UE18CS390A – CAPSTONE PROJECT APPROVAL

Intelligent Voice Interface For PESU

Project ID: PW23_PB_01
Project Guide: Prof. Priya Badrinath
Project Team: BRO code!

Introduction

- **Voice control is a major growing feature that is changing the way people live**
- **(**from smart homes to smart tv to smart phone we have voice control**)**

- Problems With Website and App Include

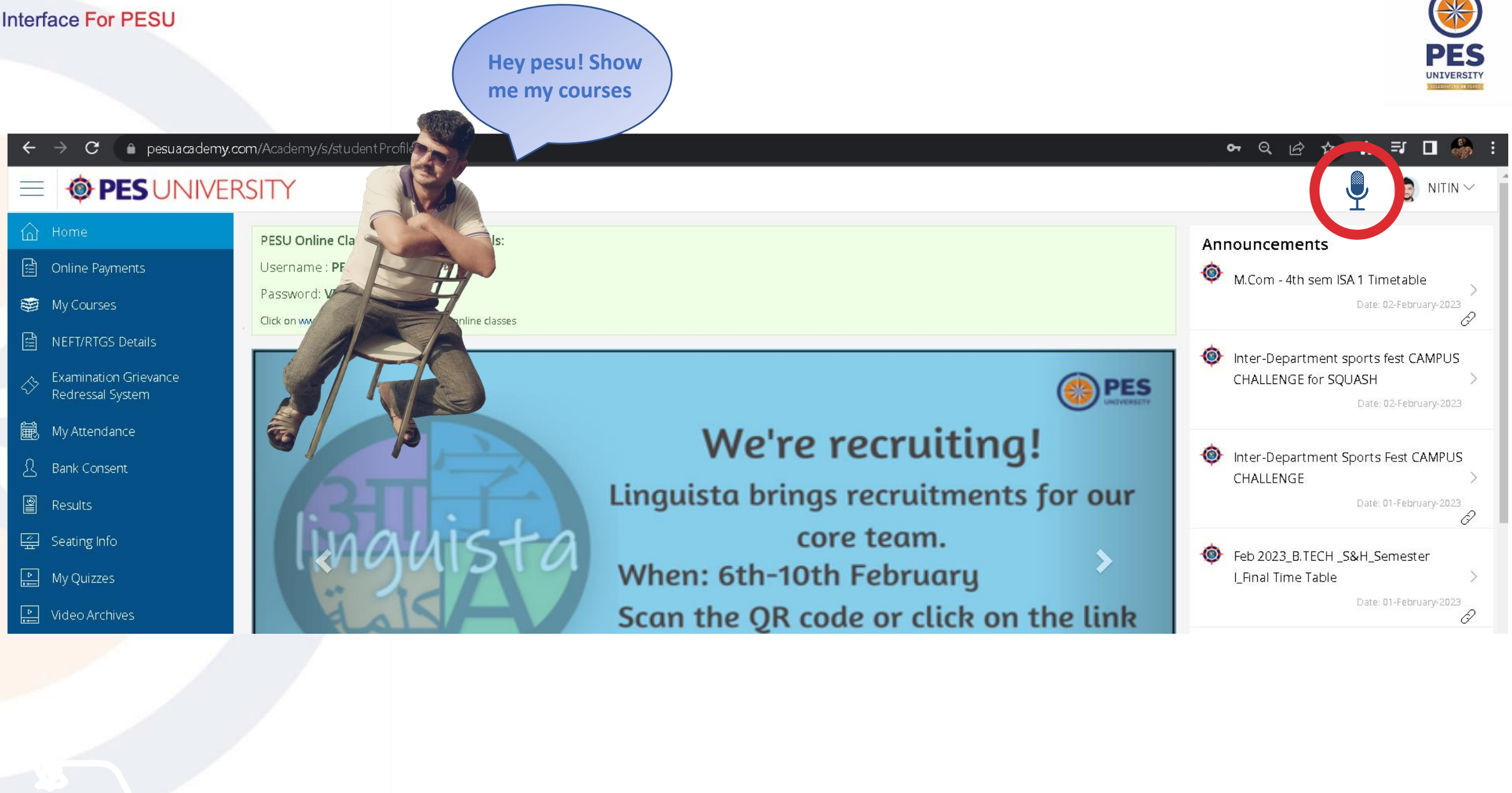
1. Have to Login After timeout or After Session Ends
2. Interface Lags
3. Experience Downtime
4. Too much process to go through to get the desired result
5. Old school(voice assistants are cooler)

Applications

1. Login using account credentials
2. Fetch Courses, ISA Results ,Attendance ,Notifications etc.
3. Gives All kind info of particular student.
4. Plays AV Summaries

- **Apart From Academics It can also be used as personal Voice Assistant**

Voice Interface For PESU



Result we will get!!!

Your courses are

PES UNIVERSITY

NITIN

- Home
- Online Payments
- My Courses
- NEFT/RTGS Details
- Examination Grievance Redressal System
- My Attendance
- Bank Consent
- Results
- Seating Info
- My Quizzes
- Video Archives
- Caler

My Courses

Select Semester: Sem-6

Course Code	Course Title	Course Type	Status	Action
UE20CS336	Digital Forensics	EC	Enrolled	
UE20CS346	Information Security	EC	Enrolled	
UE20CS351	Cloud Computing	CC	Enrolled	
UE20CS352	Object Oriented Analysis & Design with Java	CC	Enrolled	
UE20CS353	Compiler Design	CC	Enrolled	

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KEY FEATURES

Scope

1. Easier access to PESU resources
2. Get The Latest Information about academics
3. Detect and respond to Owner Only
4. Tap talk and get wherever you wish in PESU academy
5. Personal voice assistant for students

Capstone-I deliverables

Requirements needed:

1. Python programming language
2. Speech to text API module
3. Speech Learning algorithm using NLP

Detailed Implementation Plan :

We are waiting for the panel to accept our project, then only we can make detailed plan for everything

Database Design :

We will create a dummy database from scratch to work with our front and backend or we will ask Respected chairperson to provide us one that we use for our college to make our project more compatible with **PESU!!**

Modules Used :

We will be using python module ( ) to work with voice learning algo and google text to speech for voice recognition(as it supports English very well and is open source).

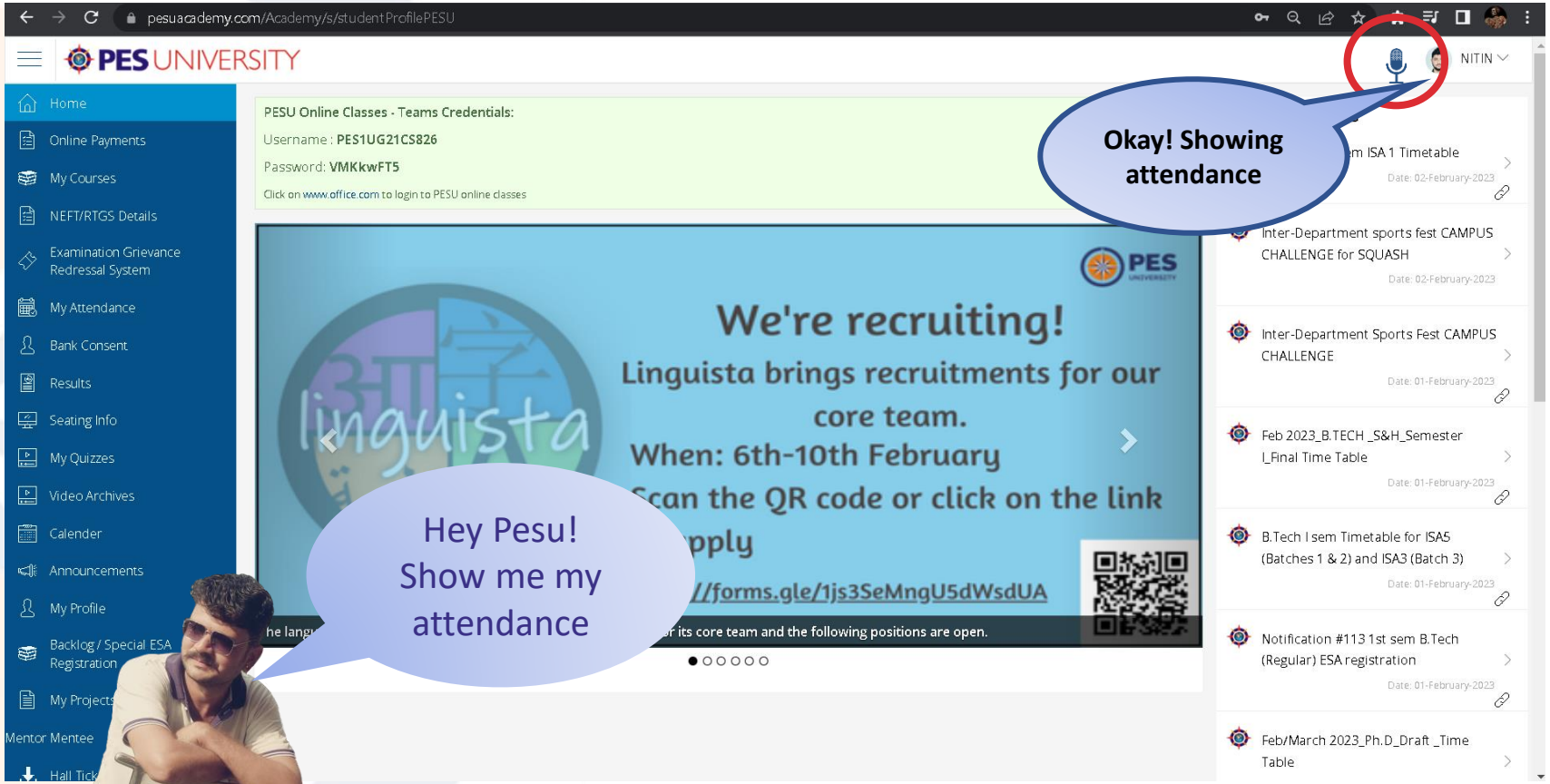
Capstone II deliverables

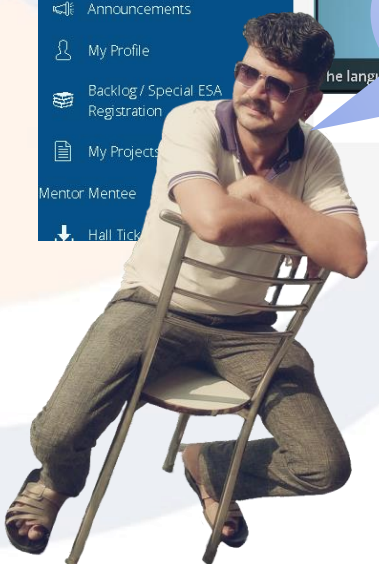
1. End Product will be made
2. Documentations of everything will be done i.e. srs and report making will be done
3. Research Papers will be made and published
4. Database Documentation will also be done
5. Monitoring and Control of Documents will be as having CIA triad in mind

Challenges we are going to face :

1. Biggest Threat to our project is Maintaining Student Data And their Privacy
2. The algorithm should work properly while its phase for learning of one's voice
3. Proper authentication is tough to implement as it may hamper the key features
4. Making The assistant understand between similar sounding words
5. The vastness of project and promise of deliverables itself
6. PESU Should allow us to Scrap www.pesuacademy.com/Academy/ Website for it to be implemented for pesu academy portal

Some examples how things will be after we implement this to pesu academy





Voice Interface For PESU

Your attendance is !!

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My Attendance

Select Semester: Sem-6

Course Code	Course Name	Total Classes	Percentage(%)
UE20CS336	Digital Forensics	7/10	70
UE20CS346	Information Security		80
UE20CS351	Cloud Computing		75
UE20CS352	Object Oriented Analysis & Design with Java		64
UE20CS353	Compiler Design		

Ohh! Thanks to this assistant now I know how much attendance I have

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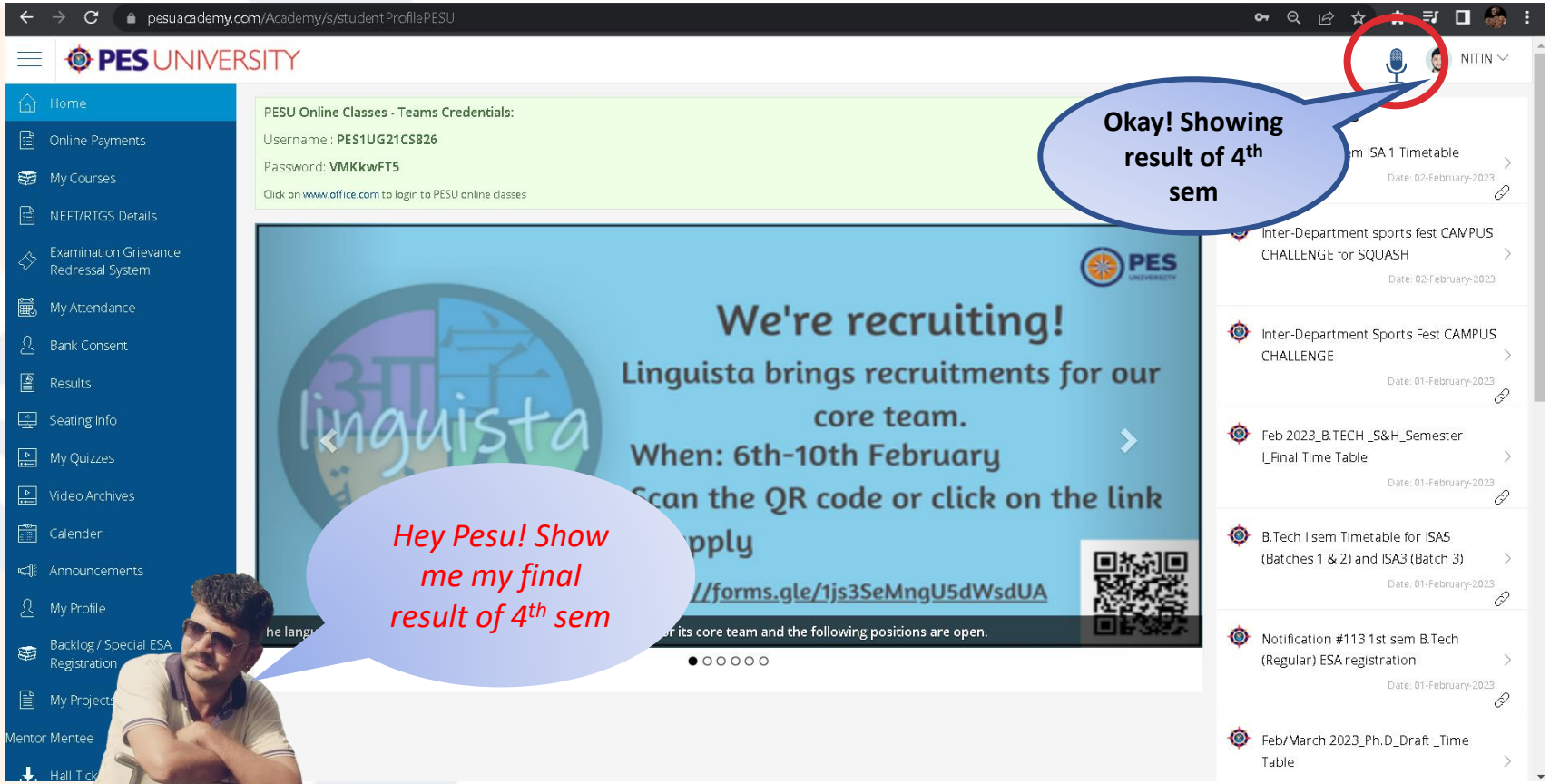

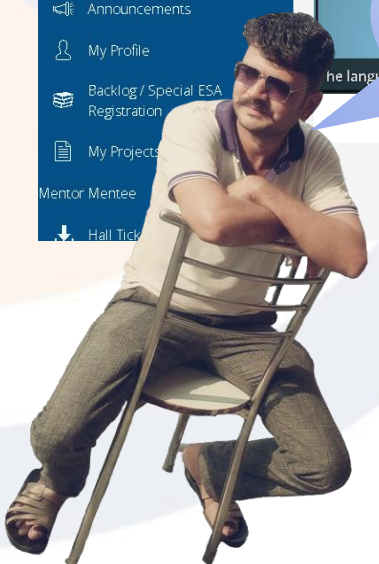

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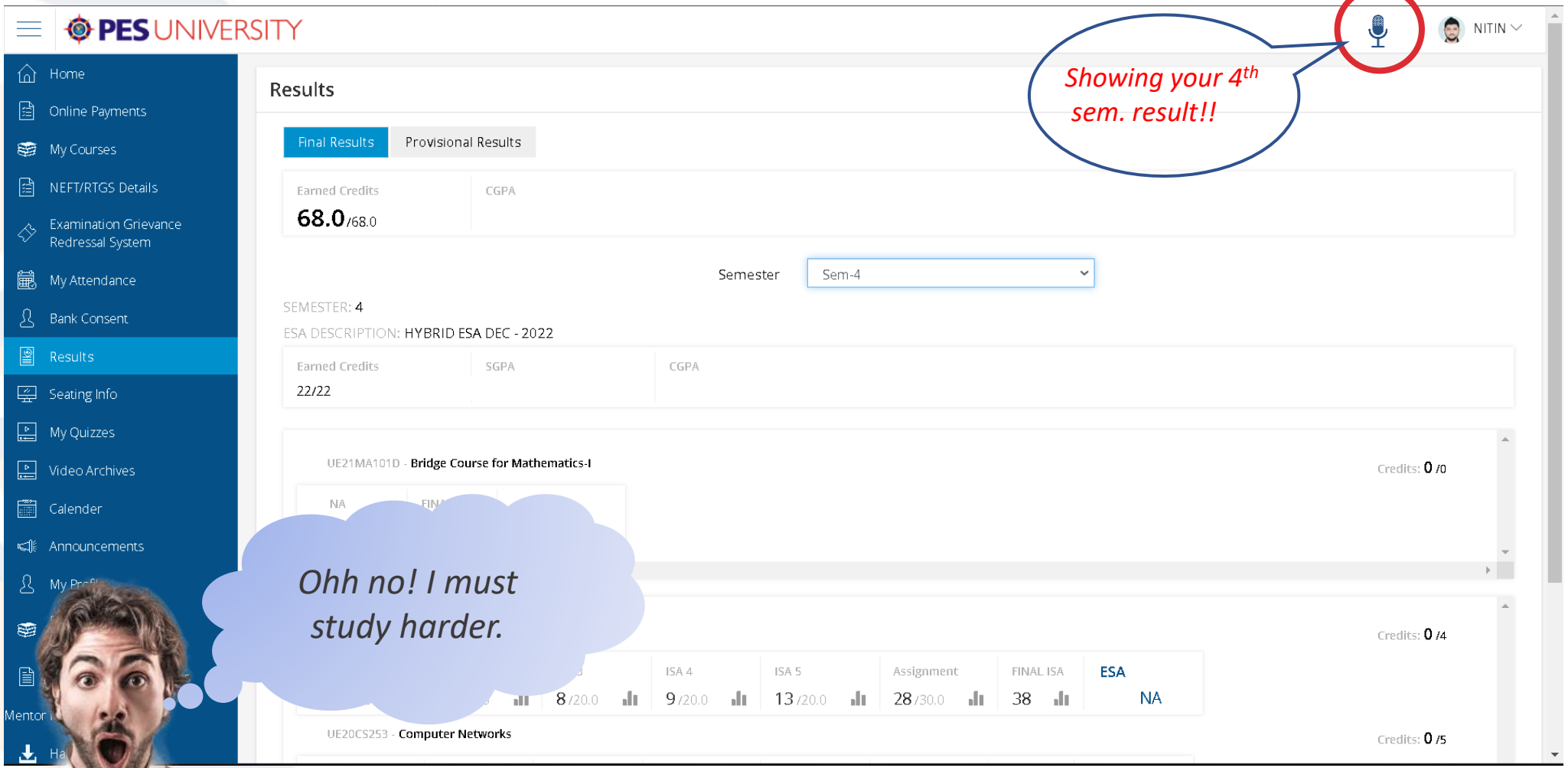

These are few features ,once with start the implementation we will add few more features.

- **Thank you !!**

- Nitin Gaurav
- Arya Girigoudar
- Vishnu Patgar
- Ankit Borker