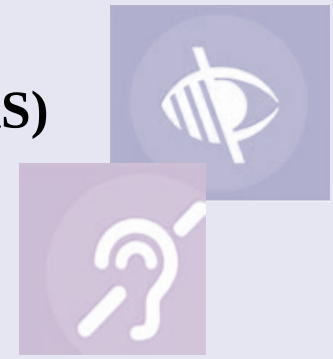
Disability Awareness and Support(DAS)



Mead saad al-zhrani

Table of Contents :

1. Introduction

Many students of the special needs category did not complete their education because of their circumstances or because of another, and the blind need to be accompanied by people for them, as well as deaf people who face some problems in communicating with others, so we launched the idea of our project to help the deaf and the blind.

- **Through this online system we overcome many problems.**
- **It saves time and money.**
- **Nothing is done manually.**
- **Help the deaf and the blind**.

1.1 Purpose (Problem)

The purpose of this document is to allow the registration of student with disabilities or challenges in particular course. It is intended to be complete specifications of what functionality the admission provides. It will also facilitate keeping all the records of students, such as their id, name, address DOB, etc. So, all the information about a student will be available in a few seconds.

Overall, it will make Student Online Registration System an easier job for the administrator and the student of any organization. The main purpose of this document is to illustrate the requirements of the project Online Student Registration System and is intended to help any organization to maintain and manage its student's personal data.

1.2 Overview

The purpose this document is to present a detailed description of the OSRS. It will explain the purpose and features of the software, the interfaces of the software, what the software will do, the constraints under which it must operates and how the software will react to external stimuli. This document is intended for both the end users and the developers of the software.

Specific design and implementation details will be specified in a future document. The student registration system has to handle records for many students and maintenance was difficult. Though it has used an information system, it was totally manual. Hence there is a need to upgrade the system with a computer-based information system which is Online educational student with disabilities or challenges

2. Overall Description

Library Management System is a replacement for the ordinary student registration systems which depend on paper work for recording book and user's information. This software is developed specifically to cater the flexible feeding requirement of a student and is totally self-contained and works efficiently.
In online student registration system minimize waste of time. It provides a simple database and a good level of normalization will make sure that the user is getting various set of reports.

3. Specific Requirements (Functions, Relationship)

This section provides software requirements to a level of detail sufficient to enable designers to design the system and testers to test the system.

This section contains all of the functional and quality requirements of the system. It gives a detailed description of the system and all its features. [1]

Requirement Specification

- Purpose: The purpose of the project is to provide online student registration.
- Scope: The website display student information of registered students
- Benefits: This website reduces the manual work, maintaining accuracy, increasing.

3.1 Functional Requirements

It deals with the functionalities required from the system which are as follows:

- The website will help the colleges/organizations/companies to conduct their student registration.
- Only authorized person can access related details.
- Organizations can change their information regarding themselves. The students can login through TEST-ID and PASSWORD.
- Administrator will be responsible for updating the site.

4. Low-Fidelity Prototype (wireframe)

Low-fidelity prototyping. Low-fidelity (lo-fi) prototyping is a quick and easy way to translate high-level design concepts into tangible and testable artifacts. The first and most important role of lo-fi prototypes is to check and test functionality rather than the visual appearance of the product [2].

Here are the basic characteristics of low-fidelity prototyping [3]:

- **Visual design***:* Only some of the visual attributes of the final product are presented (such as shapes of elements, basic visual hierarchy, etc.).
- **Content**: Only key elements of the content are included.
- **Interactivity**: The prototype can be simulated by a real human. During a testing session, a particular person who is familiar with design acts as a computer and manually changes the design's state in real-time. Interactivity can also be created from wireframes,

Wireframe for All Website:

Disability Awareness and Support(DAS).

Fig 1 System Wireframe (home page)

Courses for Hearing Poor people

by clicking on the course

he can read the book

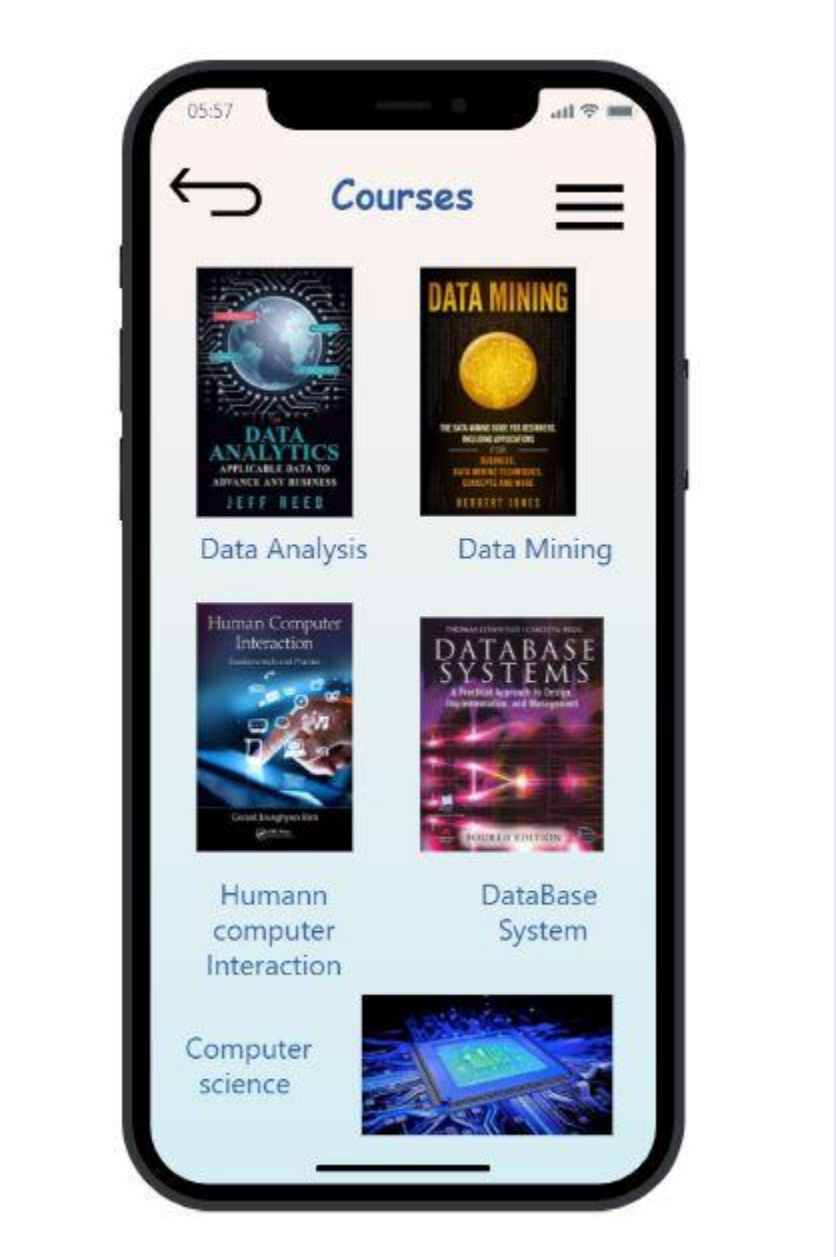


Fig 1.1 System Wireframe (courses for poor hearing)

Courses for eyesight Poor people

by clicking on the course or the voice anything,

He is trained for how to deal with the application

he can listen the book

Fig 1.2 System Wireframe (courses for poor eyesight)

5. Containers

5.1 Container for Menu bar process

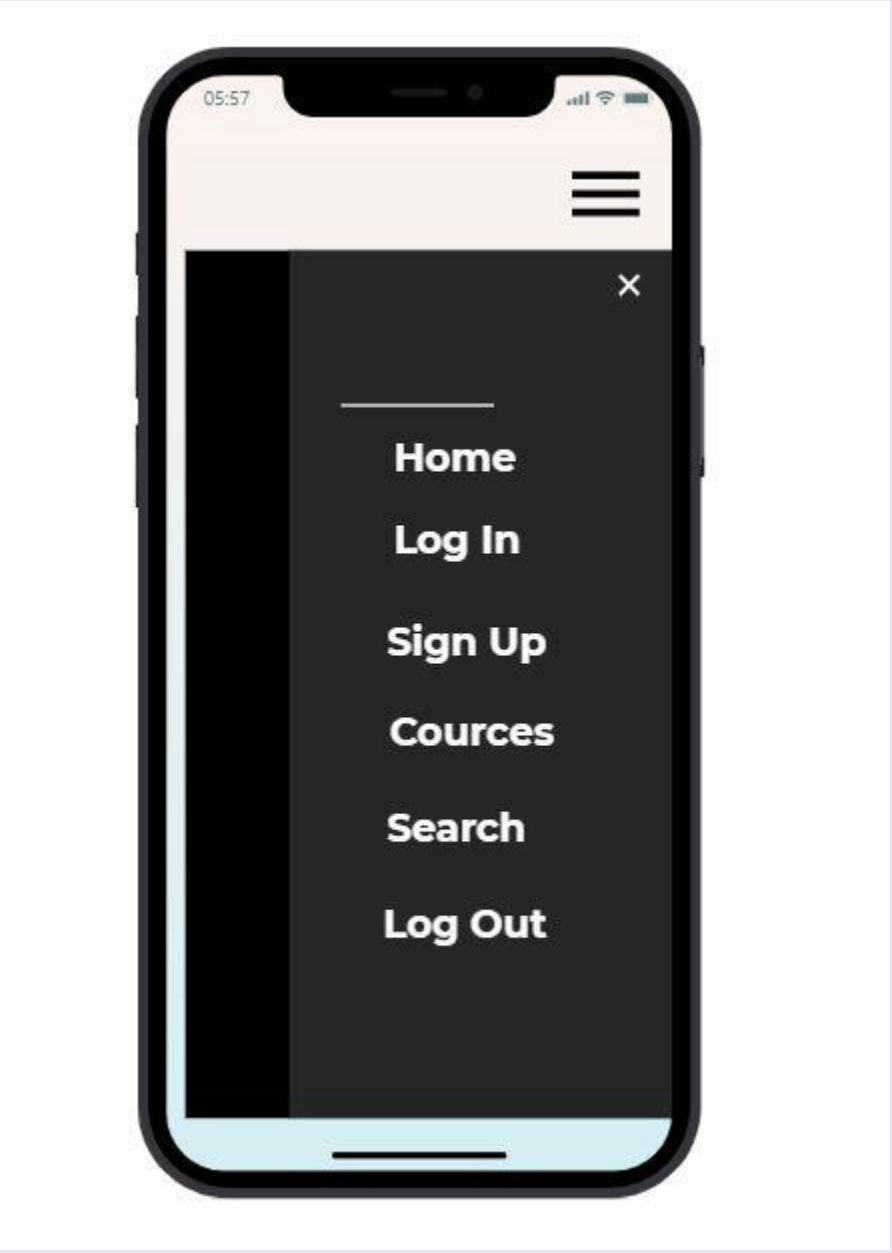


Fig 3 Menu Bar process Container

5.3 Screen for Login Container

User can choose the method of login
(By using face-book email or create a new account)

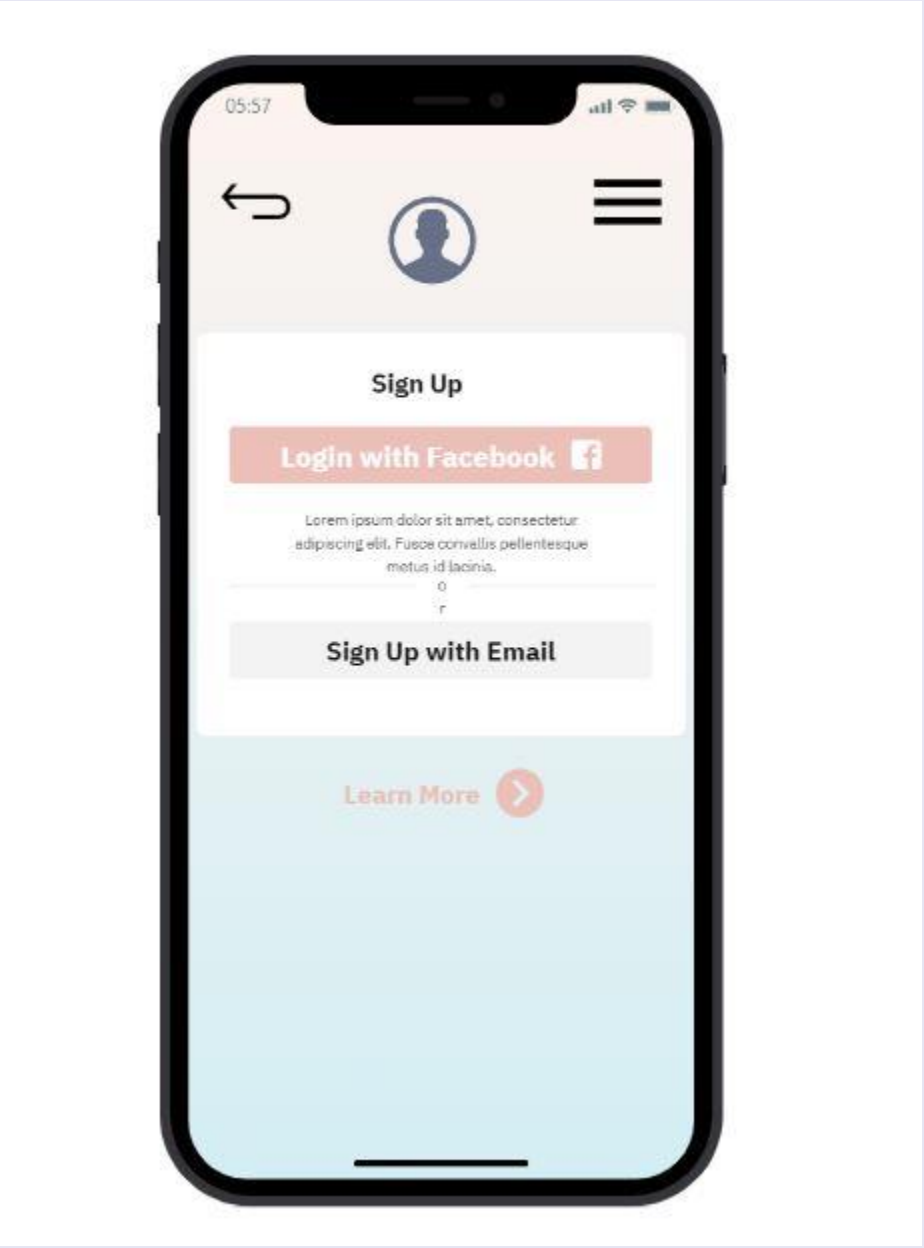
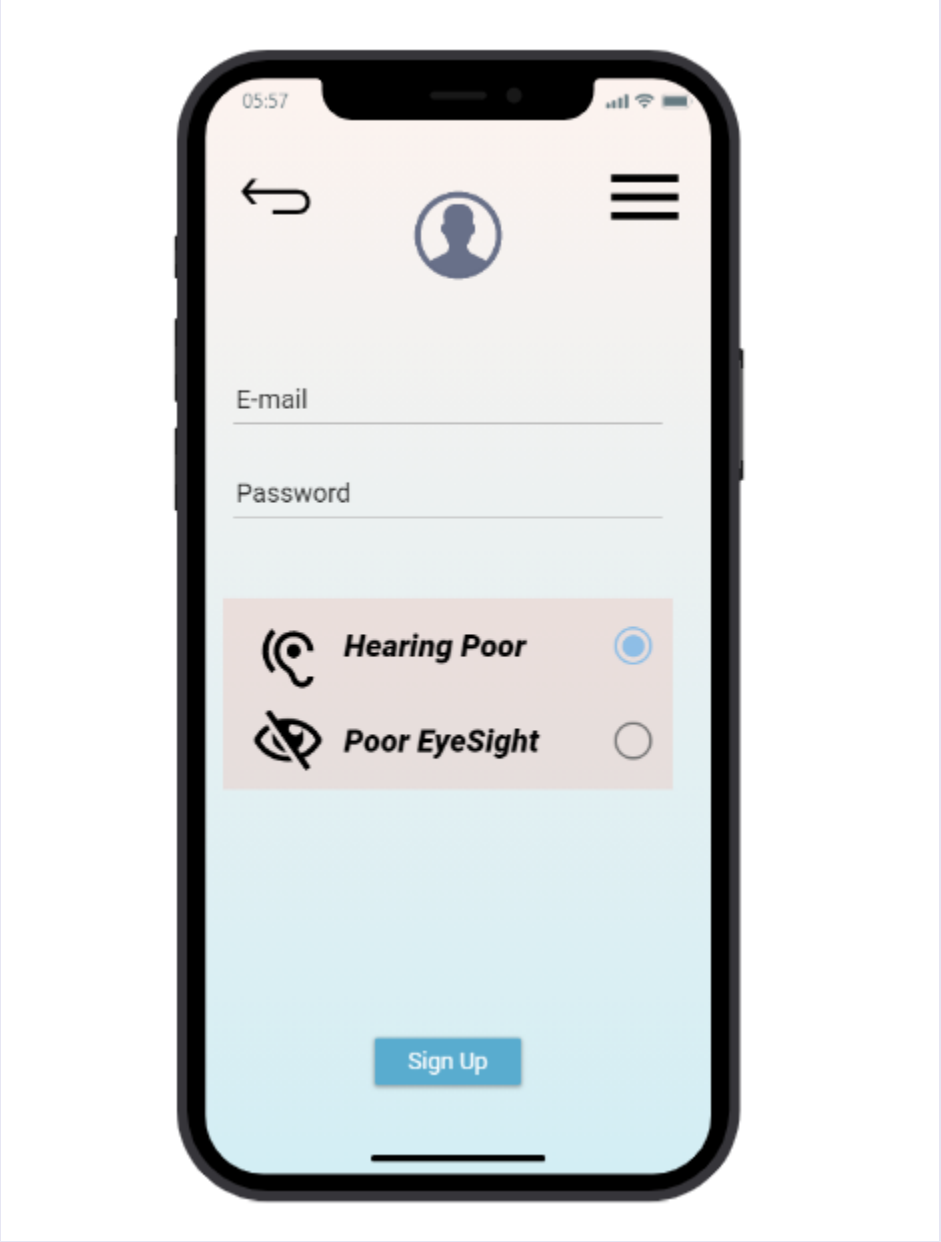
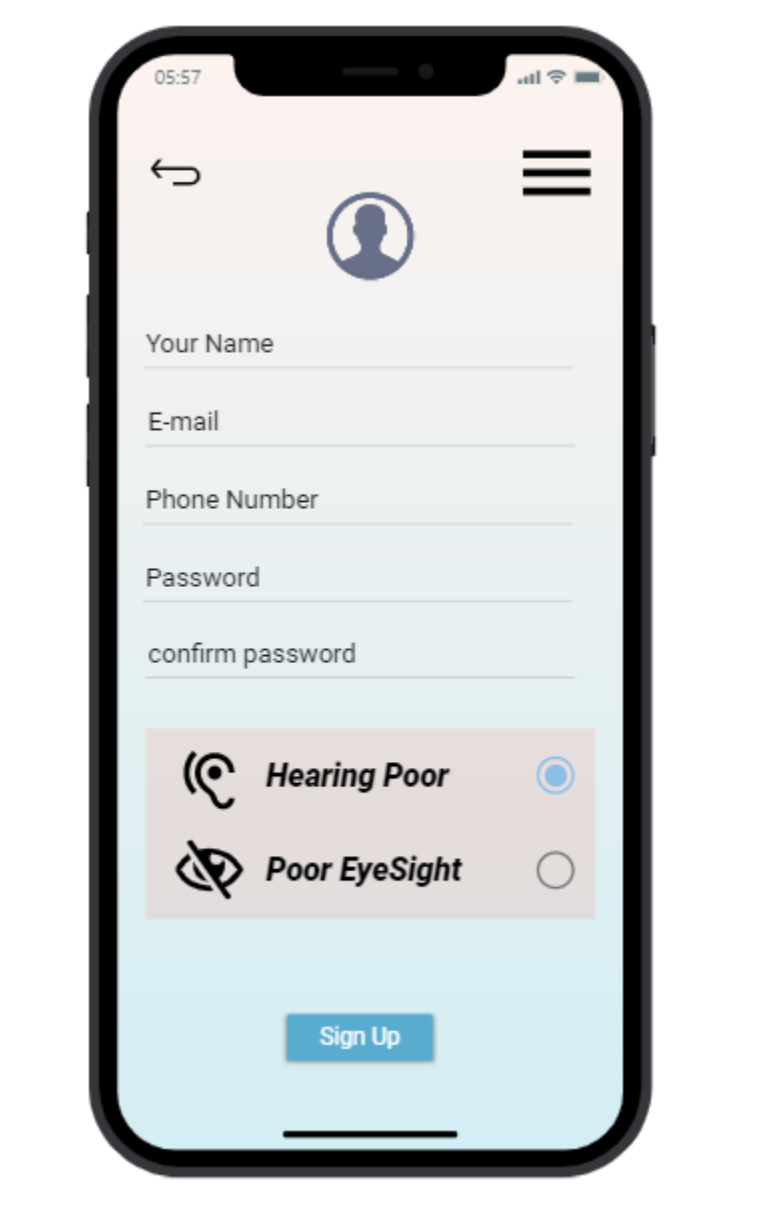


Fig 4 login screen Container

Can login in this form by using email and password



If you don't have, can easily create one with more details



6. Content Diagram

6.1 Use Case Diagram [4]-[5]

6.1.1 Use Case Diagram for all system

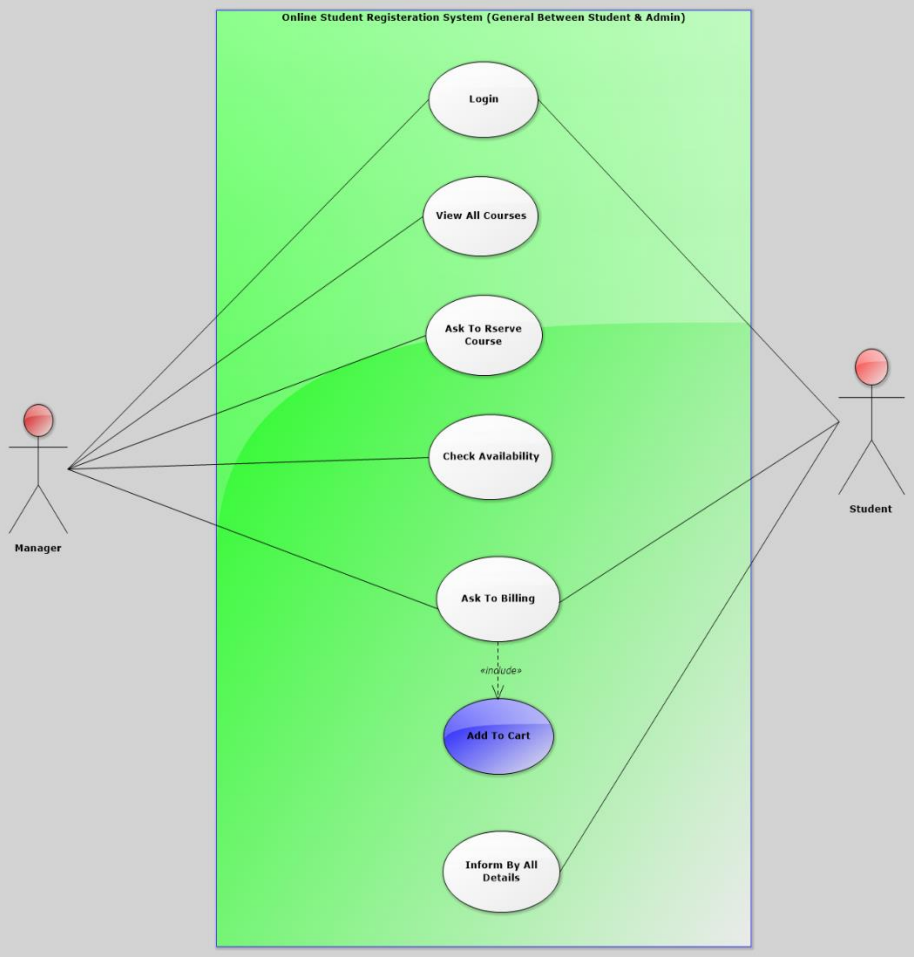


Fig 5 Use Case for all system

6.1.2 Use Case Diagram for admin process

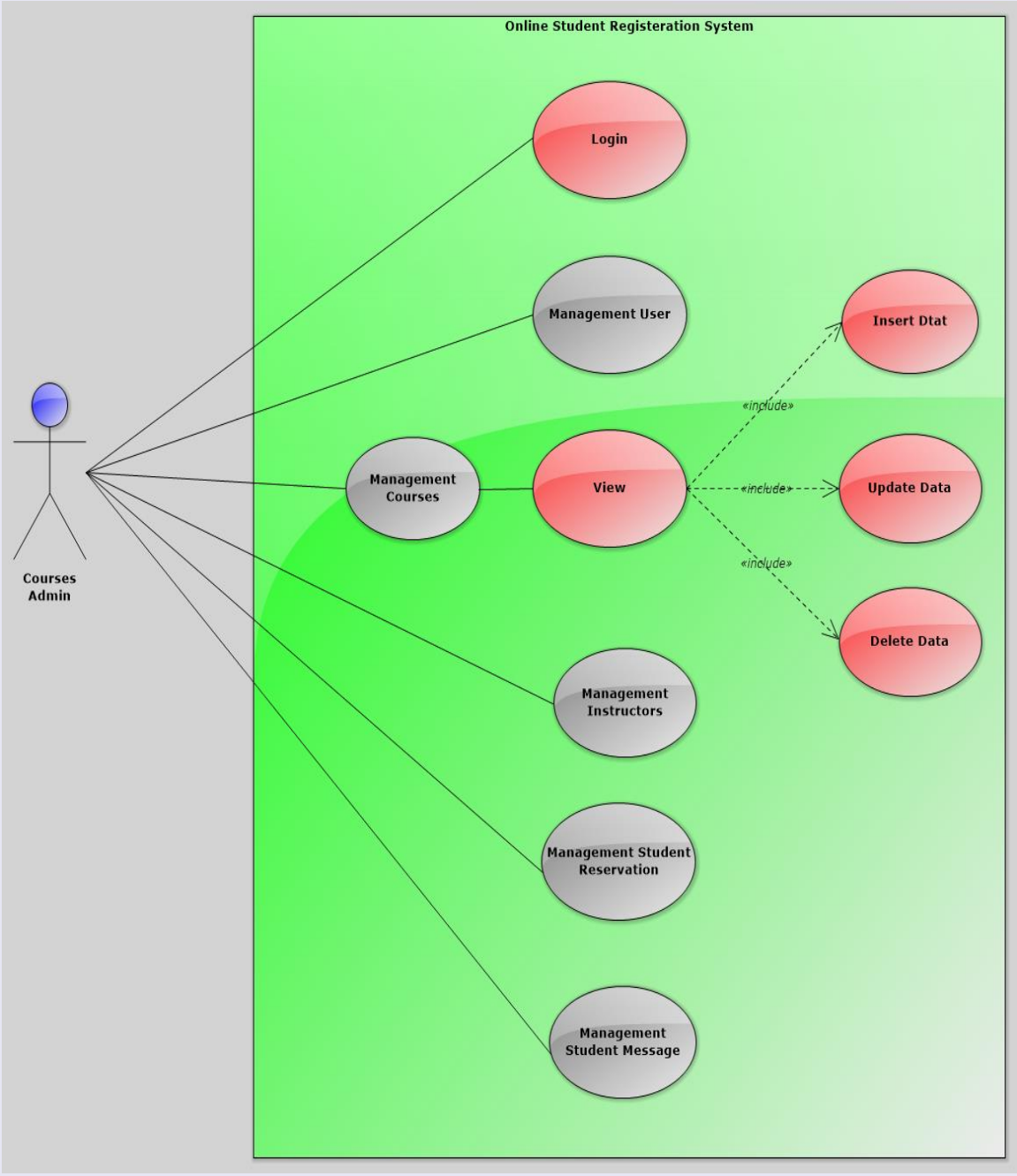


Fig 6 Use Case for admin process

7. Mark-up Concrete Use Cases

User Action	System Response
User enter user name and password to login	The system verifies login process.
User enter in searching area name of course	The system starts view and open course to student.
User choose the course	The system starts view and open course to student.
User enter his problem details	The system view sending details to user.
User enter user name and phone number of websites to contact with them	The system view contact detail to user and connected with each other.

Table 6.1 Mark-Up concrete Use Case

8. Containers for General Use Cases

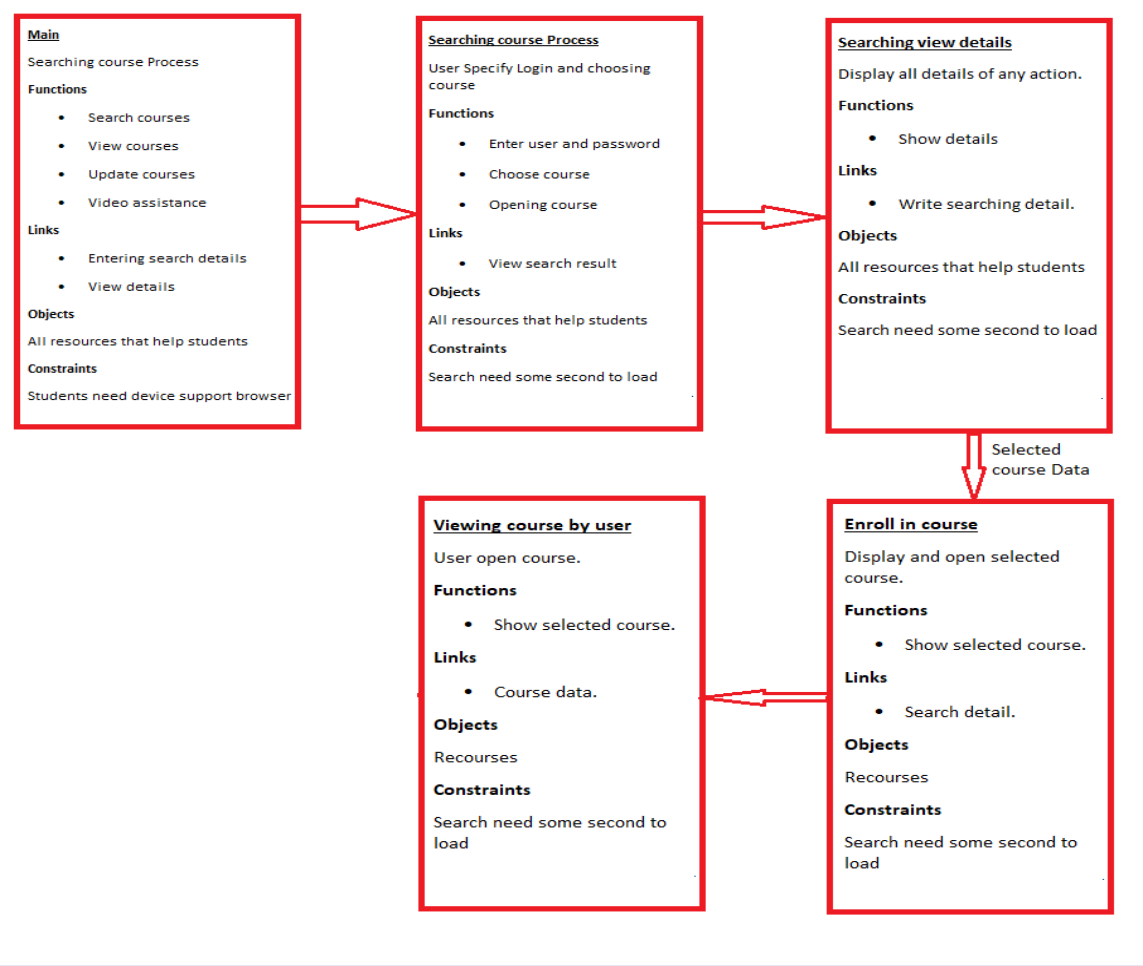


Fig 7 Container for General Use Case

9. Merging Common Containers

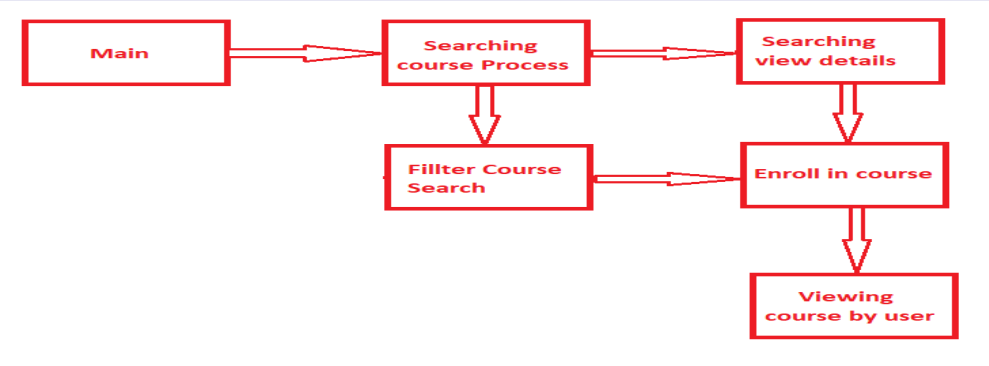


Fig 7 Merging Common Containers

1. Problem and solution overview

The purpose of this document is to allow students with disabilities or challenges to be enrolled in a particular course. They are meant to be a complete specification of the job that admission provides. It will also make it easy to keep all student records, like their ID, name, DOB address etc., so, all information about the student will be available in a few seconds, generally speaking, this online student registration system will make the easiest job for administrator and student in any organization.

The main purpose of this document is to clarify the requirements of the Online Student Registration System project and aims to assist any institution in maintaining and managing student personal data.

In Project 1 we mentioned the initial design idea and here we continue what we stopped.

2. Users and contextual inquiry participants

We presented to people with special needs the idea of our project in a simple and simple way, targeting people with special needs, especially the deaf and the blind, and providing content specific to each category.

For the blind: Provides them with lessons with audio and explanation

For the deaf: Provide written lessons for them and provide books for them

After that, we provided a prototype and verbally asked them to take into account their inability to handle the questionnaires.

The first question: What do you think of the login page?

- A participant from the blind category: He said that it is easy, but you did add a service and it translates the text into a voice to make it easier for them, and we do not need someone with us to help us
- A participant from the deaf group: He said it is easy for me and clear

The second question: What do you think of the main page of the application?

- A participant from the blind category: He said its interface is beautiful, but as I said before a translator translates the text into voice
- A participant from the deaf group: He said, I wish you had made an explanation of how to use sign language

The third question: What do you think of the training courses?

- A participant from the blind category: As for me and from my two categories, it is clear and interesting
- Deaf participant: clear and easy, for your work is excellent

3. Contextual inquiry results and design implications -

Login page: We noticed that we needed to convert text to voice for the blind.
Home page: We need an icon to explain what the app is and how to use it.
Design implications:

Login page:

We added a 'Settings' icon for the blind service, where he / she can access Settings, when using a mobile phone by double-clicking the "space" button, While using the computer, press "ctrol + F" as in the Zoom app To access the search box. After that, a menu of two options is displayed, either Enable or Disable the "screen reader", when enabled it works by double clicking on the text Convert to voice.

Home page:

explanation of the deaf and dumb through sign language.
We also designed simple interfaces for ease of use

4. Sketches of selected design and reasoning for chosen design

In it is paragraph we Sketch our selected tasks and their design

Task one: work as, user after login when want to read course, go to courses page and choose any course you want.
Process of choose course in our system as below figure:

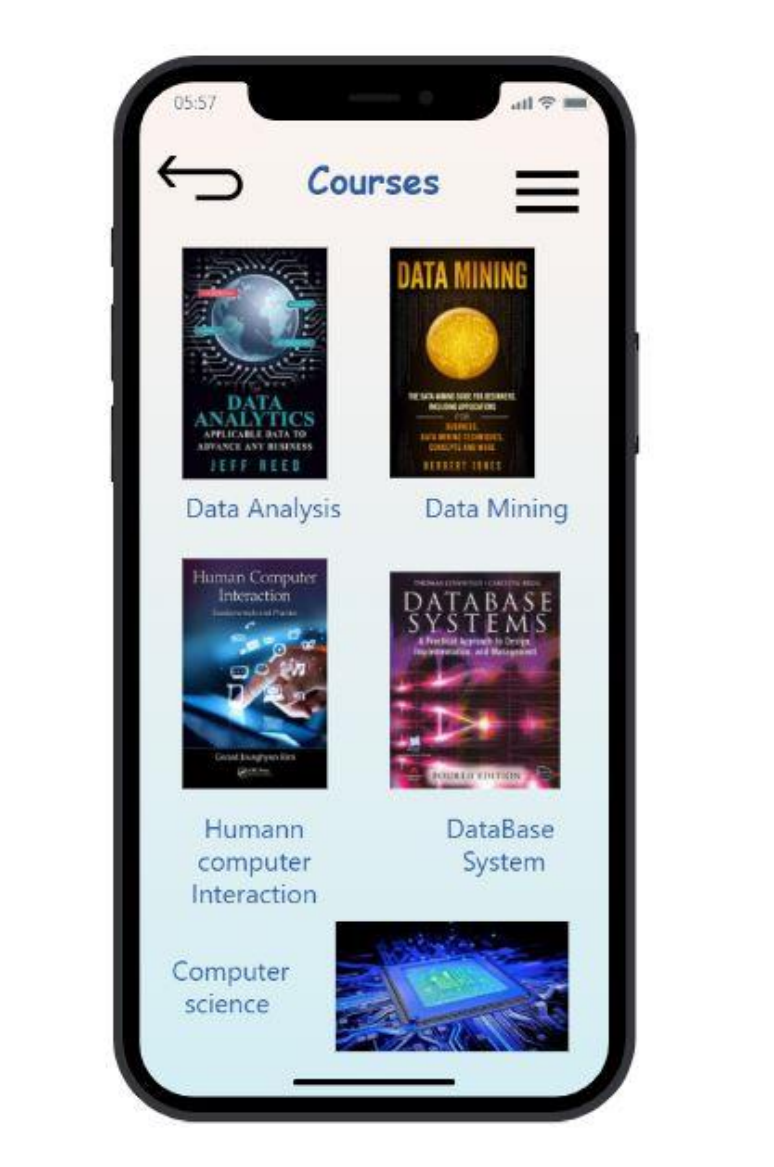


Fig 1 Courses Page Wireframe

Task two: work as, user want to login to site to get on privilege of our system. Process of login in our system as below figure:

User can choose the method of login

(By using face-book email or create a new account)

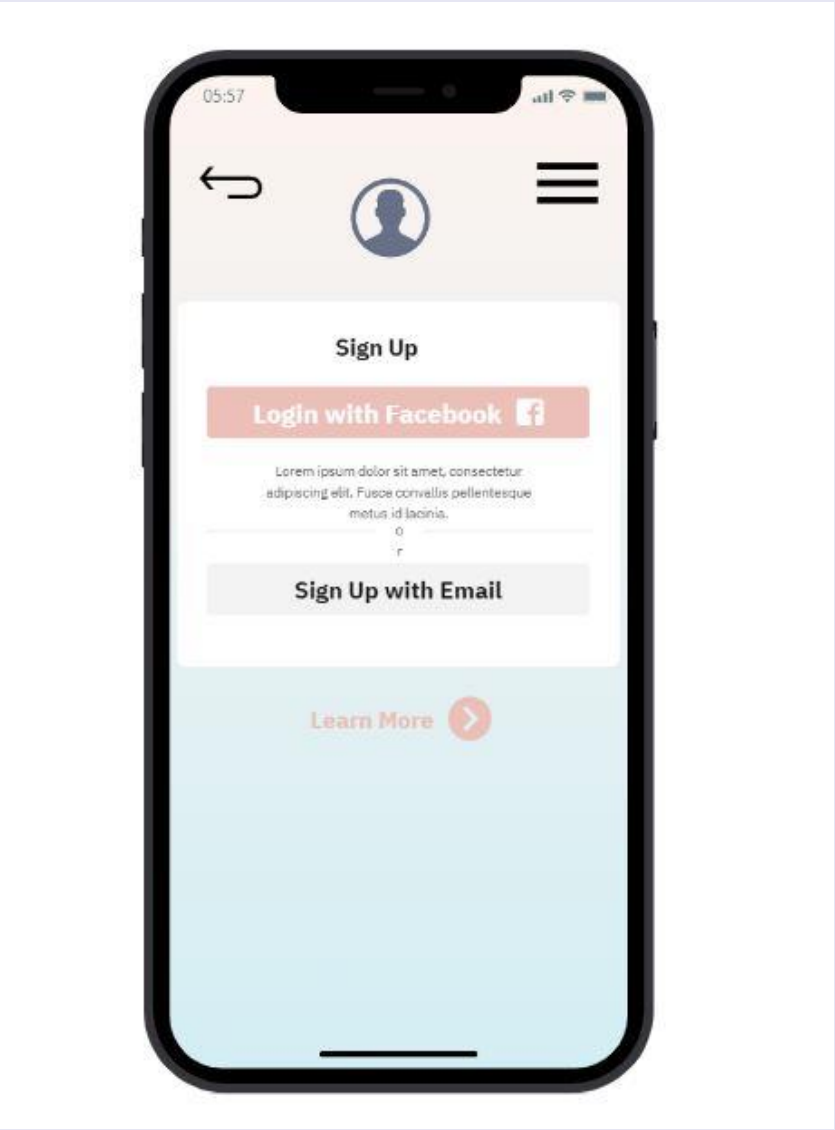


Fig 2 Login Page Wireframe

Task three: work as, Process of login in our system as below figure:
Can login in this form by using email and password

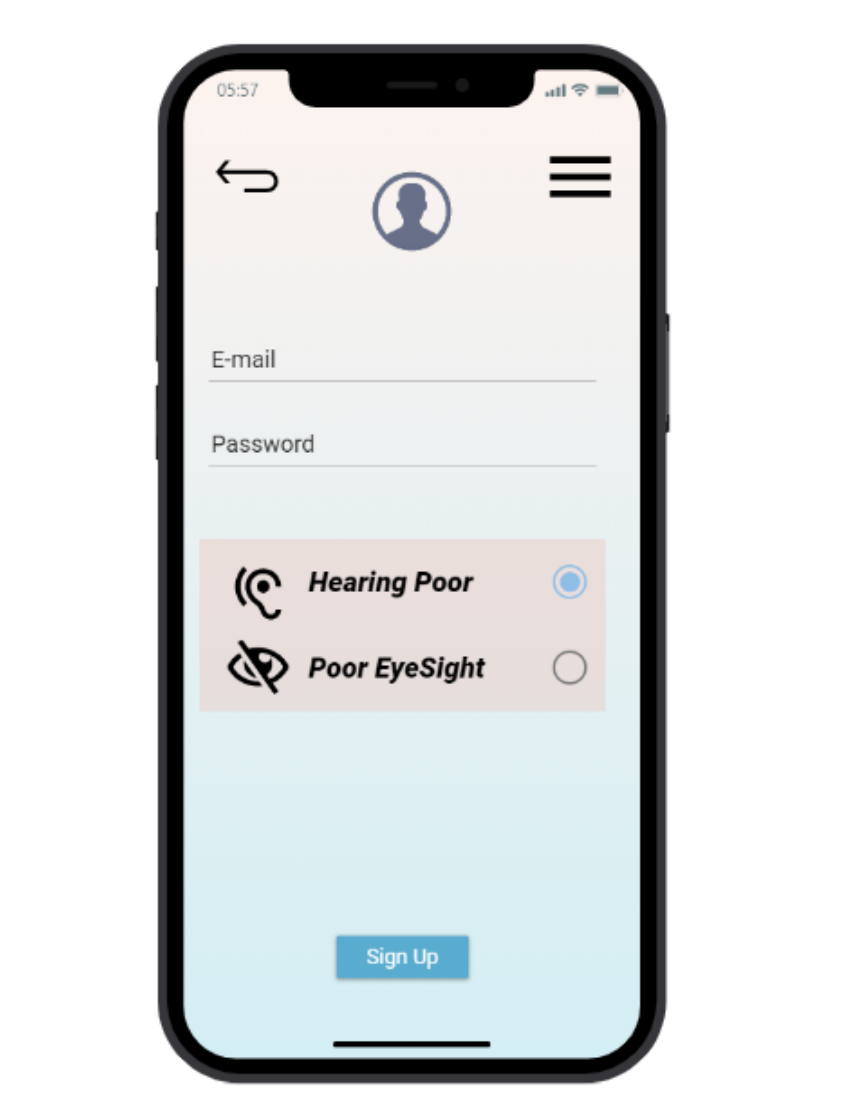
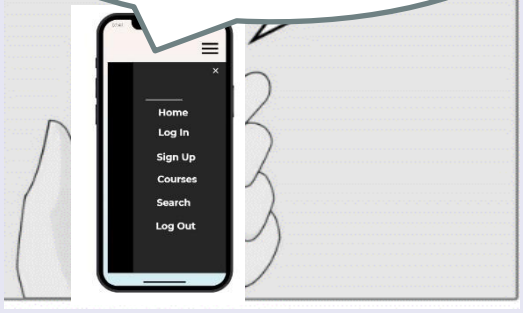


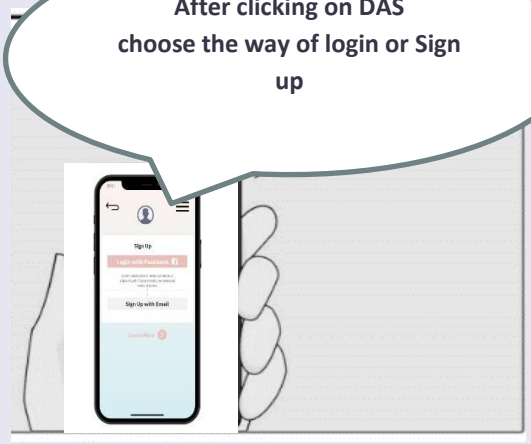
Fig 2 News Page Wireframe

5. Storyboards of the selected design being used in one of your tasks

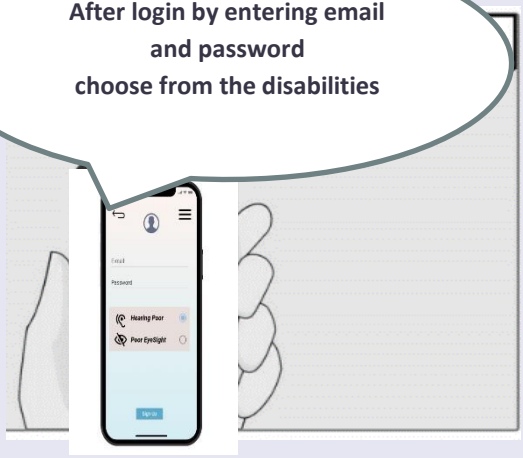
Menu bar
choose the action you want



After clicking on DAS
choose the way of login or Sign up

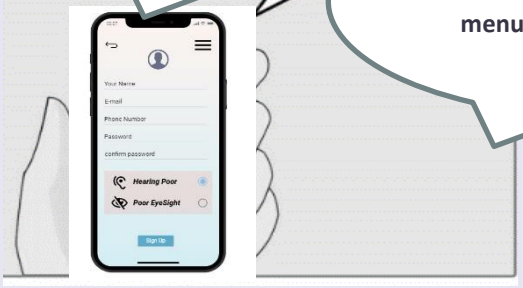


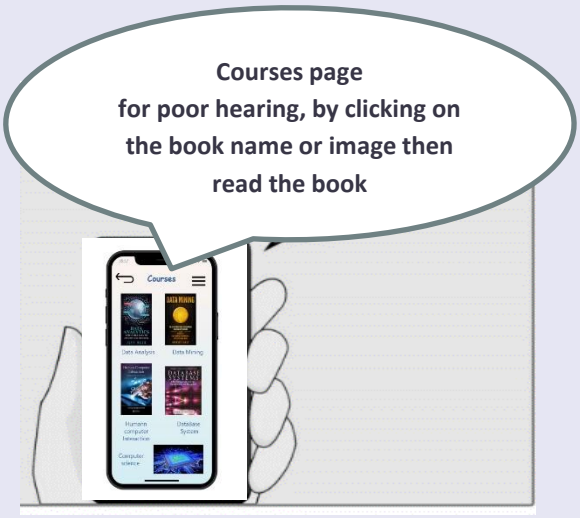
After login by entering email and password
choose from the disabilities

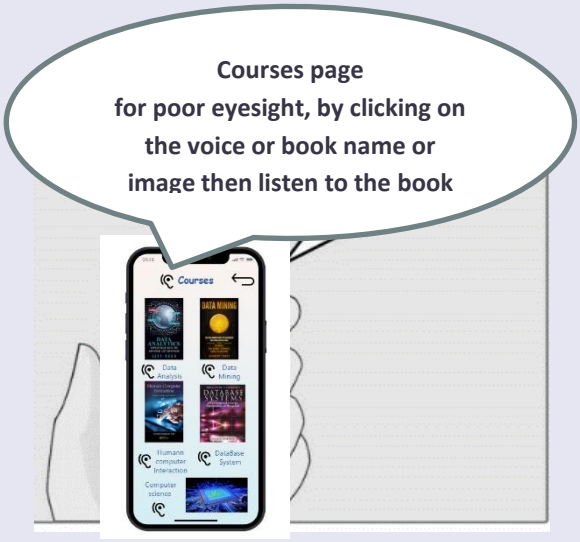


After sign up entering name, email, phone and password
choose from the disabilities

Here, there is arrow back to return to home,
menu bar if you change the action




Courses page
for poor hearing, by clicking on
the book name or image then
read the book
Courses


Courses page
for poor eyesight, by clicking on
the voice or book name or
image then listen to the book
Courses


Wow, this is very cool,
they added excellent
features and they are
easy to use

.

6. Evaluation results

It is intended to be complete specifications of what functionality the admission provides. It will also facilitate keeping all the records of students, such as their id, name, address DOB, etc. So, all the information about a student will be available in a few seconds.

This document is intended for both the end users and the developers of the software. Specific design and implementation details will be specified in a future document. The student registration system has to handle records for many students and maintenance was difficult. Though it has used an information system, it was totally manual. Hence there is a need to upgrade the system with a computer-based information system which is Online educational student with disabilities or challenges system.

In order to satisfy all users, we have taken their opinions and modified them according to their opinion:

1- We work update to system to contain on several translates not English only.
2- We work add more restricted on password written to be more safety.
3- We work news process is efficiently in used but need more type of news (sports, national …etc.).

7. Revisions and refined design sketches

And the change in our location according to them was as follows:
Adding new **icon** to choose what of course do you want if poor eyesight you can click on any voice icon to hear the course name
Process of choose course in our system as below figure:

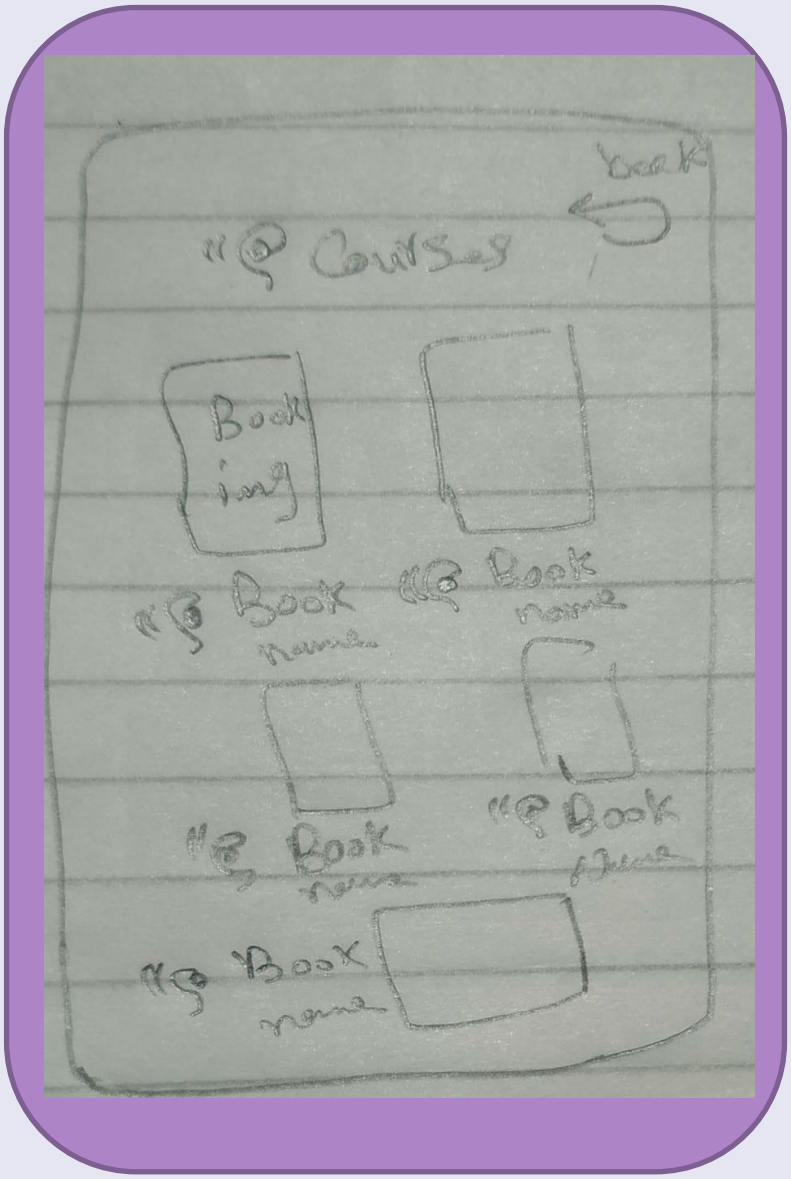


Fig 4 New Courses Page Wireframe

Adding more restricted on password written.
Process of login in our system as below figure:

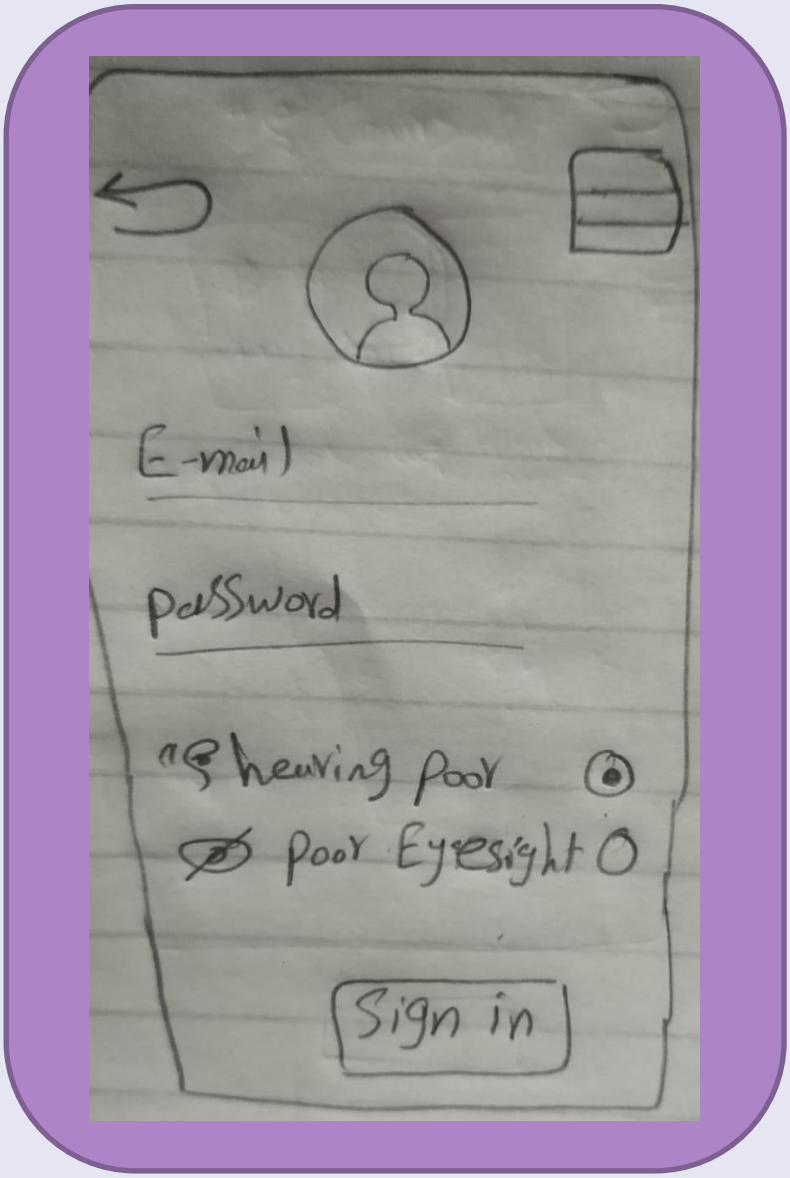


Fig 5 New Login Page Wireframe

Adding new button to choose from menu (home, login …etc.) firstly. Process of Menu in our system as below figure:

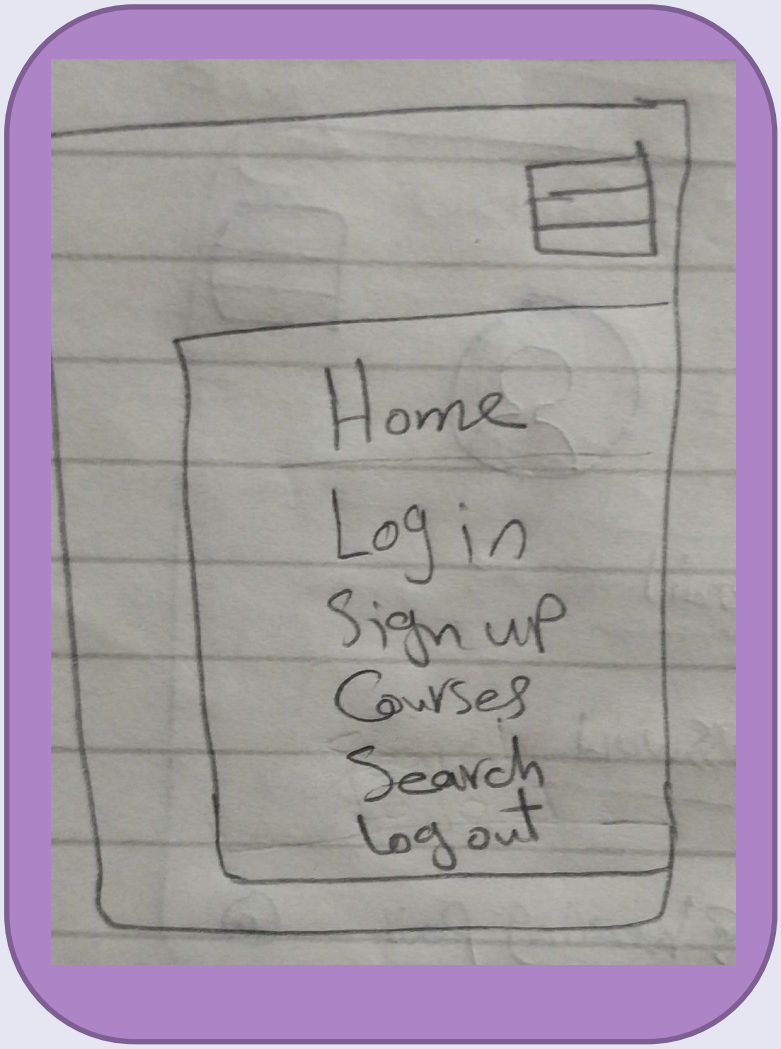


Fig 6 Menu Page Wireframe

8. Raw Data

We get all data from participants as below figure:

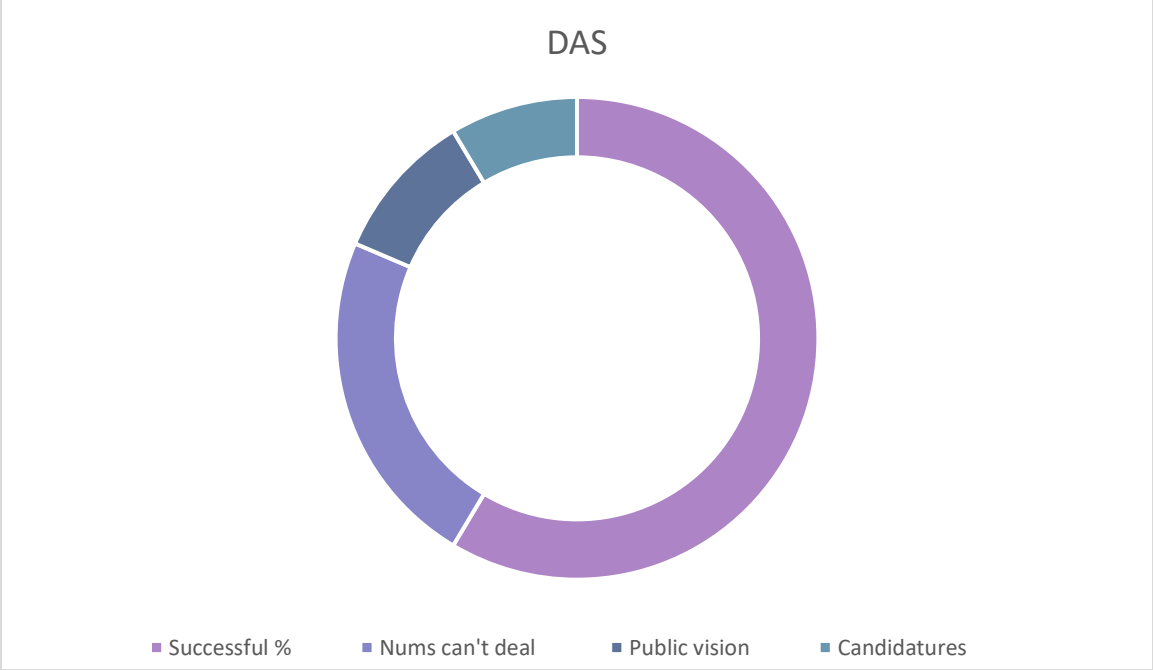


Fig 7 Participant One

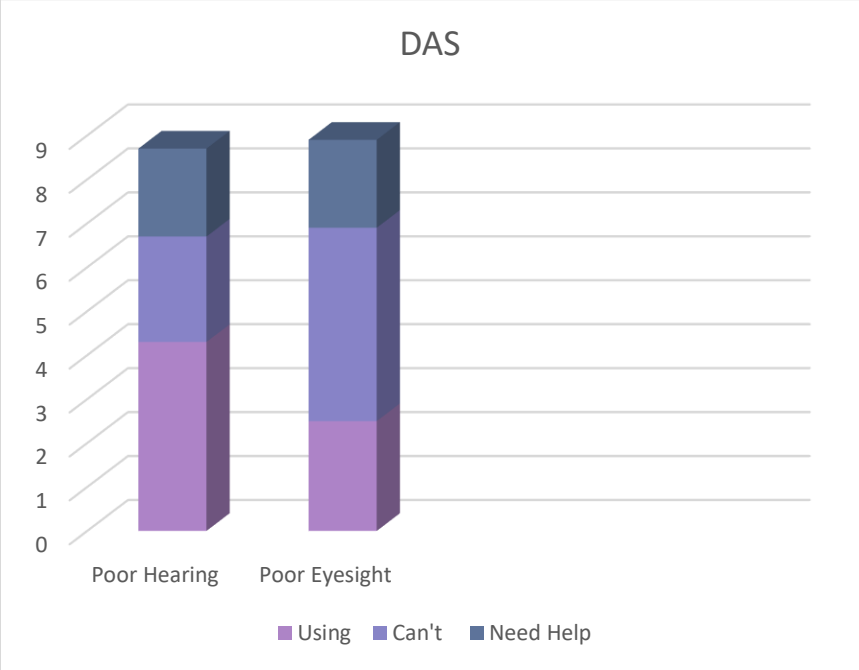
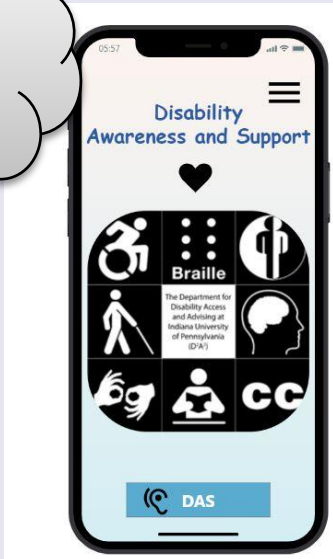


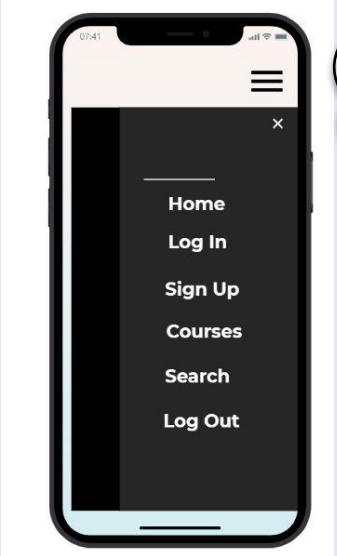
Fig 8 Participan

9. Prototype and Evaluation of prototype

User can use normally the app, and we arrange the steps

Home page
1. Click on
DAS button
or click Menu

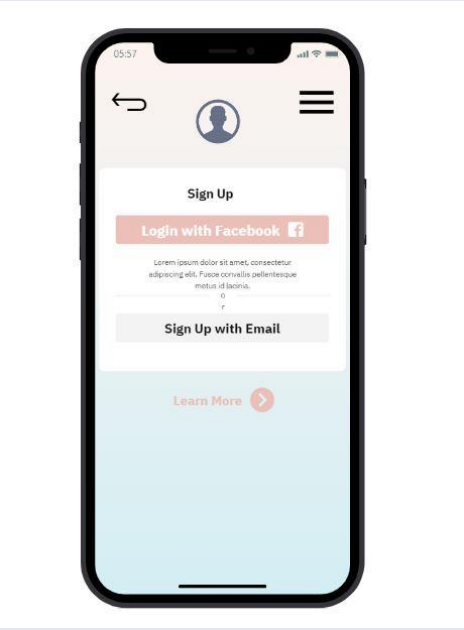


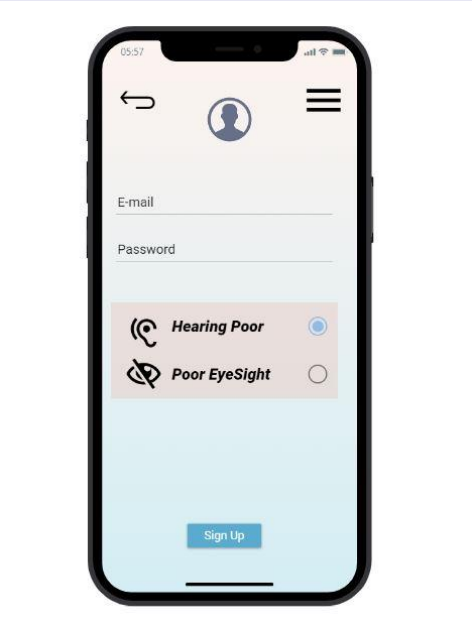


Menu bar
choose the
action you
want

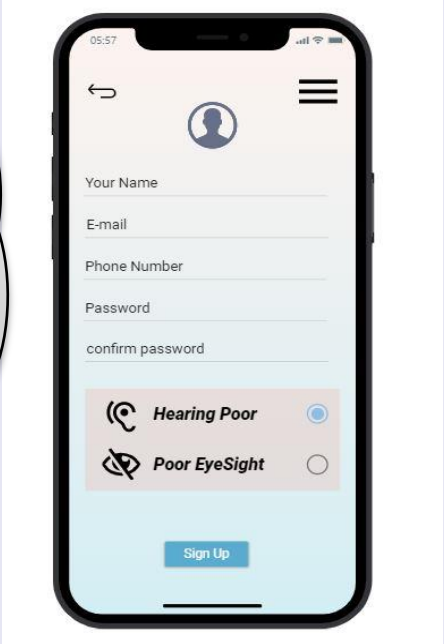
After clicking
on DAS
choose the
way of login
or Sign up

After login by
entering email
and password
choose from
the disabilities





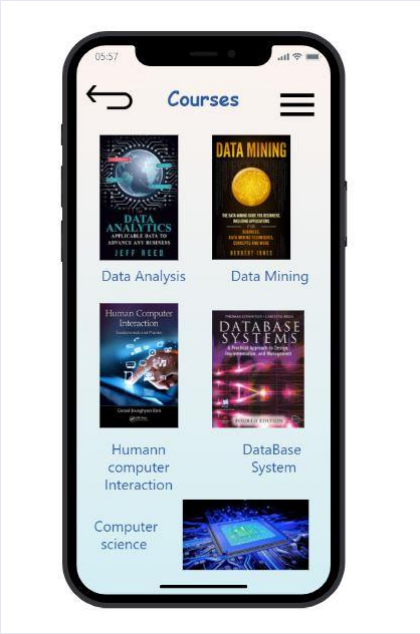
After sign up entering name, email, phone and password choose from the disabilities



Here, there is arrow back to return to home, menu bar if you change the action

Courses page for poor hearing, by clicking on the book name or

Courses page for poor eyesight, by clicking on the



10.Appendix

Forms handed to participants

questions	The deaf	Blind class
What do you think of the login page?		
What do you think of the main page of the application?		
What do you think of the training courses?		

12. References

[1] M.A. Adnan, R. Sugihara, Y. Ma, R. Gupta, Energy-optimized dynamic deferral of workload for capacity provisioning in data centers, in: Proc. of IGCC'13, IEEE, 2013.
[2] F. Ahmad, T.N. Vijaykumar, Joint optimization of idle and cooling power in data centers while maintaining response time, in: Proc. of ASPLOS'10, ACM, ACM, 2010.
[3] Z. Liu, M. Lin, A. Wierman, S. Low, L.L.H. Andrew, Geographical load balancing with renewables, ACM SIGMETRICS Perform. Eval. Rev. 39 (2011) 62–66.
[4] J. Rumbaugh, I. Jacobson, and G. Booch. The Unified Modeling Language Reference Manual. Addison-Wesley, 1999.
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[6] M.A. Adnan, R. Sugihara, Y. Ma, R. Gupta, Energy-optimized dynamic deferral of workload for capacity provisioning in data centers, in: Proc. of IGCC'13, IEEE, 2013.
[7] F. Ahmad, T.N. Vijaykumar, Joint optimization of idle and cooling power in data centers while maintaining response time, in: Proc. of ASPLOS'10, ACM, ACM, 2010.
[8] Z. Liu, M. Lin, A. Wierman, S. Low, L.L.H. Andrew, Geographical load balancing with renewables, ACM SIGMETRICS Perform. Eval. Rev. 39 (2011) 62–66.