ❖ 5 open ended question in beginning.
 - ❖ 7 close ended question after that.
2. Used Questionnaires to take survey from users
 - ❖ There were 9 questions in the survey and all of them were specific.
3. Investigation

Interview Information

Hello Doctor - Online Doctor's Appointment System			
Author: Abdullah Al Nayim Sanzida Islam Suchi Nur-e-Alam Shikdar	Date: 17/09/2019	Time: 03 : 05 pm	Duration: 15 mins
Participants: Mr. Al Ameen Shaheen IT officer, Ibn Sina Hospital			

Total Interview Procedure

- Question 01: How ISH usually take appoinment for doctors?
 - ✓ Answer: Patient have to take their appoinment physically or by a phone call at Ibn Sina Hospital. Patient ask for their desired doctors at preferable time. If available, we give them confirmation through phone call.
- Question 02: Do you think this an old process of communication ?
 - ✓ Answer: Yes I think this an old process of communication in this modern age of global village.
- Question 03: How ISH promote their doctors ?
 - ✓ Answer: Ibn Sina Hospital promote their doctors by postering or through some banner in front of hospital.

- Question 04: Do you think it's a good marketing policy to reach most possible clients ?
- ✓ Answer: I don't think it's a good marketing policy to reach most possible clients .

- Question 05: Do you have any future plan about promotion and appointment system?
- ✓ Answer: We have some plan to make promotion through internet and social media. And make the appointment system more easy to clients.
- Question 06: How much phone calls you need to attend for doctors appointment everyday ?
- ✓ Answer: Approximately 500-700.
- Question 07: Don't you think that it's a big bothering ?
- ✓ Answer: Yes! I think it's a matter of bothering.
- Question 08: Do you have any website ?
- ✓ Answer: Yes. We have a website .
- Question 09: Do you have any web based appointment system for clients ?
- ✓ Answer: No
- Question 10: Do you think that ISH need a web based appointment system to reduce clients suffering ?
- ✓ Answer: Yes! I believe it
- Question 11: Do you think you need to update doctors list by website ?
- ✓ Answer: Yes.
- Question 12 : Do you believe that a web based appointment system will reduce ISH sufferings for getting clients ?
- ✓ Ans: Yes.

Questionnaires (Users):

What general people think about online doctor management collected using a questionnaire made by <https://docs.google.com/forms> . The questionnaires were directed at users via social media, so the data was collected from random users. As our website's main target is to interact with people, it will be made to suit the preference of the users.

Online Doctor's Appointment System

We are going to make a website where anyone can make an appointment with their desired doctors from home. Now let us know your point of view about this project. Your opinions are very valuable to us!

* Required

What is your profession? *

- ☐ Student
- ☐ Teacher
- ☐ Doctor
- ☐ Engineer
- ☐ Businessman
- ☐ Housewife
- ☐ Retired Person
- ☐ Journalist
- ☐ Other: _____

Both for you and your family members, How many time you have to make an appointment with a doctor approximately in a year? *

- ☐ less then 2 times
- ☐ 2-5 times
- ☐ 5-10 times
- ☐ More than 10 times

Did you ever experienced suffering to make an appointment ? *

- ☐ Sometimes
- ☐ Never

Which sufferings you had experience ? *

- ☐ Couldn't reach via mobile phone for serial or appointment
 - ☐ Troubled of gathering when tried to make it physically
 - ☐ Suffered in traffic jam
 - ☐ Lost money when tried to make it quick by brokers
 - ☐ didn't get the reply of email
 - ☐ Other: _____
-

Did you ever feel the necessity of an online doctor's appointment system ? *

☐ Yes

☐ No

Do you think this system will reduce people's suffering on this ground? *

☐ Yes

☐ No

☐ Maybe

Which will make it effective? *

☐ Easy to use

☐ Quick Response

☐ Easy payment method

☐ Other:

Your Age Range *

☐ 13 - 18 Years

Your Age Range *

- ☐ 13 - 18 Years
- ☐ 18 - 25 Years
- ☐ 25 - 40 Years
- ☐ Above 40 Years

Gender *

- ☐ Male
- ☐ Female

SUBMIT

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Google Forms

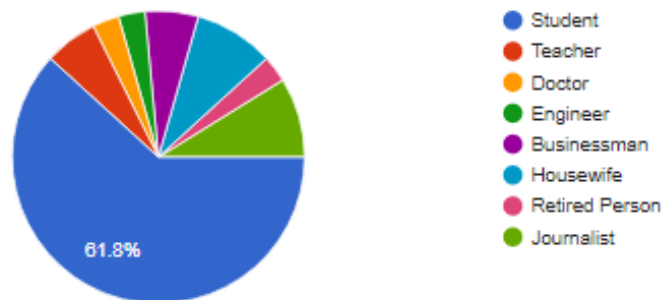
Appendix

Result of the Questions:

Question No 1:

What is your profession?

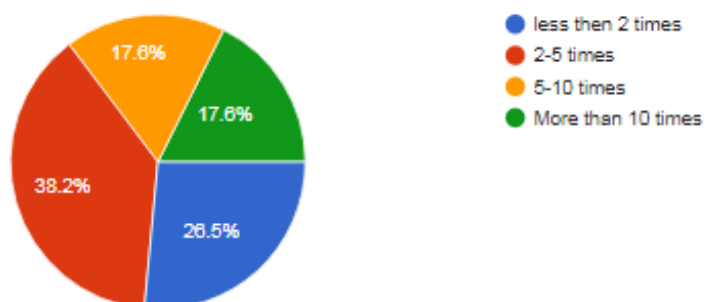
34 responses



Question No 2:

Both for you and your family members, How many time you have to make an appointment with a doctor approximately in a year?

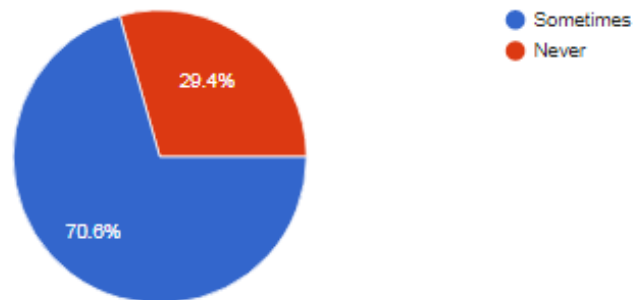
34 responses



Question No 3:

Did you ever experienced suffering to make an appointment ?

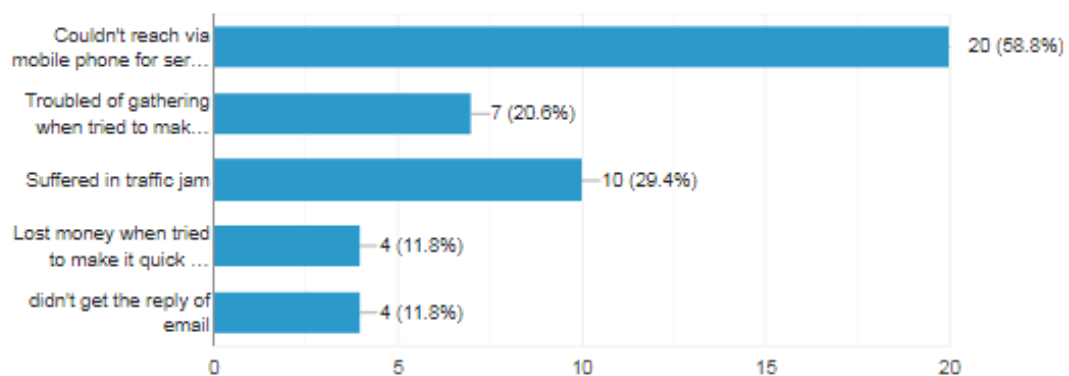
34 responses



Question No 4:

Which sufferings you had experience ?

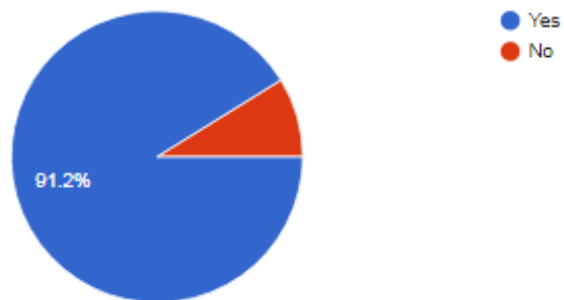
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Question No 5:

Did you ever feel the necessity of an online doctor's appointment system ?

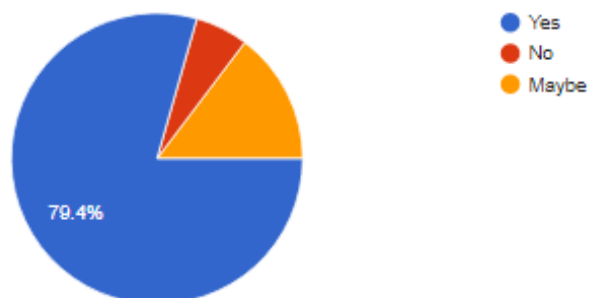
34 responses



Question No 6:

Do you think this system will reduce people's suffering on this ground?

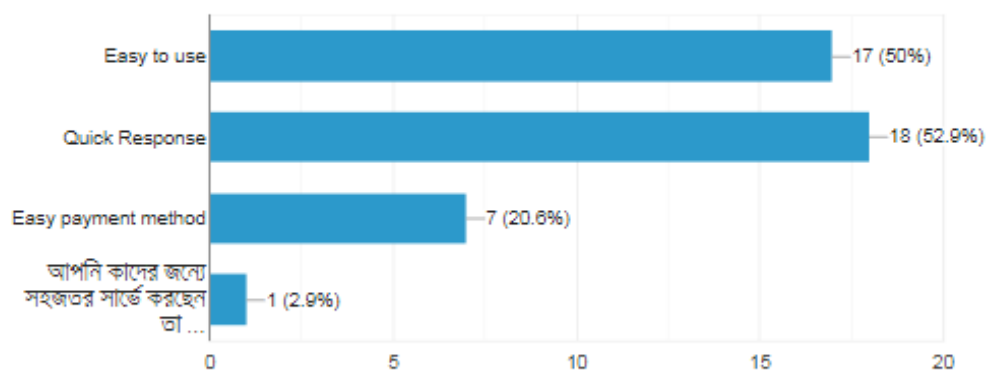
34 responses



Question No 7:

Which will make it effective?

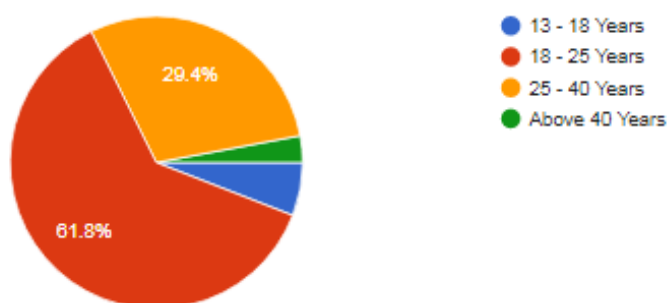
34 responses



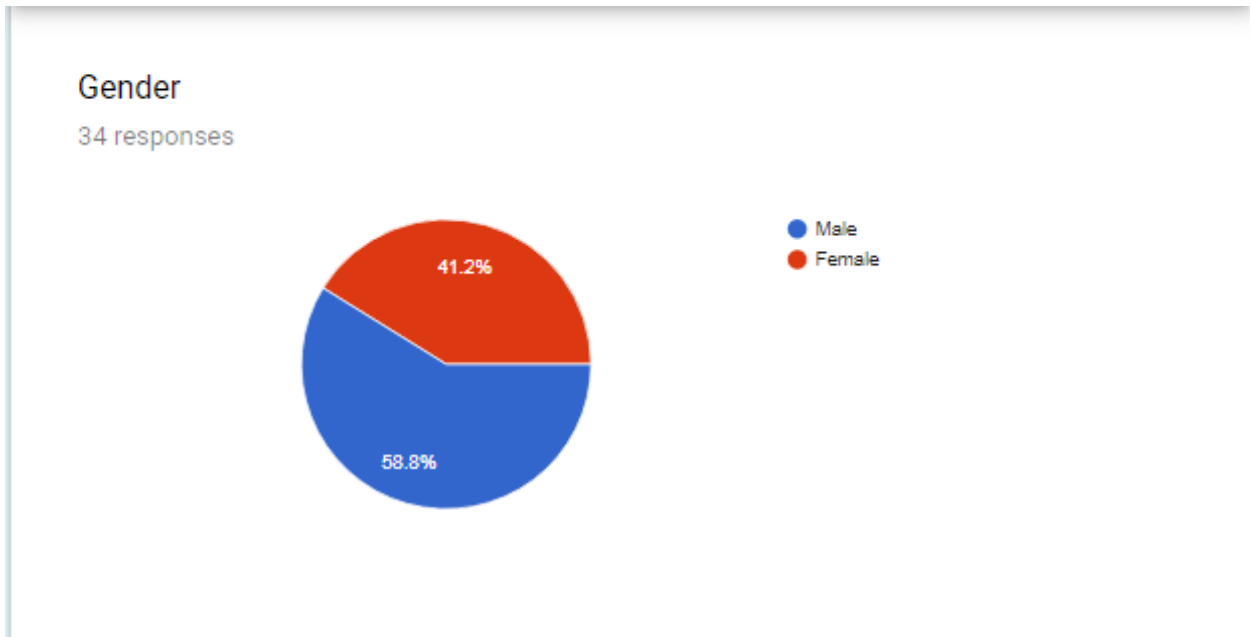
Question No 8:

Your Age Range

34 responses



Question No 9:



Investigations

- ❖ Almost 80% hospital do not have an active system of doctors appointment
- ❖ More than 48% people suffered when tried to make an appointment by phone
- ❖ More than 88% people suffered when tried to make an appointment physically at the hospital .
- ❖ Less than 5% hospitals have a web based doctor's appointment system .

Task List

(Service)

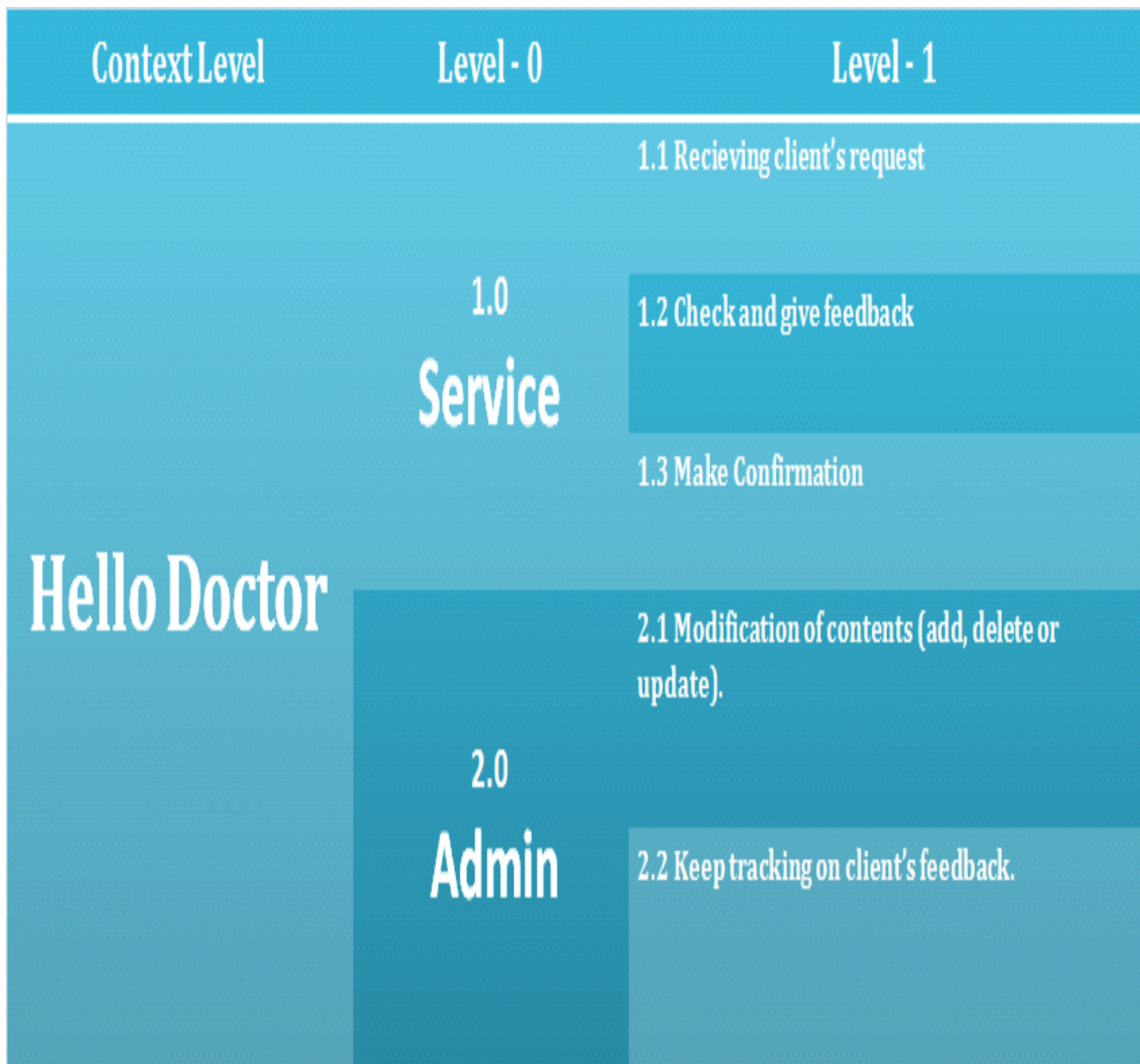
- Recieving client's request to make an appopinment.
- Check desired doctor's availability .
- Give feedback and confirm payment.
- Make confirmation message to client.

Task List

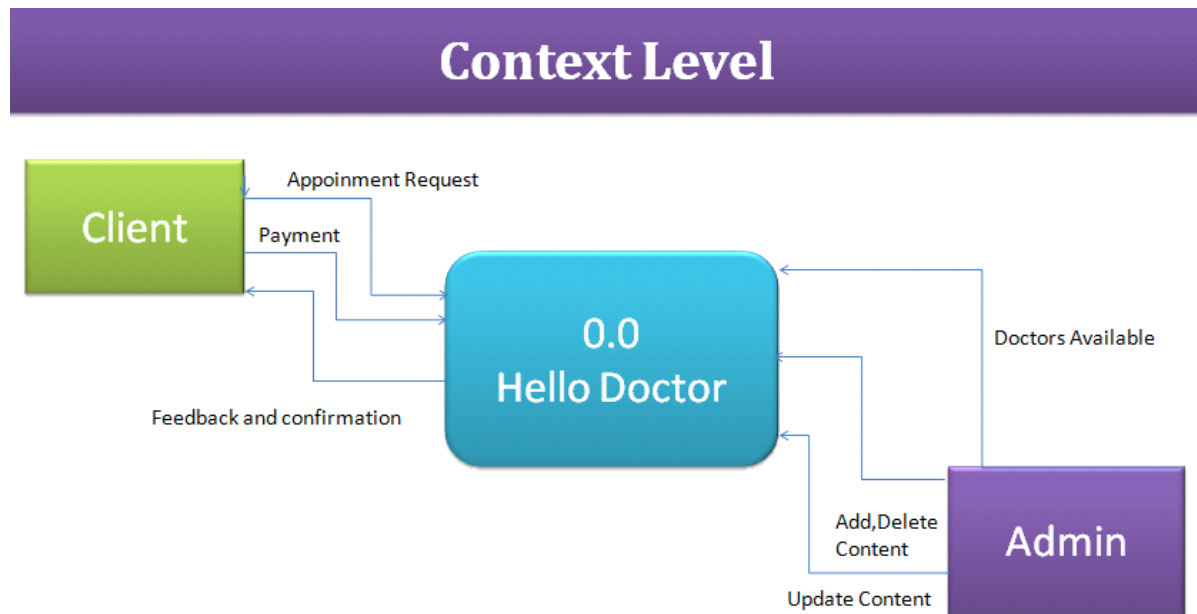
(Admin)

- Modification of contents (add, delete or update).
- Making Promotions.
- Keep tracking on client's feedback

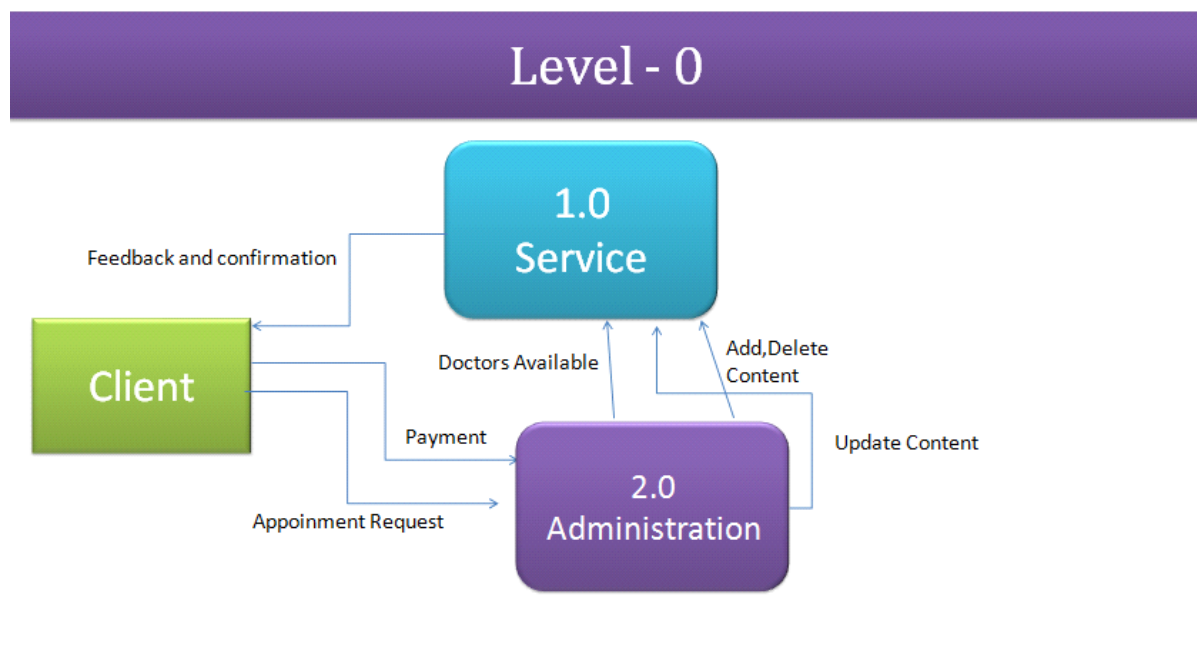
Decomposition of DFD



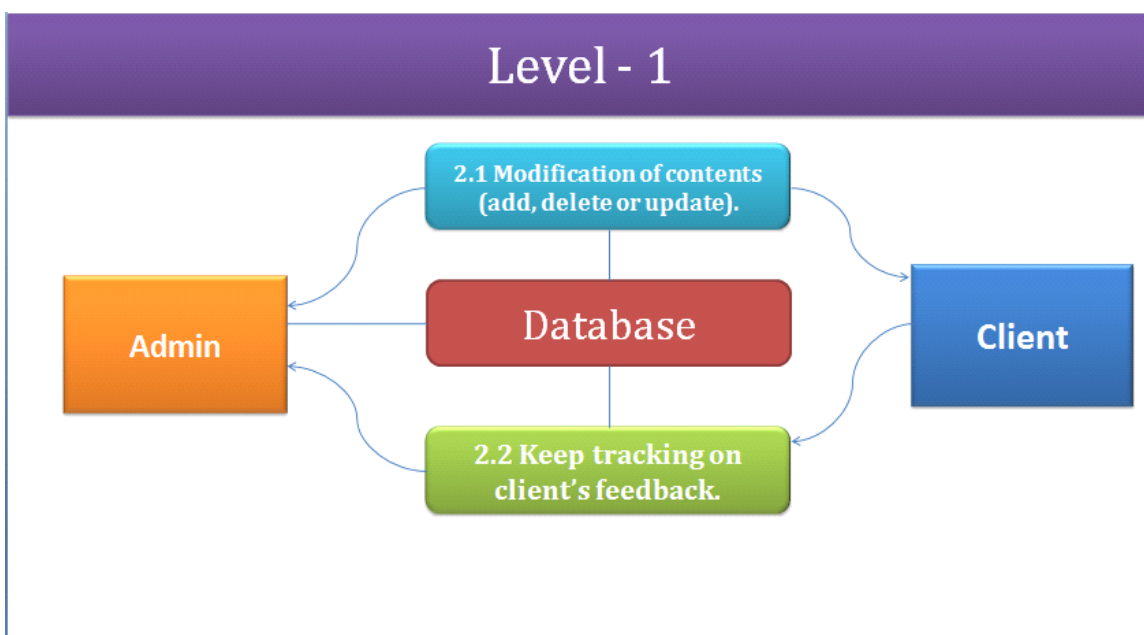
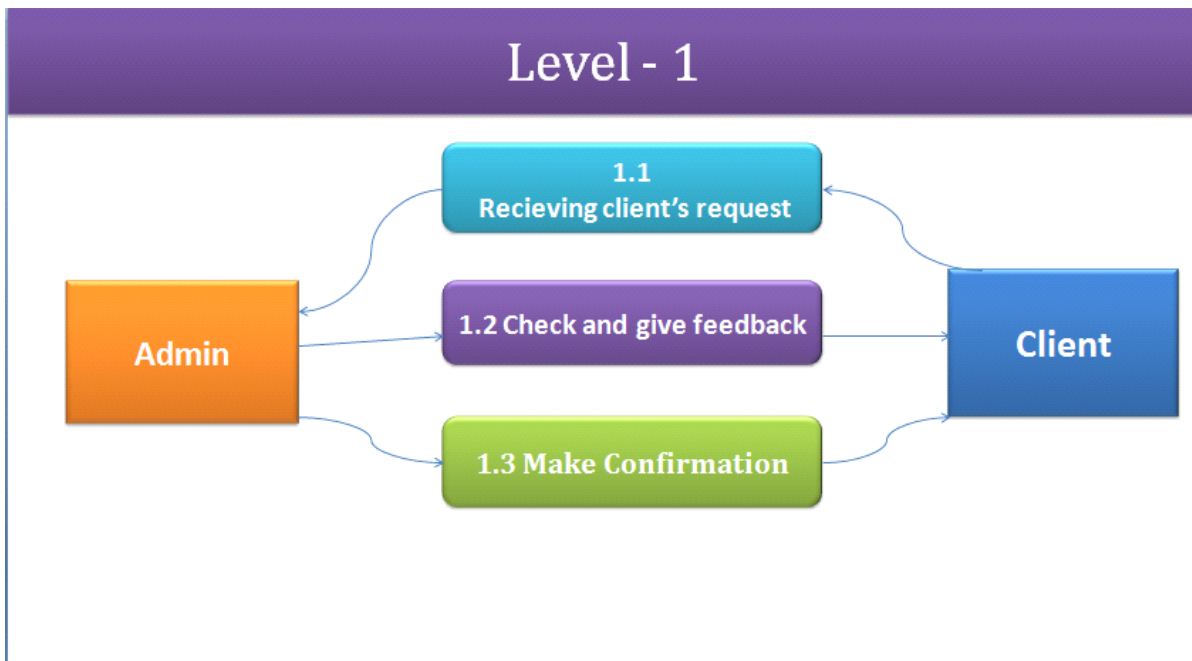
Context Level



Level - 0

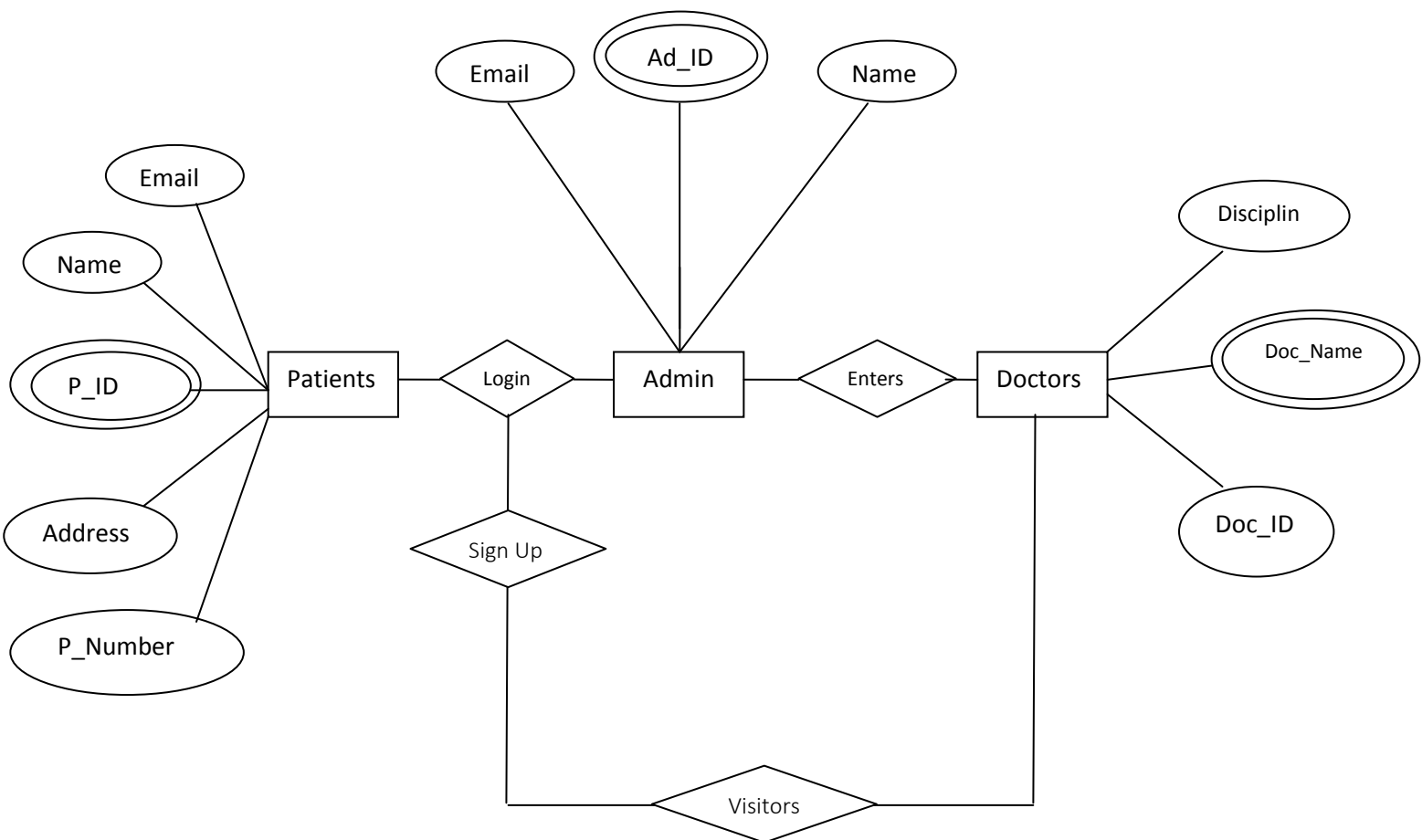


Level - 1



ER Diagram

This report is about Entity Relationship Diagram of our project. An entity relationship diagram (ERD) is a data modeling technique that graphically illustrates an information system's entities and the relationships between those entities. An ERD is a conceptual and representational model of data used to represent the entity framework infrastructure.



Database Table

Table Name	Attribute	Data Type
Admin	A_name	Varchar (50)
	ADID	Varchar (15) (Primary key)
	Email	Varchar (30)
	UID	Varchar (15) (Foreign key)
	DID	Varchar (10) (Foreign key)
Doctor	D_name	Varchar (50)
	DID	Varchar (15) (Primary key)
	Phone_number	Int (20)
Patient	UID	Varchar (15) (Primary key)
	Patient_name	Varchar (50)
	Phone number	Int (20)
	Email	Varchar (30)
	Address	Varchar (50)

Development Opportunities

- We will create mobile application both for Android and Apple OS.
- We will make the website responsive for every browsing media device such as Mobile, Tablet, Macbook etc.
- Some features are not added as they were described in the project proposal. We will add those missing features.
- Email Notification for the Patients to confirm their Appointments .

Contributions

Abdullah Al Nayim : 40 %
CSE 063 07519

Sanzida Islam Suchi : 30 %
CSE 063 07514

MD Nur-E- Alam Shikdar : 30 %
CSE 063 07431

Conclusion

Here, we are concluding the final report of the project Hello Doctor. This project as well as the full course helped us to realize that how software development is done in practical life. Hope this fundamental learning will add such a huge value for working skill in the future.

Thank You!

