# CS355 Databases

# Fall 2019

# Project Proposal

**ConnectHear DBMS**

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# *Submitted to*

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**Introduction**

*ConnectHear is a social entrepreneurial start-up with the aim to connect the deaf community with the society using Sign Language training classes and interpretation services – in-person and via video call and aims to make a positive difference in the lives of millions of Pakistani deaf individuals.*

*The idea is to develop a database system that helps ConnectHear manage their interpreters and allow for customers to book appointments. The application is also to allow the user to book an appointment, based on the available timings of the available interpreters.*

*Each interpreter will have their complete name, sex, age, address, XP, specialty, and date of joining. Each customer/client will have their complete name, age, sex, bank account number, bank name, and phone number. The database will keep a record of past customers with information on which interpreter they got, when they needed the interpreter, what was the purpose, and what was their feedback with that specific interpreter.*

*If a user opens the app for the first time, they’re prompted to register with the following details:*

* 1. *Name*
  2. *Mobile Number*
  3. *Age*
  4. *Gender*
  5. *NIC Number*
  6. *Occupation*
  7. *Address*
  8. *Picture*
  9. *Picture of NIC*

*If they initiate a call:*

* 1. *They are connected to any available interpreter*
  2. *Throughout their session, a timer will be going for us to calculate the charges accordingly.*
  3. *If the total time exceeds the balance of the client, they will be allowed to finish the ongoing call, yet their account balance will be in the negative after that, barring them from making any calls until they top-up again.*
  4. *After every successful call, the user must be able to rate the interpreter.*
  5. *Snippets of the conversations are to be recorded for our future projects requiring that data.*

**Interpreter Workflow for Interpretation:**

1. *The interpreter then has to enter their personally identifiable details.*
2. *After registration, the interpreter will be taken to the default screen of their details and statistics.*
3. *When they receive a call, they can pick it up or decline it, but upon declining, they must be asked the reason to do so and the call should then be routed to some other available interpreter.*
4. *After they finish a call, they must be asked to rate the user, provide a reason for the call.*

**Modules of the System**

1. *Interpreter data look up: A module that allows to look up an interpreter and their relevant details*
2. *Customer directory: A module that will allow to search for any customer and check details for their interactions with the company*
3. *Video playlist: A module that allows to look up any of the company’s videos and provides clickable links for them to view them.*
4. *Booking system: A module allowing for a potential customer to book an interpreter for a given selection of time slots.*
5. *Student records: A module allowing for a quick look at the status of a training class and update student records.*

**Front-end Development**

*The target audience of this Interpreter Booking System will be using it over the internet. This will require a web-based front-end. Going with the traditional approach, we will be using a combination of HTML, CSS, and JavaScript along with some JS libraries and frameworks to develop the front-end of this application. The main objectives of the front-end will be to:*

*1. Provide the end-user with a clean, minimalistic, and intuitive representation of the form.*

*2. Provide appealing visuals to the end-user in order to make it easier for them to use the application.*

**Tools & Technologies**

*Back-end: SQL Server, Python*

*Front-end: C#, Python, Javascript*