### AMAZON TRANSCRIBE MEDICAL

### MARY SHEMNA V.N KTE18MCA039

Department of Computer Applications Rajiv Gandhi Institute of Technology, Kottayam

> Guided By: Prof.SHEREENA THAMPI Asst. Professor Dept. of MCA

> > 15 JUNE 2021

### Overview

- INTRODUCTION
- 2 EXISTING SYSTEM
- PROPOSED SYSTEM
- MODULE DESCRIPTION
- PRODUCT BACKLOG
- **6** SPRINT BACKLOG
- HARDWARE AND SOFTWARE SPECIFICATION
- O DATA FLOW DIAGRAM
- TABLE DESIGN
- **10** FORM DESIGN
- GIT SCREEN SHOT
- **©** CONCLUSION

### INTRODUCTION

- Automatic speech recognition service.
- Transcribes medical terminologies.
- Diverse range of use cases.
- It is HIPAA eligible .
- Data privacy and security.

### **EXISTING SYSTEM**

- It has a medical transcriptionist.
- Responsible for listening to voice record and written reports.
- Very hardworking and time consuming process.
- Chance of losing and errors of data.
- less user friendly.

### PROPOSED SYSTEM

- Automatic speech recognition service.
- it automatically transmit audio to text.
- Easy to manage and maintain.
- Reduce the manual work.
- Easy to retrieve the data and user friendly.

### MODULE DESCRIPTION

- Audio file transcribe.
- Record transcribe.
- Admin panel.

- Audio file transcribe
  - Audio file language
  - speech type
  - patient or case number
  - email address

- Record transcribe
  - Record the voice using start button.
  - Audio file language
  - speech type
  - patient or case number
  - email address

#### Admin panel

- login and registration.
- create and edit patient case number.
- Audio file upload.
- successful results.
- daily transcribe tasks.
- case name with audio file name.
- google analytics.
- Adsense.
- · email services.
- profile setting.

## PRODUCT BACKLOG

SI.No	Description	Priority
1	Data base creation	1
2	Home page creation	2
3	Registration and Login Page creation	3
4	Creation of audio transcribe	4
5	Creation of record transcribe	5
6	Creation of admin session	6

### Sprint-1(31-03-2021 to 09-04-2021)

SI.No	Tasks	Status
1	Find out suitable topic	Complete
2	Data collection	Partially Completed
3	Starting Learning	Partially Completed

### Sprint-2(10-04-2021 to 24-04-2021)

SI.No	Tasks	Status
1	Template creation	Partially Completed
2	Data collection	Partially Completed
3	Table design,DFD,form design	Completed

### Sprint-3(01-05-2021 to 22-05-2021)

SI.No	Tasks	Status
1	Data collection	Partially Completed
2	Registration of doctor	Completed
3	Registration of staff,patient	Completed

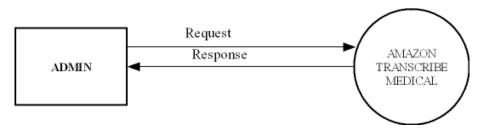
## Sprint-4(24-05-2021 to 14-06-2021)

SI.No	Tasks	Status
1	Data collection	Completed
2	speech recognition	Completed

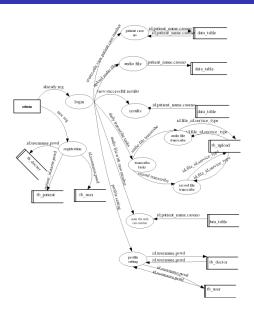
### HARDWARE AND SOFTWARE SPECIFICATION

- Hardware Specification
  - 32-bit or 64-bit
  - 2 GB RAM
  - intel i3.
- Software Specification
  - Operating system: Windows 7 or above.
  - Framework:Django
  - Browser:Any Browser
  - Front-End: Python 3.8.0
  - Backend: MySql

### DATA FLOW DIAGRAM:Level 0



### Level 1



## TABLE DESIGN

### 1.Login\_table

column name	Data type	Constraints
id	int(10)	primary key
username	varchar(100)	not null
password	varchar(100)	not null
type	varchar(100)	not null

### cont..

#### 2.Data\_table

column name	Data type	Constraints
id	int(10)	primary key
patient_name	varchar(255)	not null
case_number	varchar(255)	not null
date	date	not null
doctorname	varchar(250)	not null
audio_file_language	text	not null
rec_duration	varchar(100)	not null
speech_type	varchar(200)	not null
active_status	tinyint(4)	not null
created_at	timestamp	not null
updated_at	timestamp	not null
created_by	int(10)	not null
updated_by	int(10)	not null
medtrans_id	int(10)	foreign key

#### 3.Doctor\_table

column name	Data type	Constraints
id	int(11)	primary key
username	varchar(30)	not null
password	varchar(30)	not null
email	varchar(30)	not null
join_date	timestamp	not null
address	varchar(250)	not null
hospital/management name	varchar(250)	not null
doctor verfid	varchar(15)	not null

## $\textbf{4.patient\_table}$

column name	Data type	Constraints
patient_id	int(11)	primary key
patient_name	varchar(250)	not null
password	varchar(20)	not null
gender	varchar(20)	not null
mobile_number	varchar(30)	not null
day	int(10)	not null
month	varchar(20)	not null
year	int(20)	not null
street_address	varchar(250)	not null
city	varchar(250)	not null
zipcode	int(30)	not null
country	varchar(250)	not null
email	varchar(250)	not null
tset1	varchar(20)	not null
test2	varchar(20)	not null

#### 5.medtran\_table

column name	Data type	Constraints
medtrans_id	int(11)	primary key
org_name	varchar(200)	not null
created_by	tinyint(4)	not null
updated_by	tinyint(4)	not null
created_at	timestamp	not null
updated_at	timestamp	not null

### 6.roles

column name	Data type	Constraints
id	int(11)	primary key
name	varchar(100)	not null
type	varchar(100)	not null
active_status	tinyint(4)	not null
created_by	varchar(255)	not null
updated_by	varchar(255)	not null
created_at	timestamp	not null
updated_at	timestamp	not null
medtrans_id	int(10)	foreign key

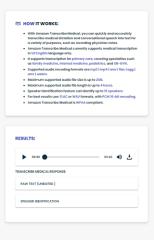
### 7.upload

column name	Data type	Constraints
id	int(11)	primary key
file name	text	not null
file_id	text	not null
service_type	varchar(20)	not null
description	medium text	not null
file size	double	not null
created_at	datetime	not null
client_id	int(11)	not null
user_id	int(11)	not null
uploaded_by	int(11)	not null
deleted	tinyint(11)	not null

#### 8.user

column name	Data type	Constraints
id	int(11)	primary key
full name	varchar(250)	not null
username	varchar(250)	not null
email	varchar(250)	not null
password	varchar(100)	not null
user type	varchar(200)	not null
access_status	tinyint(4)	not null
active_status	tinyint(4)	not null
random_code	text	not null
notification_token	text	not null
rember_token	varchar(100)	not null
created_at	timestamp	not null
updated_at	timestamp	not null
created_by	int(11)	not null
updated_by	int(11)	not null
medtrans_id	int(11)	foreign key
role_id	int(11)	foreign key

#### **DOCTOR REGISTRATION**





### Figure: Doctor Registration

#### **USER REGISTRATION**

#### M HOW IT WORKS:

- With Amazon Transcribe Medical, you can quickly and accurately transcribe medical dictation and conversational speech into text for a variety of purposes, such as recording physician notes.
- Amazon Transcribe Medical currently supports medical transcription in US English language only.
- It supports transcription for primary care, covering specialties such
- as family medicine, internal medicine, pediatrics, and OB-GYN.

  Supported audio encoding formats are mp3 | mp4 | way | floc | ogg |
- Supported audio encoding formats are mp3 | mp4 | wav | flac | ogg amr | webm.
- Maximum supported audio file size is up to 208.
- Maximum supported dudio like size is up to zoe.
- Maximum supported audio file length is up to 4 hours.
  Speaker identification feature can identify up to 10 speakers.
- . For best results use: FLAC or WAV formats, with PCM 18-bit encoding.
- For best results use: FLAC or WAV formats, with PCM is-bit end
- Amazon Transcribe Medical is HIPAA compliant.





#### **PATIENT REGISTRATION**

#### MOW IT WORKS:

- With Amazon Transcribe Medical, you can quickly and accurately transcribe medical dictation and conversational speech into text for a variety of purposes, such as recording physician notes.
- Amazon Transcribe Medical currently supports medical transcription in US English language only.
- It supports transcription for primary care, covering specialties such
- as family medicine, internal medicine, pediatrics, and OB-GYN.
- Supported audio encoding formats are mp3 | mp4 | wav | flac | ogg | amr | webm.
- · Maximum supported audio file size is up to 208.
- Maximum supported audio file length is up to 4 hours.
- · Speaker identification feature can identify up to 10 speakers.
- . For bost results use: FLAC or WAV formats, with PCM 16-bit encoding.
- Amazon Transcribe Medical is HIPAA compliant.





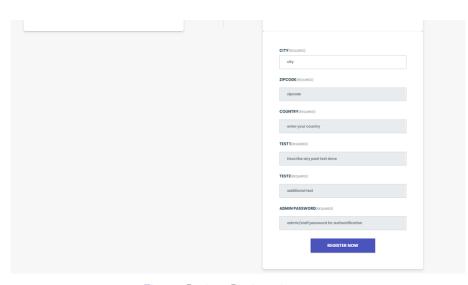


Figure: Patient Registration cont..

AMAZON TRANSCRIBE MEDICAL
ACCOUNT LOGIN
USERNAME
admin
PASSWORD
*****
✓ Remember me
SIGN IN
Login Credentials

Figure: Login

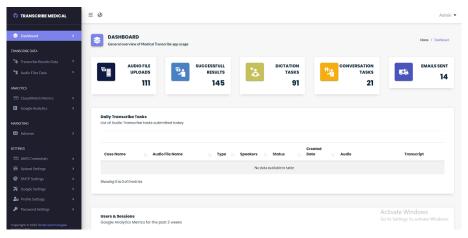


Figure: Dash Board

#### **LAUNCH TRANSCRIBE**

#### **AUDIO FILE TRANSCRIBE**



\*UP TO 2GB OF AUDIO FILES

#### \_\_\_\_\_



UP TO 4 HOURS OF AUDIO FILE LENGTH

Figure: Audio File Home Page

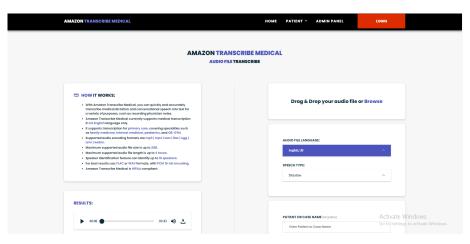


Figure: Audio File Upload Page

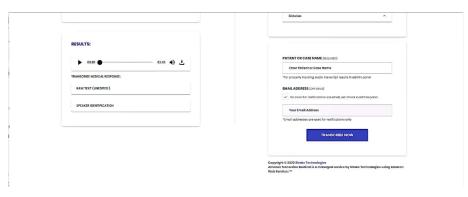


Figure: cont..

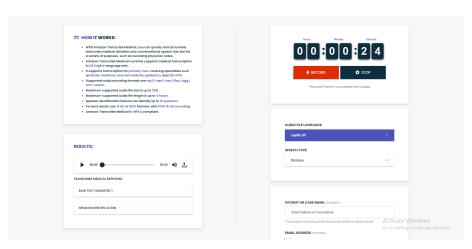


Figure: Record File Upload Page



Figure: cont..

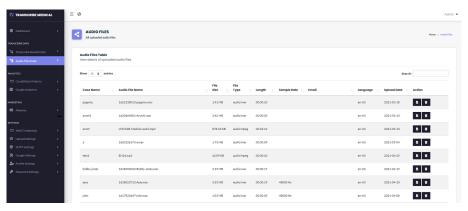


Figure: Audio file upload

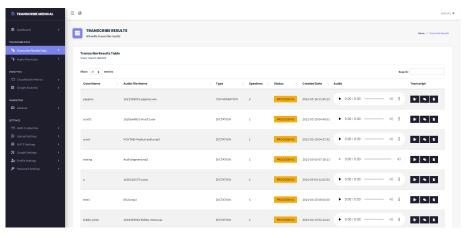


Figure: Transcribe Results

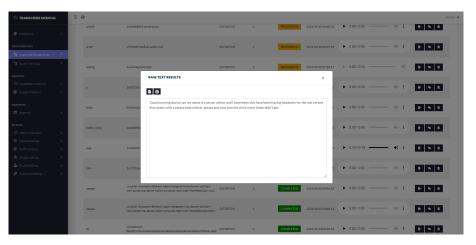


Figure: Raw Text Results

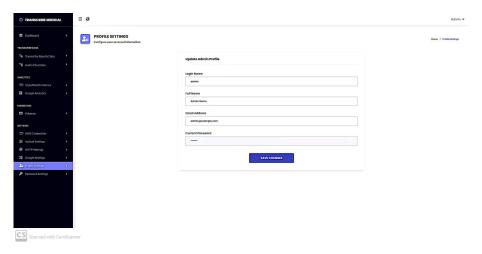


Figure: Profile setting

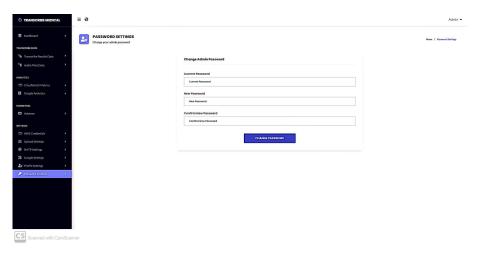
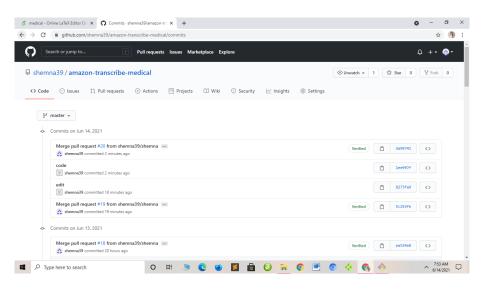


Figure: Password setting

### **GIT SCREEN SHOT**



### CONCLUSION

- Reliable software.
- It accurately transmit the medical terminologies.
- Manage the works of a medical transcriptionist.
- Provide easy maintenance and security .
- Efficient utilization of time.

# The End