
Speech Pathology Application

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Value Proposition

Nearly 8% of children require some sort of speech therapy. The purpose of this project is to provide an inexpensive and visually appealing tool to make therapy and child speech data more accessible.

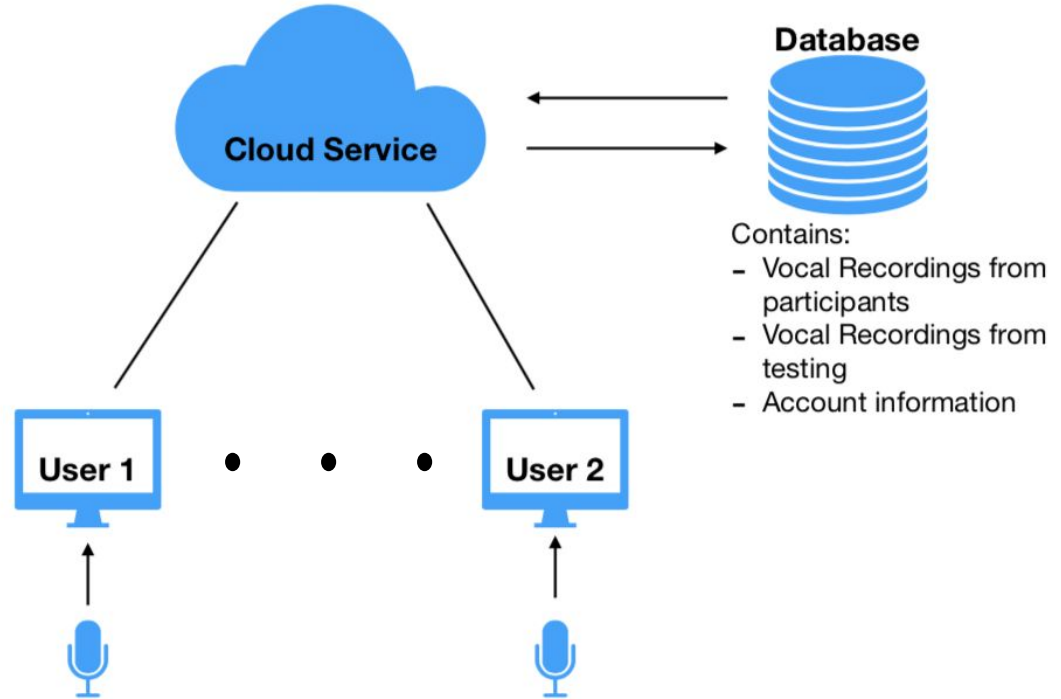


<https://nspt4kids.com/specialties-and-services/speech-language-pathology/>

Problem Definition

Our project consists of the development of a database that securely stores:

1. User account information.
2. Vocal recordings from user.
3. Vocal recordings from training.

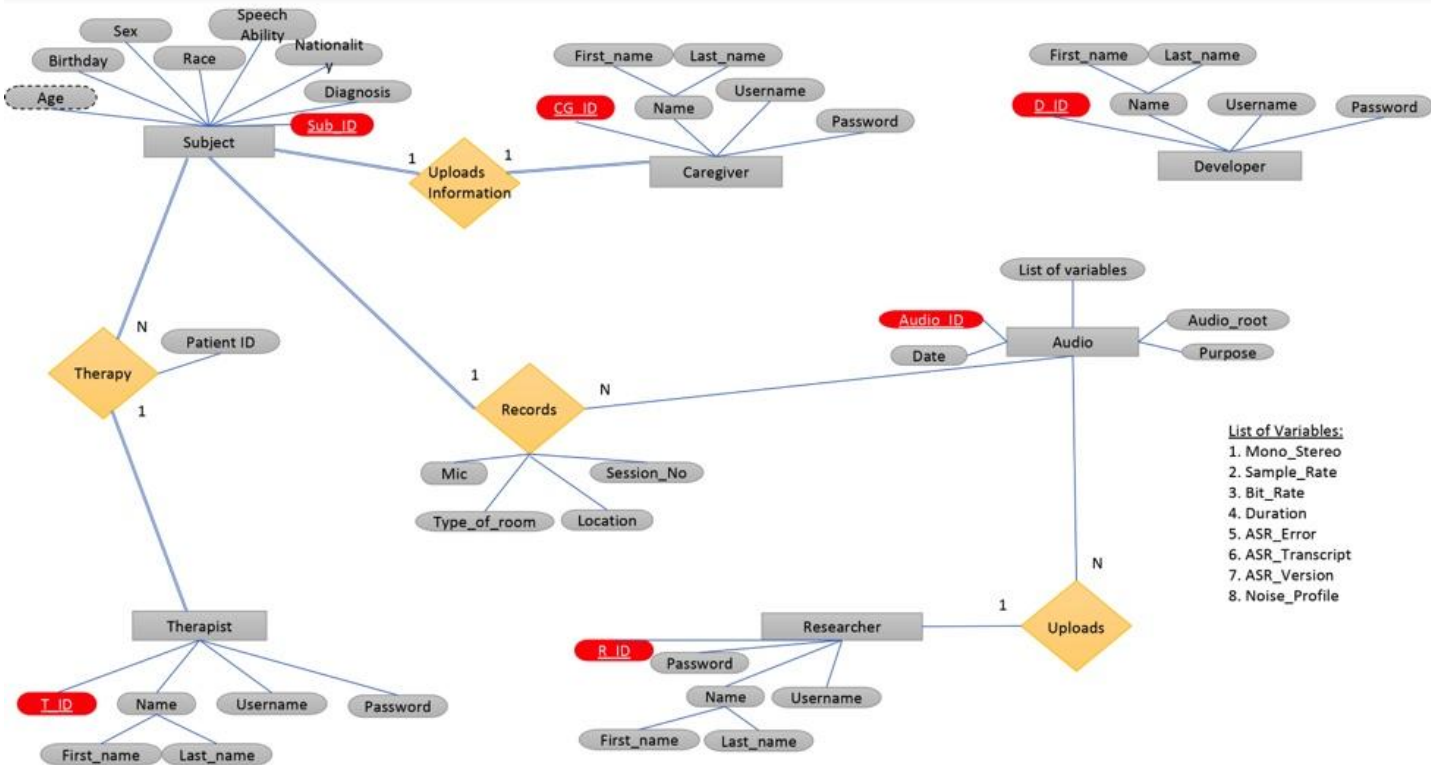


*Note: Can have multiple users.

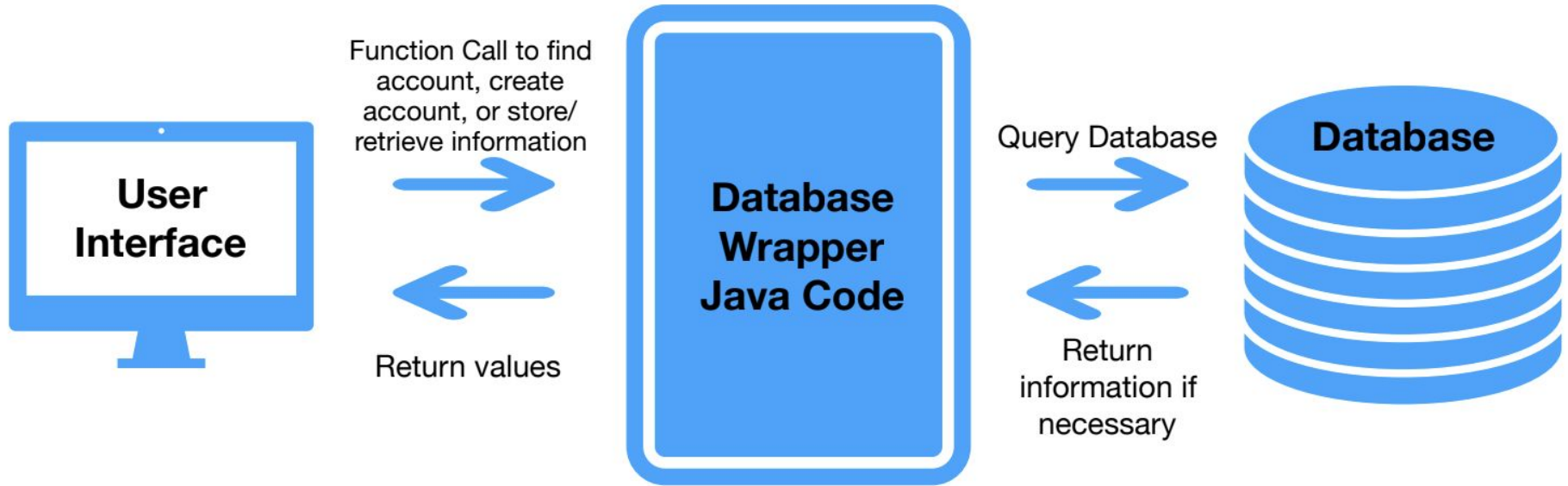
Deliverables

- ◆ Secure database that stores account information and vocal recordings
- ◆ Four different user account types
 - ◆ Therapist
 - ◆ Developer
 - ◆ Researcher
 - ◆ Caregiver
- ◆ Ability to sort and display certain sets of data.
- ◆ Ability for researchers to submit speech data to the database.
- ◆ Ability to port database to different servers.

Database Specifications



Database Wrapper



Database Wrapper Functions

- Connection **getConnection()**
 - Returns connection variable that will be used as parameters for other functions
- void **CreateAccount**(Connection con, String accountType, String username, String password)
- void **CreateCGAccount**(Connection con)
- String **FindAccount**(Connection con, String username, String password)
 - Returns accountType
- ResultSet **Researchers**(Connection con, String DBName)
 - Returns queryResult

Database Wrapper Functions

-ResultSet **Developers**(Connection con, String DBName)
-Returns queryResult

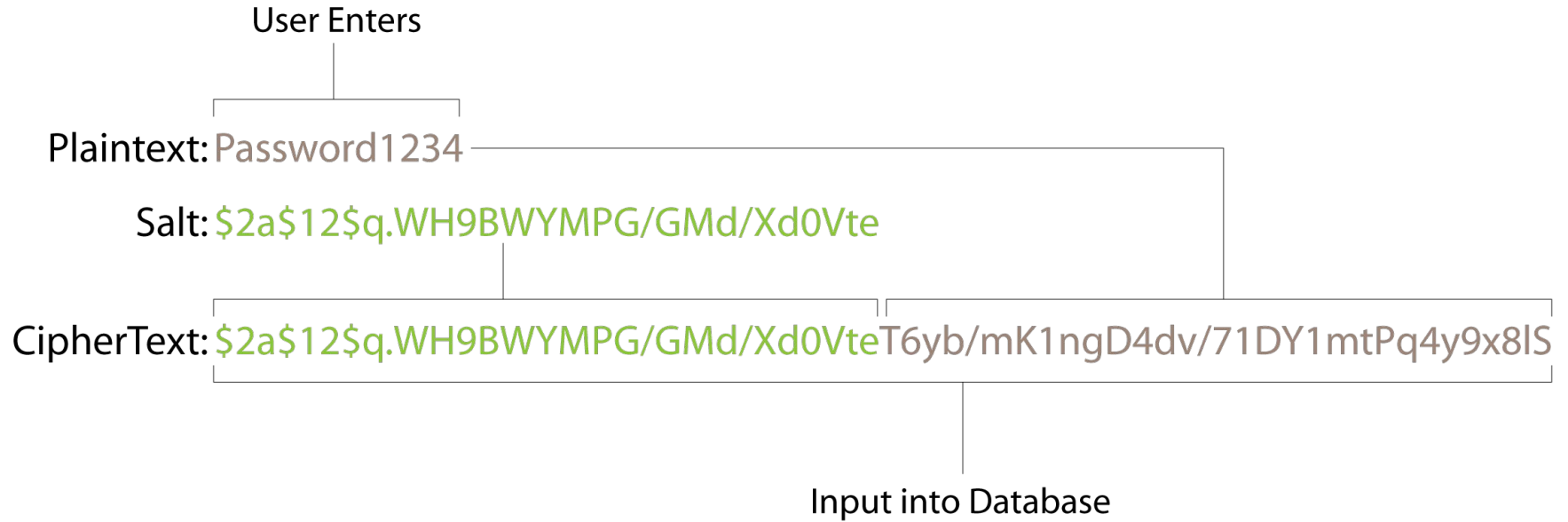
-ResultSet **CareGivers**(Connection con, String DBName)
-Returns queryResult

-ResultSet **Therapists**(Connection con, String DBName)
-Returns queryResult

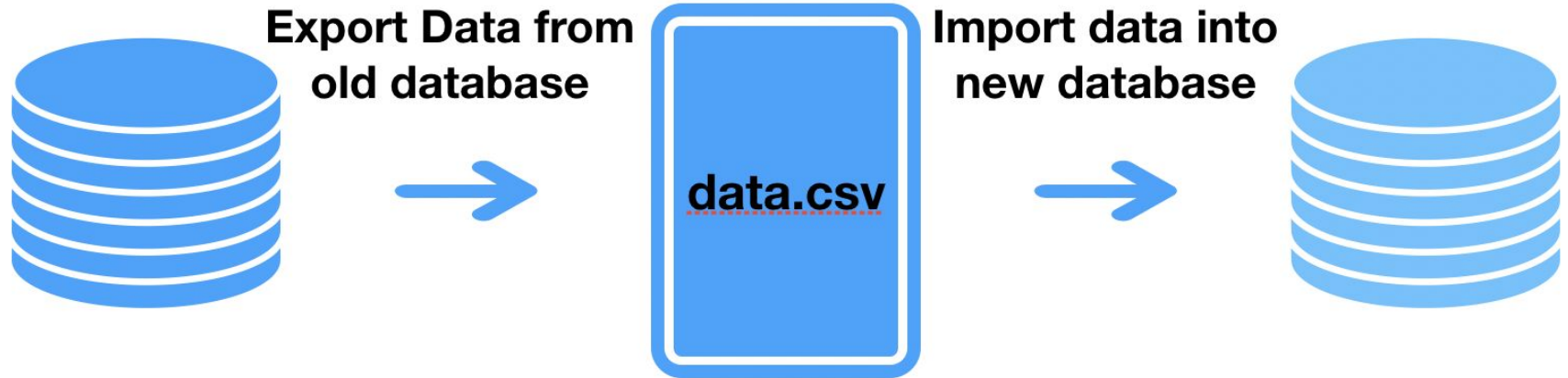
-void **closeConnection**(Connection connection)

-void **CSVCreate**(Connection connection)

Password Hash



Porting



*This is all done in java in the wrapper.
The new database will be implemented
through a script prior to this function

speech-application / database_csv / CareGiver.csv

```
1 cg1,Jessica,Smith,Jessica1,JkTe4Y
2 cg2,Ashley,Johnson,Ashley2,T6T2s4
3 cg3,Emily,Williams,Emily3,d8WqGf
4 cg4,Sarah,Jones,Sarah4,Lc2Vac
5 cg5,Samantha,Brown,Samantha5,KpZ8mr
6 cg6,Brittany,Davis,Brittany6,UeTA3X
```



CareGiver_ID	First_Name	Last_Name	Username	Password
cg1	Jessica	Smith	Jessica1	JkTe4Y
cg2	Ashley	Johnson	Ashley2	T6T2s4
cg3	Emily	Williams	Emily3	d8WqGf
cg4	Sarah	Jones	Sarah4	Lc2Vac
cg5	Samantha	Brown	Samantha5	KpZ8mr
cg6	Brittany	Davis	Brittany6	UeTA3X
NULL	NULL	NULL	NULL	NULL

CareGiver.csv

CareGiver database table

1. CSV files can be opened or edited by any text editors in any computer system like notepad.
2. Any programming language to parse CSV data is trivial, generating it is extremely easy.
3. Importing CSV files can be much faster, and it also consumes less memory.

Budget

Section	Item	Price Allotted
<u>Software</u>	Development	\$0.00
	Cloud VM Service	\$23.00/month
<u>Travel</u>	Hotels/food	\$700
	Rental cars	\$200
<u>Expo Presentation</u>	Poster	\$70

Total Funding	\$3000
Current using	\$0
Funds left over	\$2,030

Schedule

Horsemen of the Epiglottis Schedule																																																																																																															
Project Section	Task	Start Date	End Date	February																											March																											April																											May																										
				1	4	6	8	11	13	15	18	20	22	25	27	1	4	6	8	11	13	15	18	20	22	25	27	29	1	3	5	8	10	12	15	17	19	22	24	26	29	1	3	6	8	10																																																																	
Project Documentation	Detailed Design Review	1/16/2019	2/9/2019																																																																																																												
	Logbook Draft 3	11/9/2018	2/16/2019																																																																																																												
	Portfolio Draft 3	11/9/2018	3/6/2019																																																																																																												
	Wiki Draft 2	11/2/2018	3/6/2019																																																																																																												
	Logbook Draft 4	2/17/2019	4/13/2019																																																																																																												
	Expo Presentation	4/8/2019	4/27/2019																																																																																																												
	Deliverables submitted	5/1/2019	5/4/2019																																																																																																												
Database	Develop database wrapper	1/8/2018	12/12/2018																																																																																																												
	Set privacy levels	2/1/2019	3/20/2019																																																																																																												
	Encrypt passwords	2/1/2019	3/20/2019																																																																																																												
	Import vocal recordings	2/11/2019	3/1/2019																																																																																																												
	Search capabilities for researchers and therapists	3/1/2019	3/29/2019																																																																																																												
	Fully delete account with its information	3/15/2019	4/3/2019																																																																																																												
	Update information capabilities	4/1/2019	4/15/2019																																																																																																												
Testing	Test creation of caregiver account	12/3/2018	12/12/2018																																																																																																												
	Test creation of Therapist account	2/1/2019	2/15/2019																																																																																																												
	Test creation of researcher account	2/1/2019	2/15/2019																																																																																																												
	Test creation of student account	2/1/2019	2/15/2019																																																																																																												
	Test search capabilities	3/4/2019	3/29/2019																																																																																																												
	Test account deletion	3/25/2019	4/3/2019																																																																																																												
	Test information update	4/8/2019	4/15/2019																																																																																																												
	Port database to another server	4/15/2019	5/1/2019																																																																																																												
	Upload other audio files and delete them	4/22/2018	5/1/2019																																																																																																												
School Schedule	Spring break	3/11/2019	3/15/2019																																																																																																												
	Graduation	5/11/2018	5/11/2018																																																																																																												

Any Questions?