Geethanjali College of Engineering and Technology (Autonomous)

Accredited by NAAC with A^{+} Grade; B.Tech. CSE, EEE, ECE accredited by NBA

Sy. No: 33 & 34, Cheeryal (V), Keesara (M), Medchal District, Telangana – 501301

Annexure-5.6

Innovation in Teaching

S.NO	Name of the faculty	Methodology
1	V.Sravanthi	Musical Experience and Peer Discussion
2	S. Durga Prasad	Flipped learning
3	Dr. A. Hariprasad Reddy	Flipped learning
4	A.SrinivasRao	Hacker rank
5	Dr. A Sree Lakshmi	Google Classroom
6	M Swapna Rani	Quizizz and Peer Discussions
7	Dr.NehaNandal	Flipped learning
8	P Ushasree	Case Study

Faculty Name: V.Sravanthi

Subject : Theory of Computation

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE-F

Title: “Compiler Design as a Musical Experience"

Introduction:

Teaching compiler design can sometimes be challenging due to its technical complexity. To make learning more engaging and interactive, we introduced an **innovative teaching method** where students **present compiler phases through a song**. This approach **blends music with learning** to improve retention and interest in the subject.

Concept:

- The entire **compiler design process (Lexical Analysis, Syntax Analysis, Semantic Analysis, Intermediate Code Generation, Optimization, and Code Generation)** is broken down into **verses** of a song.
- Students **collaborate to create lyrics** that explain each phase in a simple and rhythmic manner.
- The song follows a structured format, making it **fun and memorable** for everyone.

Implementation Steps:

1. **Divide Students into Groups** – Each group focuses on one phase of the compiler.
2. **Create Lyrics** – Students compose simple, catchy lyrics explaining the phase's role and function.
3. **Add a Tune** – The song is set to a familiar melody or a simple beat.
4. **Practice & Perform** – Students rehearse and present the song in class.
5. **Discussion & Reinforcement** – After the performance, the instructor discusses key takeaways and clarifies doubts.

Benefits:

✅ **Engagement & Creativity** – Encourages students to think outside the box.

✅ **Better Retention** – Rhythm and melody help in memorizing technical concepts.

✅ **Collaborative Learning** – Teamwork fosters a deeper understanding.

✅ **Enjoyable Learning Environment** – Reduces stress and makes compiler design fun!

This approach transforms a traditional lecture into a **dynamic, participatory, and memorable learning experience**, aligning with modern pedagogical strategies for B.Tech students.







Faculty Name: V.Sravanthi

Subject : Theory of Computation

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE-A

Title: Interactive Analytical Discussion on Turing Machines: Benefits & Drawbacks

Introduction:

Teaching **Theory of Computation (TOC) machines** (such as Finite Automata, Pushdown Automata, and Turing Machines) can be challenging for students due to their abstract nature. To make learning more **interactive and engaging**, an **innovative teaching approach** is introduced where a few students compare different TOC machines, while the rest of the class participates in a discussion on their benefits and drawbacks.

Methodology:

- **Role-Based Debate:** Assigned roles each machine
- **Case Study Analysis:** Provide examples where Turing Machines concepts are applied (e.g., modern computation, AI) to link theory with practical applications.
- **Mind Maps &Infographics:** Encourage students to present their discussions visually through diagrams, charts, or short presentations.

Outcomes:

- Deeper conceptual understanding through peer discussion.
- Improved critical thinking and problem-solving skills.
- Engagement through interactive and student-led learning.


Introduction:
GPS Map Camera
Hyderabad,Telangana,India
Cheeryal, Hyderabad, Telangana 501301, India
Lat 17.520943, Long 78.630940
03/26/2025 10:08 AM GMT+05:30
Note : Captured by GPS Map Camera


Introduction:
GPS Map Camera
Hyderabad,Telangana,India
Cheeryal, Hyderabad, Telangana 501301, India
Lat 17.520943, Long 78.630940
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Note : Captured by GPS Map Camera

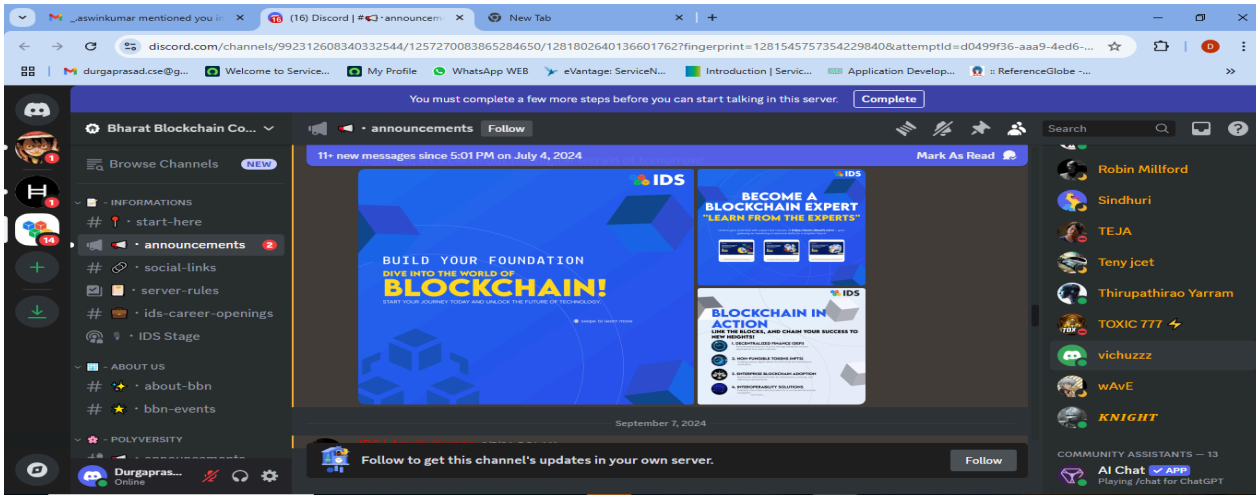
Faculty name: S. Durga Prasad

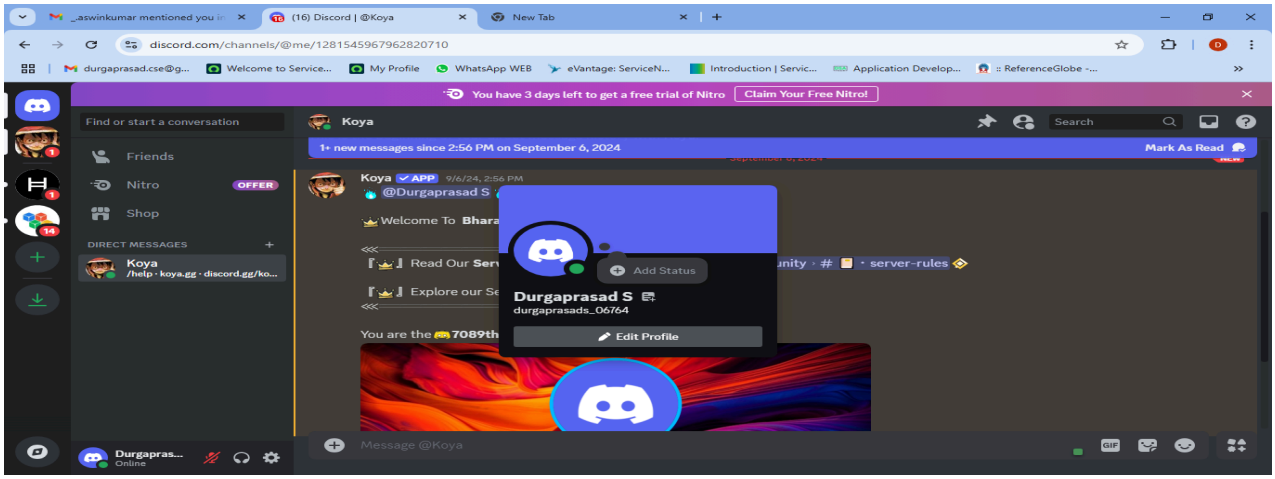
Flipped Classroom

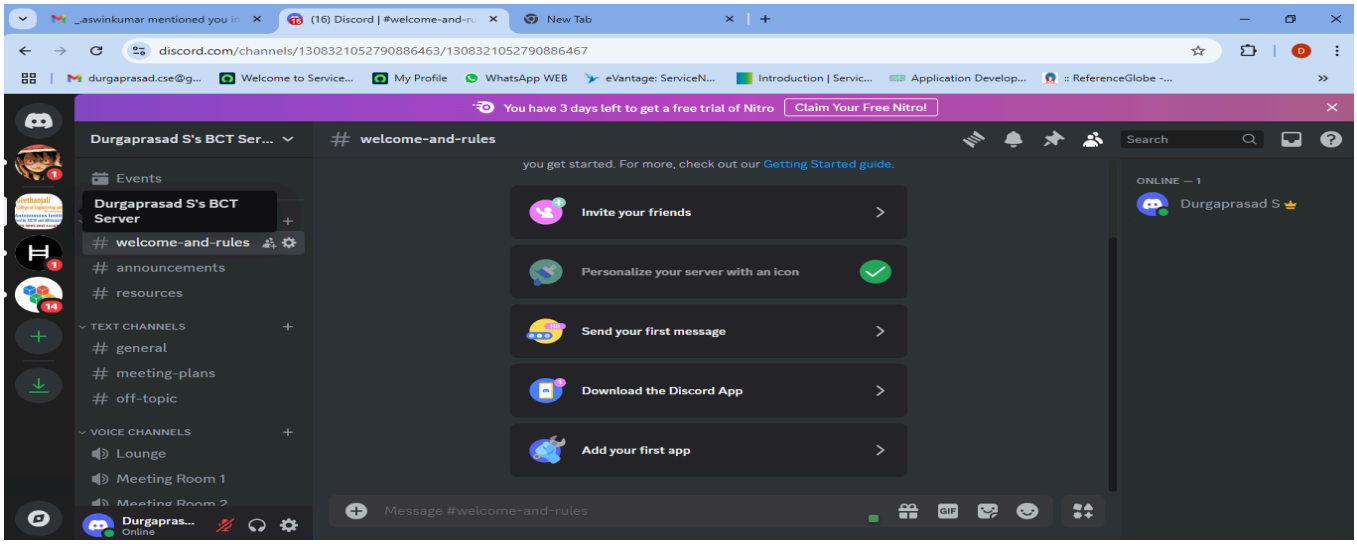
Assigned readings, videos, or podcasts for students to review at home, and used classroom time for discussions, activities, and problem-solving using Bharat BlockChain Network

This method encouraged active learning and allows for more in-depth exploration of REALTIME topics during class.

Students participated and experienced simulated smart contacts using this Bharat BlockChain .



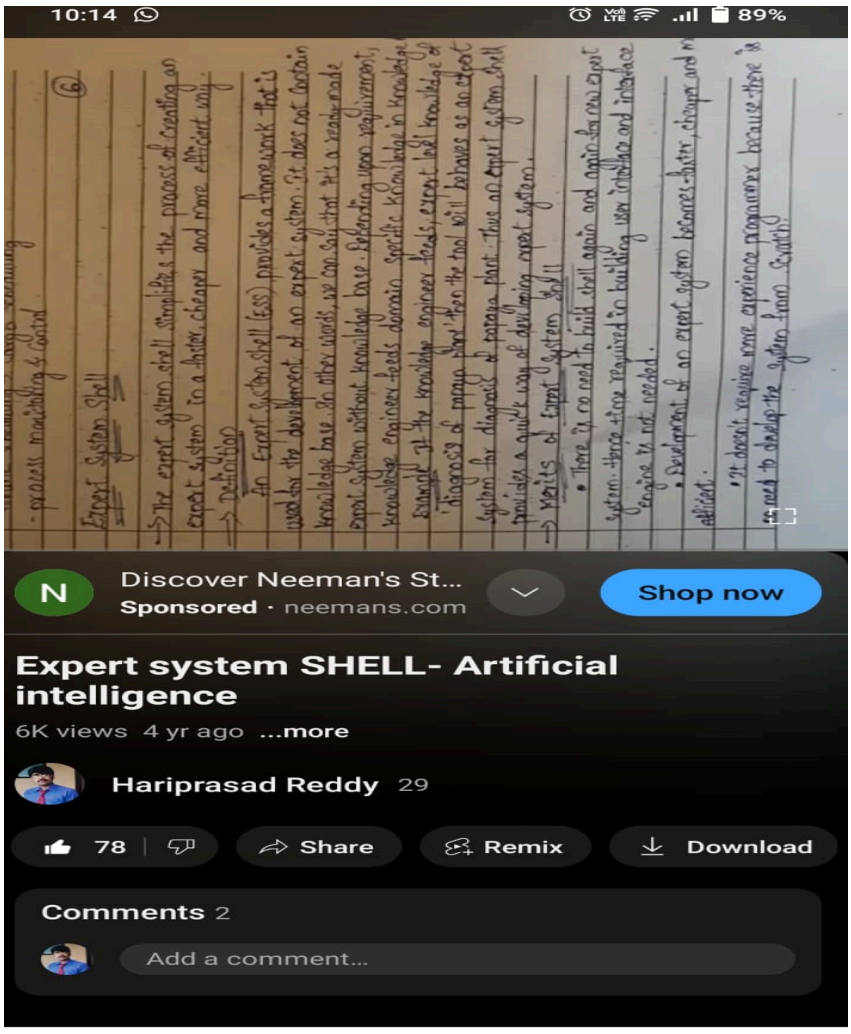



discord.com/channels/1308321052790886463/1308321052790886467
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Claim Your Free Nitro!
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off-topic
VOICE CHANNELS
Lounge
Meeting Room 1
you get started. For more, check out our Getting Started guide.
Invite your friends
Personalize your server with an icon
Send your first message
Download the Discord App
Add your first app
Message #welcome-and-rules
ONLINE — 1
Durgaprasad S


BHARAT BLOCKCHAIN NETWORK
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Bharat Blockchain Yatra
ORGANISED BY
IDS
POWERED BY
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S1 2023
Bharat Blockchain Yatra
Making Bharat a Blockchain Leader!
A series of mega blockchain events aimed to make blockchain from Hype to Reality through it's adoption in India.
25+ Events | 18+ States in India | August 2023 to February 2024.
Summits | Bootcamps & Hackathons | Round table discussions
| Business Pitches & Launchpad | Awards
START

Faculty name: Dr. A. Hariprasad Reddy

In my flipped learning, I suggest students watch my online videos (YouTube) Or other online learning material at home, freeing up class time for more interactive and hands-on activities.

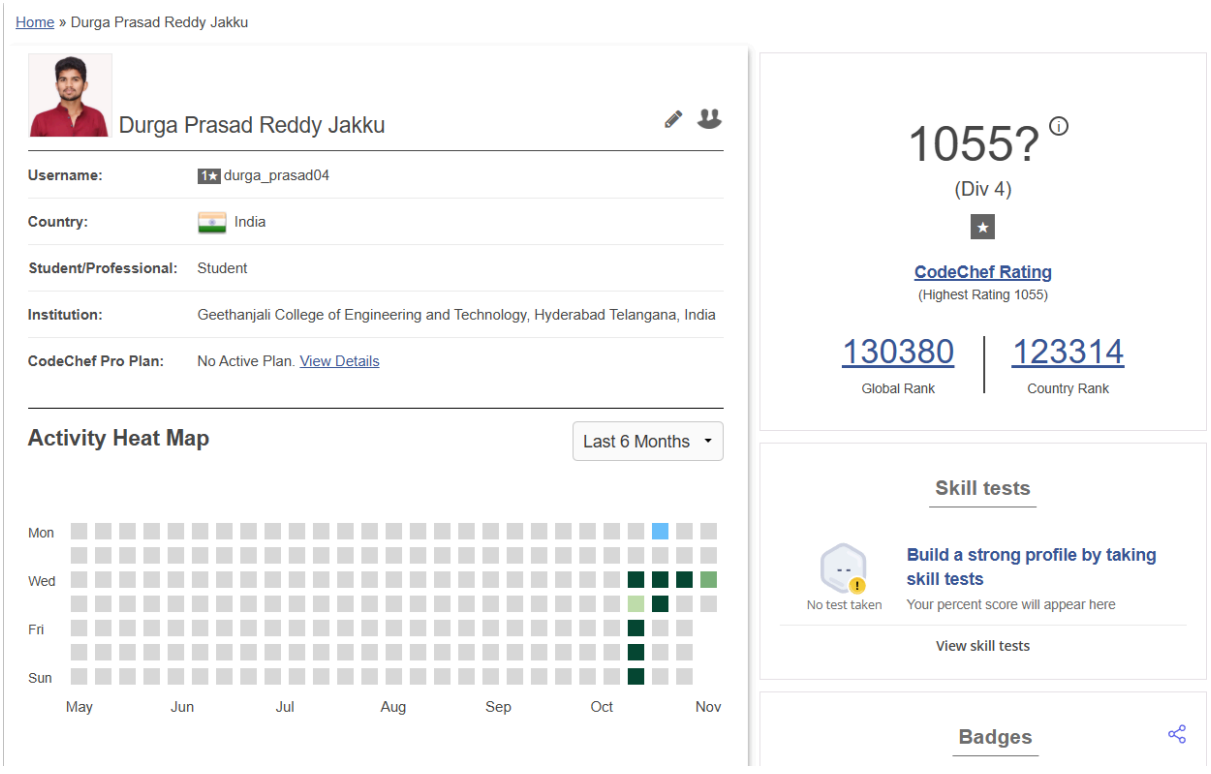


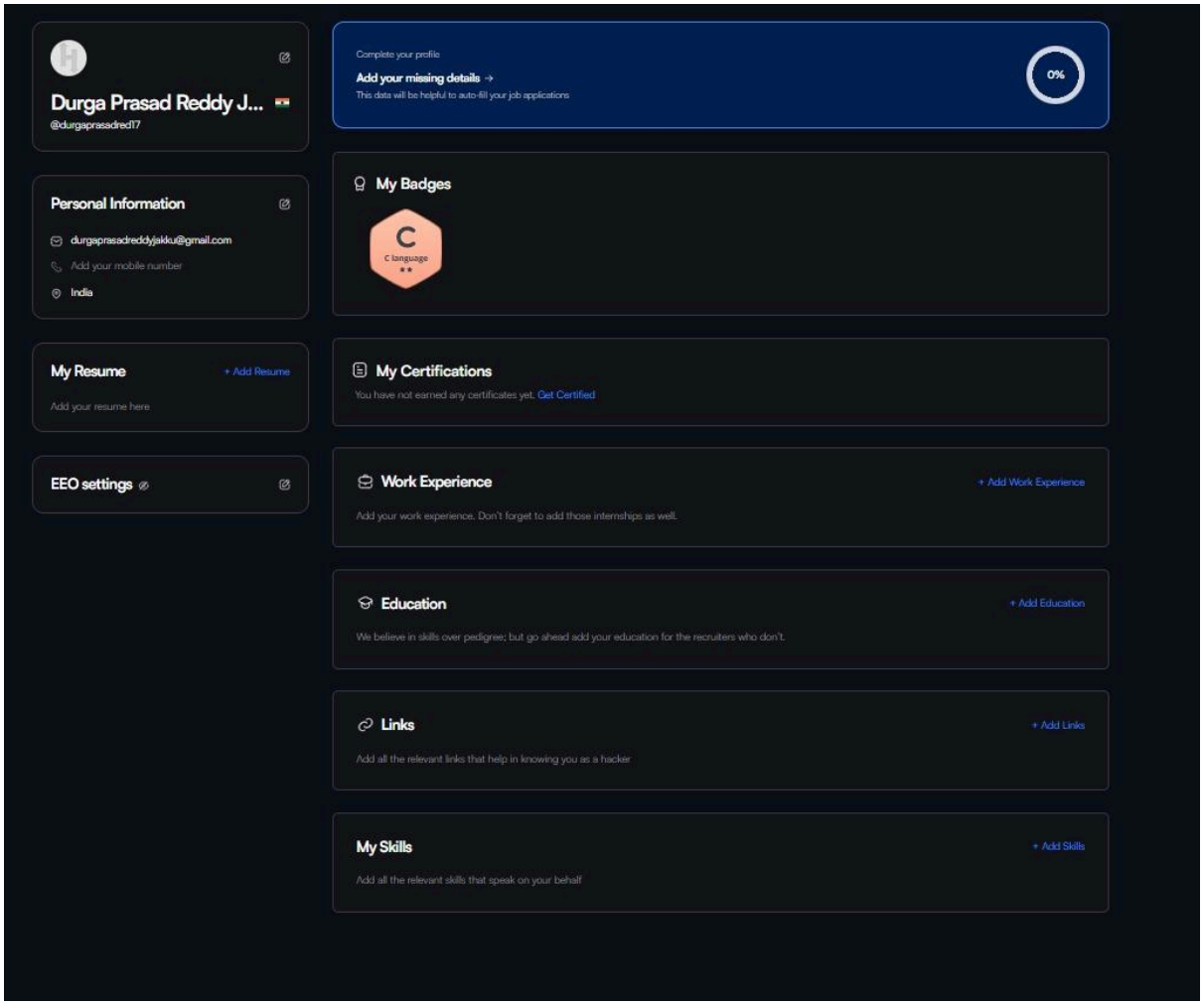
Faculty Name **: A. SrinivasaRao**
Subject : PPS-1
Academic Year : 2024-25
Year : I-B. Tech I-Sem
Class : CSE – A & CSE-B
ALM **: Case Studies and Self-Assessment**

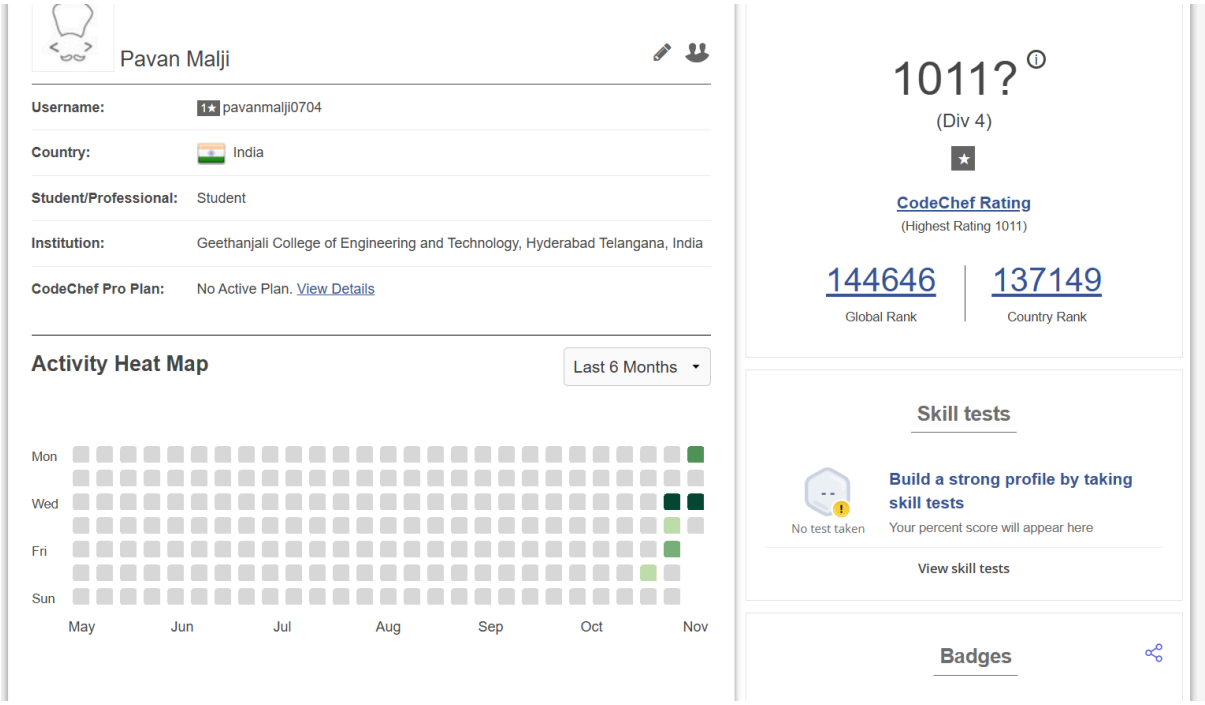
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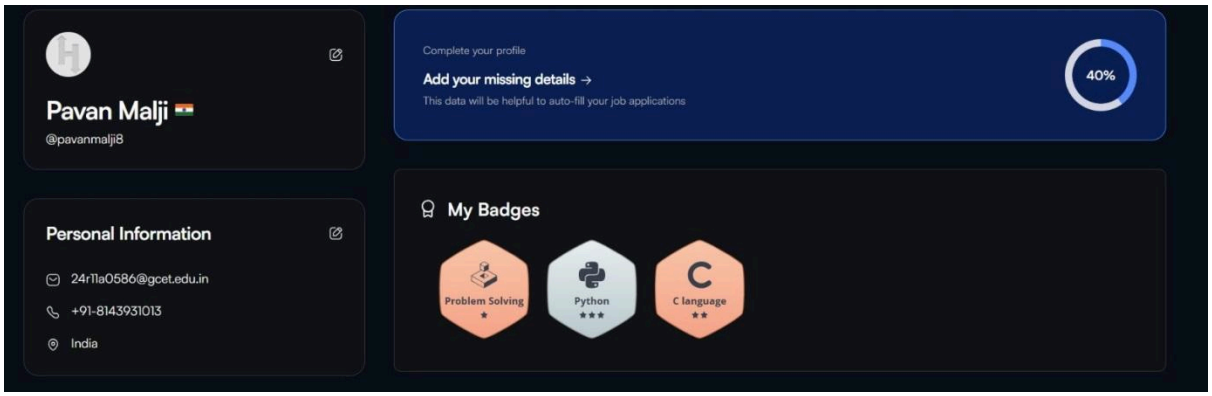
1. Students are in an active learning role, and are encouraged to solve problems, and enhance problem solving skills through online coding platforms HackerRank, CodeChef, etc.,
2. Students are taking self-assessments by attending online coding contest "Codechef Starter".

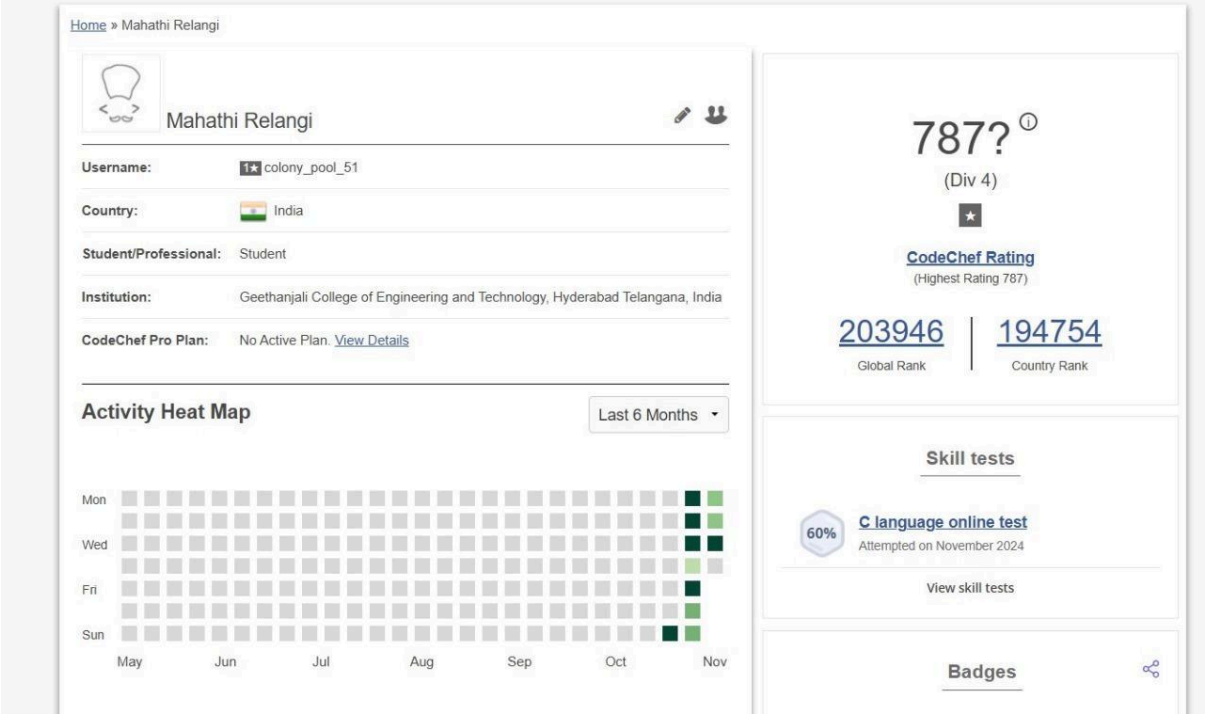
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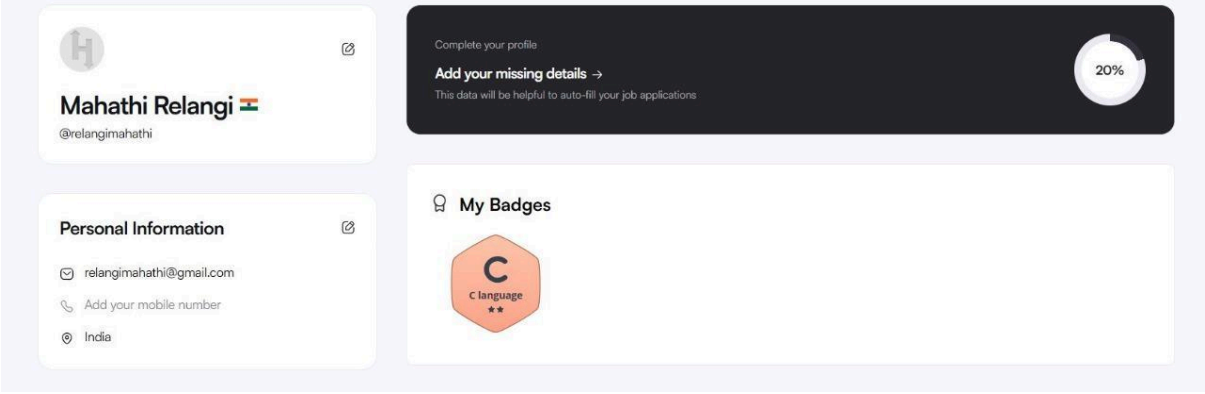


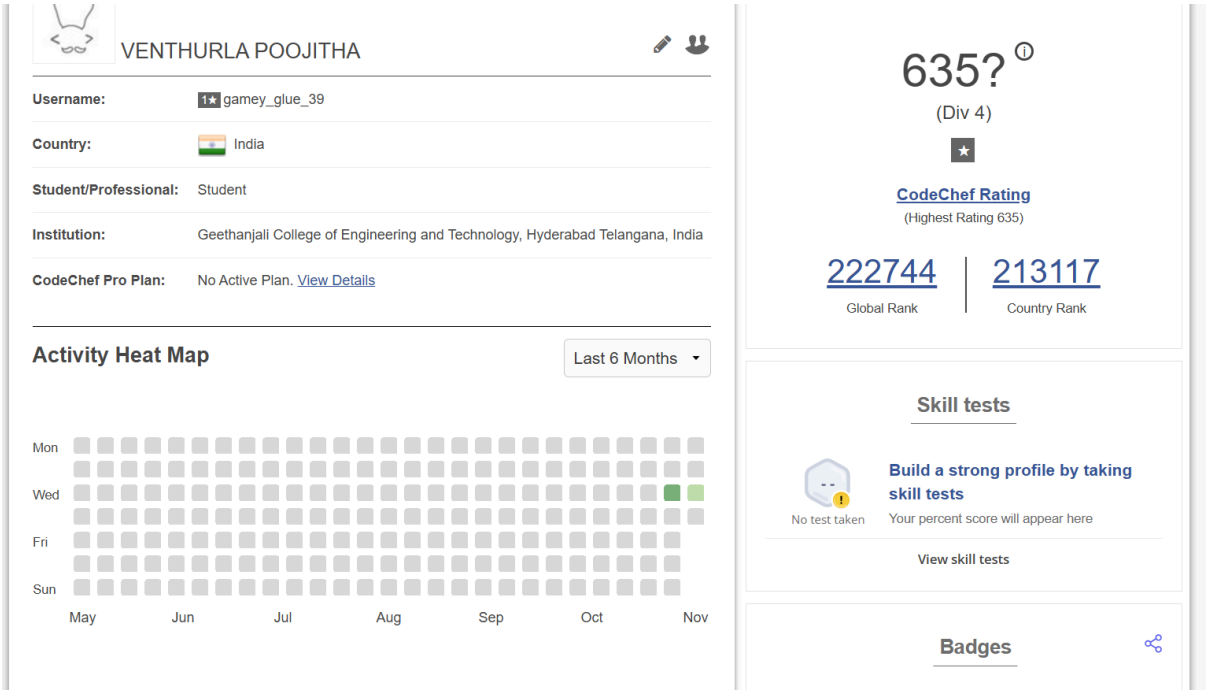

Durga Prasad Reddy J...
@durgaprasadred17
Personal Information
durgaprasadreddyjakku@gmail.com
Add your mobile number
India
My Resume
+ Add Resume
Add your resume here
EEO settings
Complete your profile
Add your missing details →
This data will be helpful to auto-fill your job applications
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My Badges
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You have not earned any certificates yet. Get Certified
Work Experience
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Add your work experience. Don't forget to add those internships as well.
Education
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We believe in skills over pedigree; but go ahead add your education for the recruiters who don't.
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Add all the relevant links that help in knowing you as a hacker
My Skills
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Add all the relevant skills that speak on your behalf

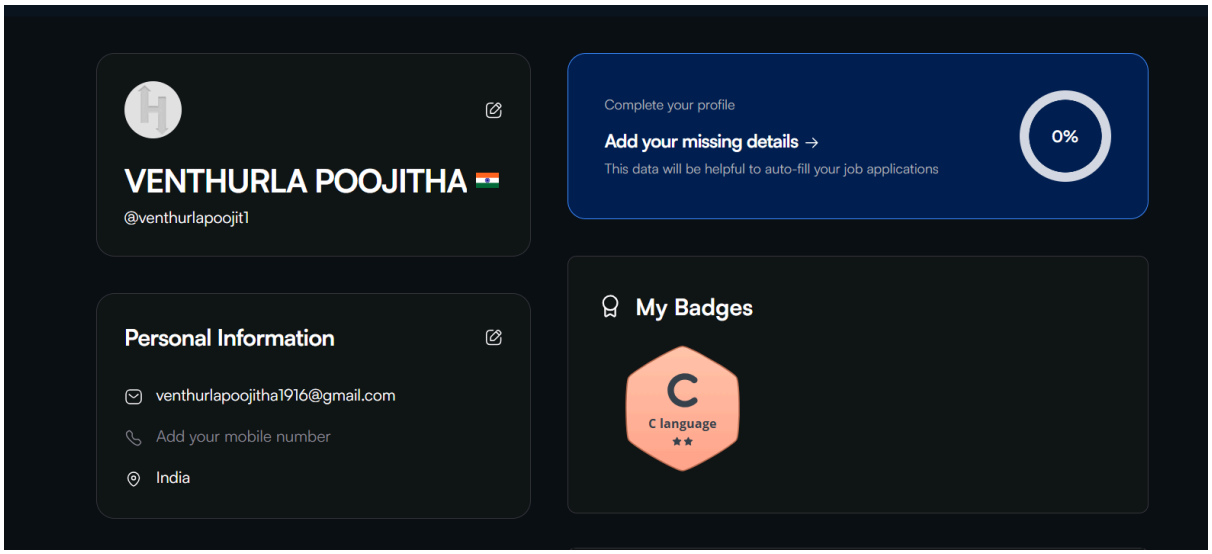

Pavan Malji
Username: pavanmalji0704
Country: India
Student/Professional: Student
Institution: Geethanjali College of Engineering and Technology, Hyderabad Telangana, India
CodeChef Pro Plan: No Active Plan. View Details
Activity Heat Map
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Build a strong profile by taking skill tests
Your percent score will appear here
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Badges

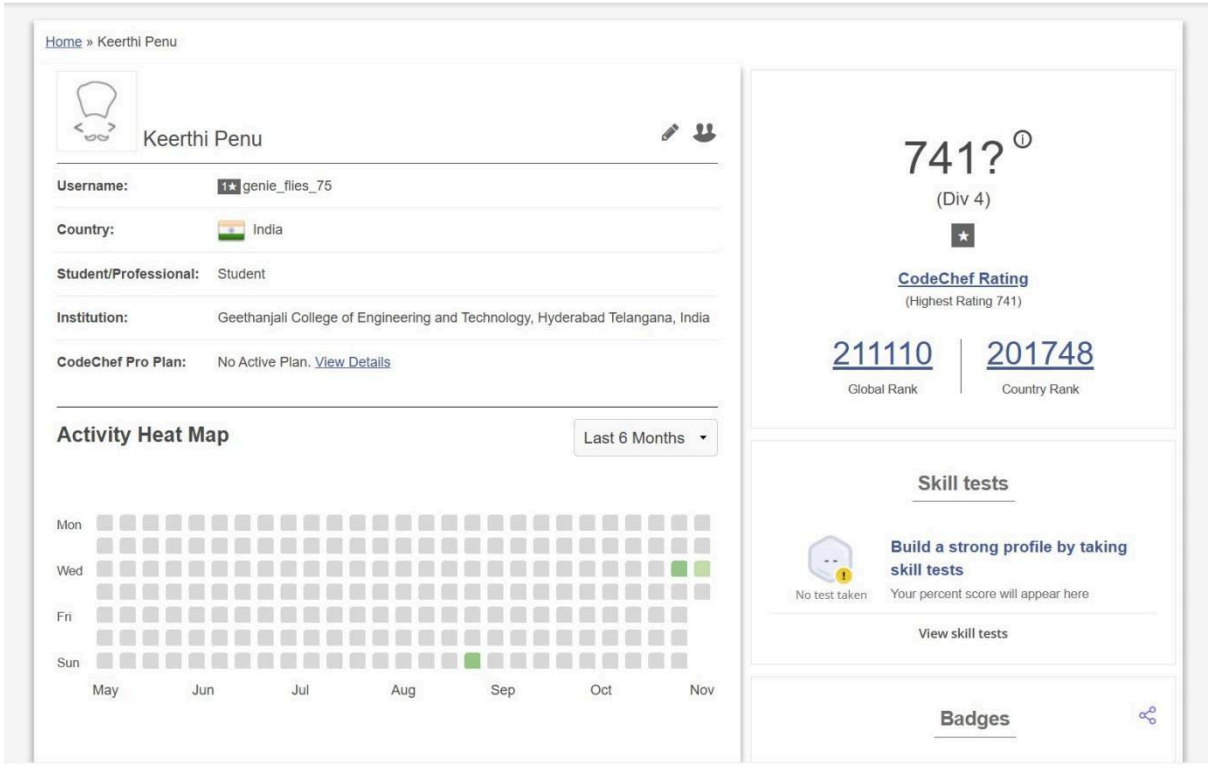

Pavan Malji
@pavanmalji8
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Personal Information
24r11a0586@gcet.edu.in
+91-8143931013
India
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Problem Solving
Python
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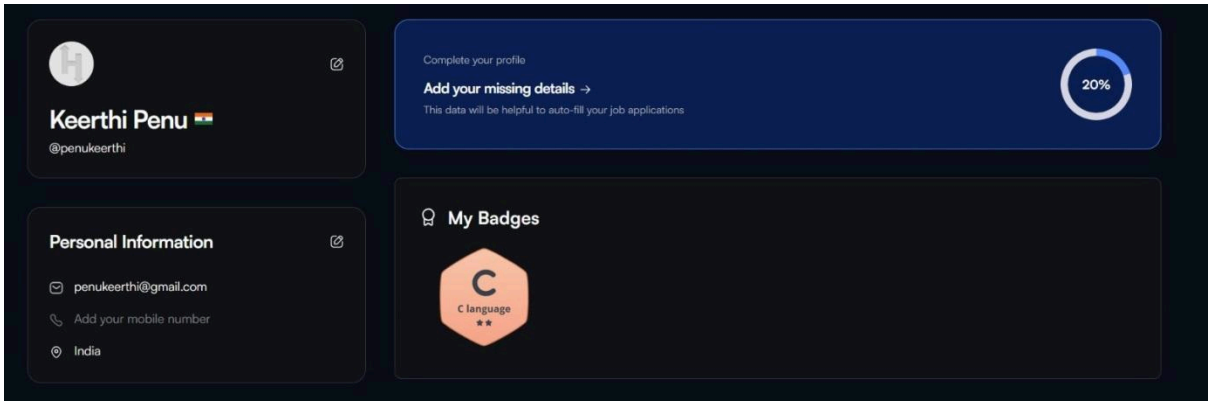

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CodeChef Pro Plan: No Active Plan. View Details
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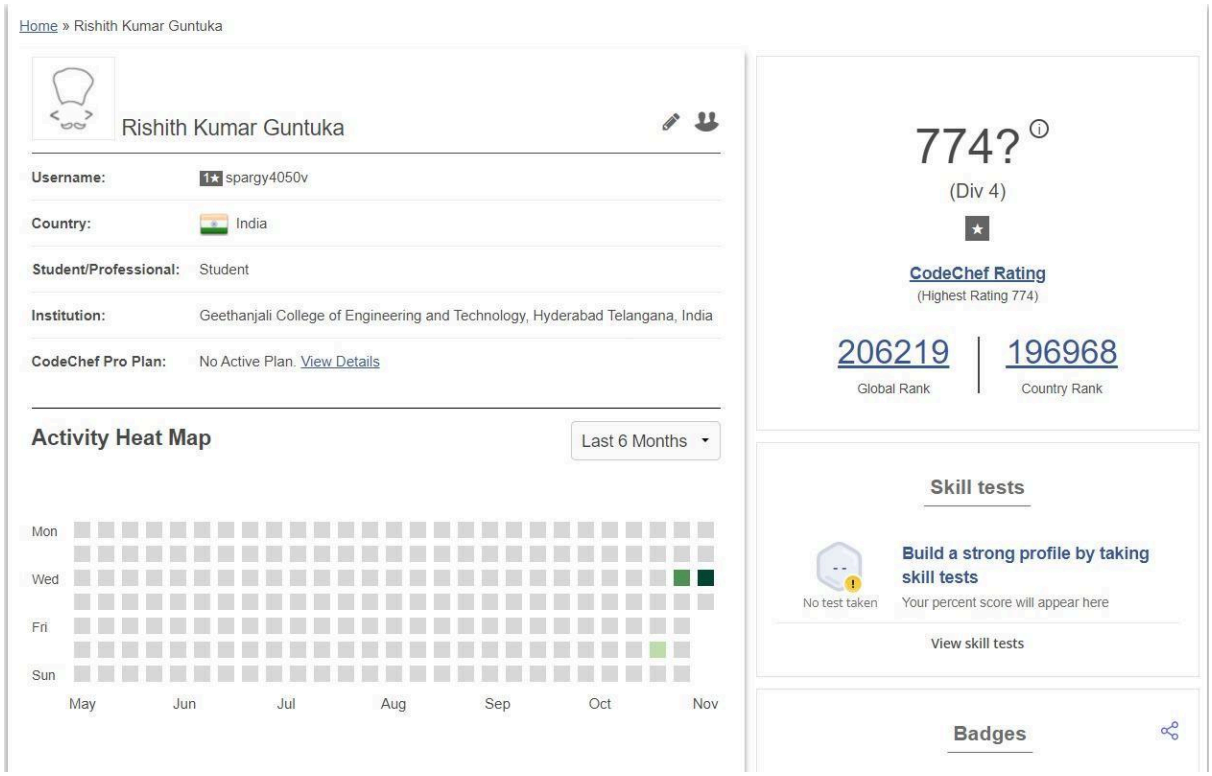

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@relangimahathi
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relangimahathi@gmail.com
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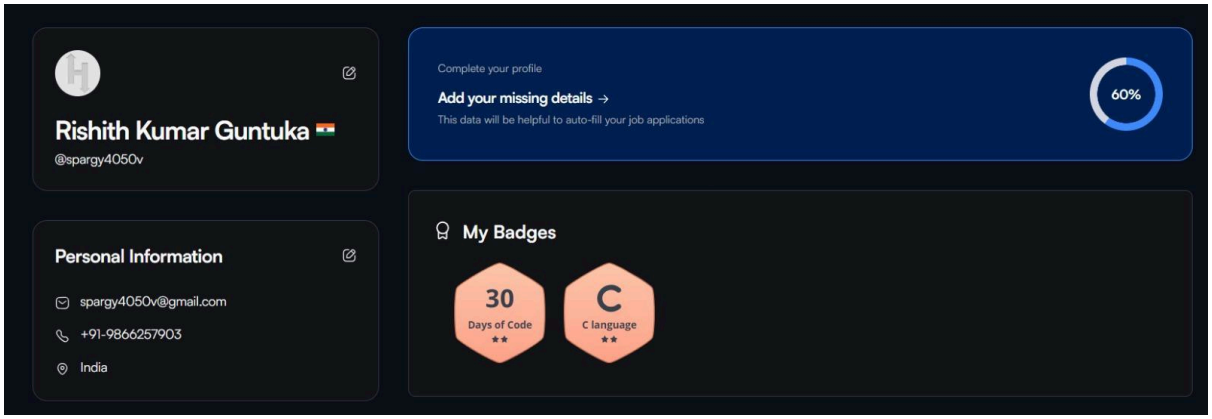

VENTHURLA POOJITHA
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Country: India
Student/Professional: Student
Institution: Geethanjali College of Engineering and Technology, Hyderabad Telangana, India
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Skill tests
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Keerthi Penu
Username: genie_flies_75
Country: India
Student/Professional: Student
Institution: Geethanjali College of Engineering and Technology, Hyderabad Telangana, India
CodeChef Pro Plan: No Active Plan. View Details
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Home » Rishith Kumar Guntuka
Rishith Kumar Guntuka
Username: spargy4050v
Country: India
Student/Professional: Student
Institution: Geethanjali College of Engineering and Technology, Hyderabad Telangana, India
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@spargy4050v
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Personal Information
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+91-9866257903
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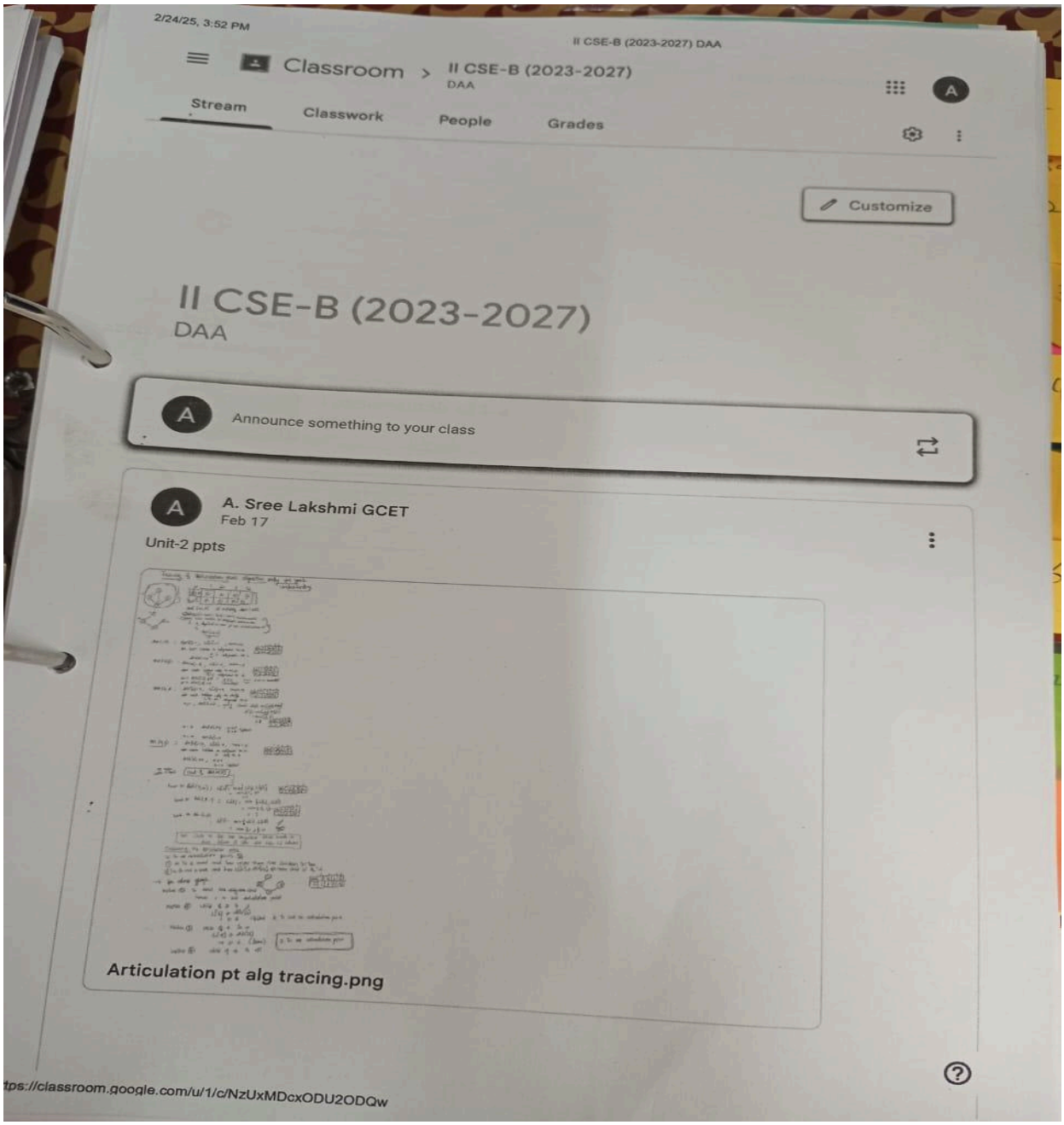
Faculty Name: Dr. A Sreelakshmi.

Subject : Design and Analysis of Algorithms and OOPs

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE



Disjoint sets.pdf
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Stream Classwork People Grades

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A A. Sree Lakshmi GCET
Feb 17

DAA text book

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A Announce something to your class

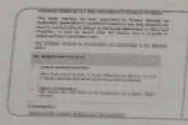
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Dec 12, 2024

A. Sree Lakshmi GCET posted a new assignment: Theory presentations & re...
Dec 12, 2024

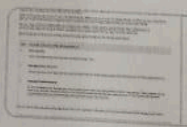
A. Sree Lakshmi GCET posted a new assignment: PBL presentations, reports...
Dec 12, 2024 (Edited Dec 12, 2024)

A. Sree Lakshmi GCET
Dec 12, 2024

Collection notes



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Microsoft Word

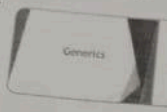


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A **A. Sree Lakshmi GCET**
Dec 4, 2024

unit5-collections



Unit5 collections.pdf
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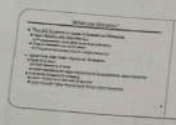


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A **A. Sree Lakshmi GCET**
Dec 4, 2024

Unit-5 io streams

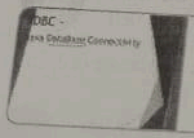


Unit5 io.pdf
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A **A. Sree Lakshmi GCET**
Dec 4, 2024

Unit-5 ppt on jdbc



Unit5 jdbc.pdf
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A. Sree Lakshmi GCET
Dec 4, 2024

Faculty Name: M. Swapna Rani.

Subject : Python Programming

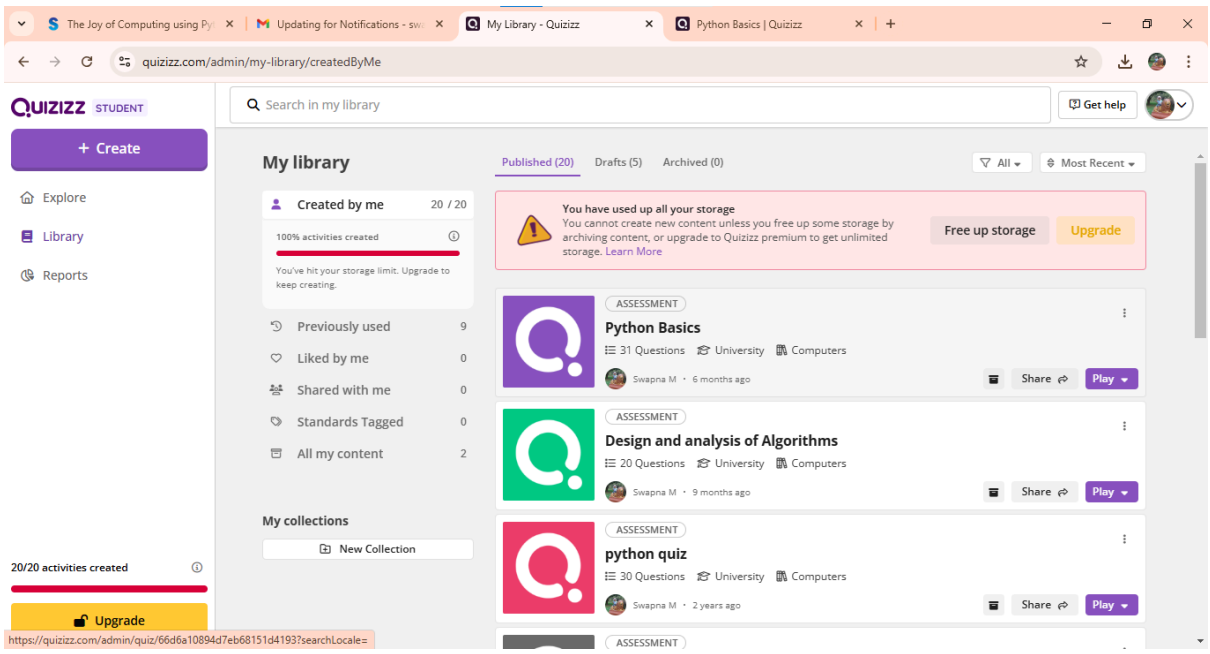
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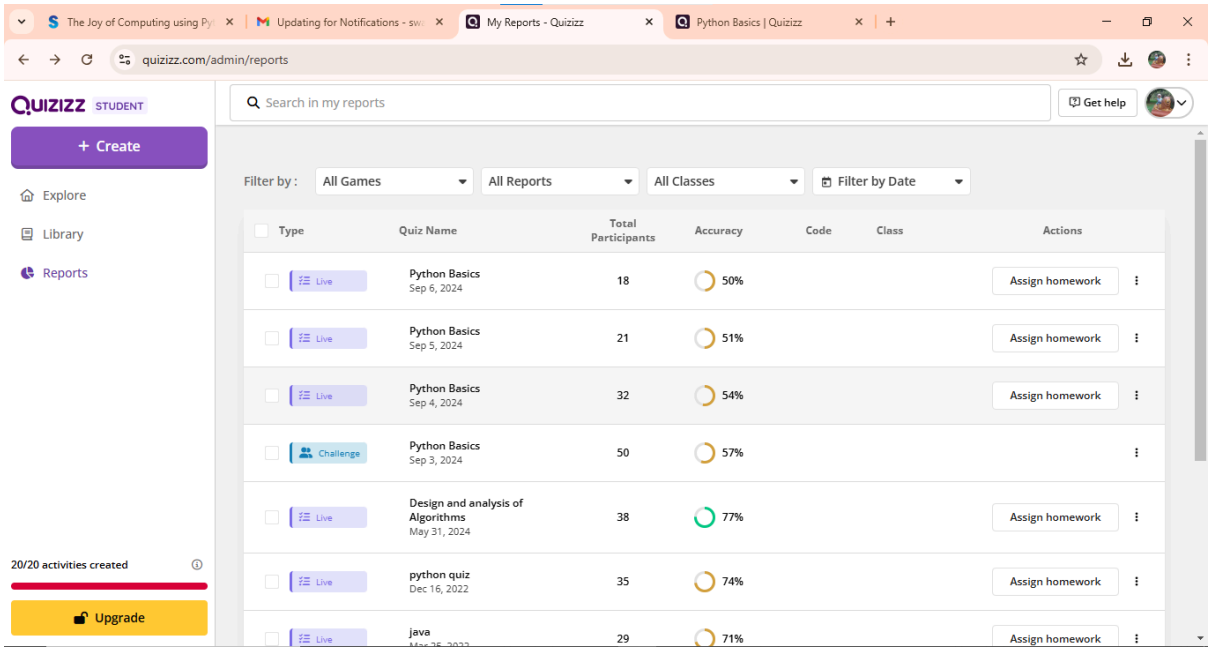
Year : II-B. Tech I-Sem

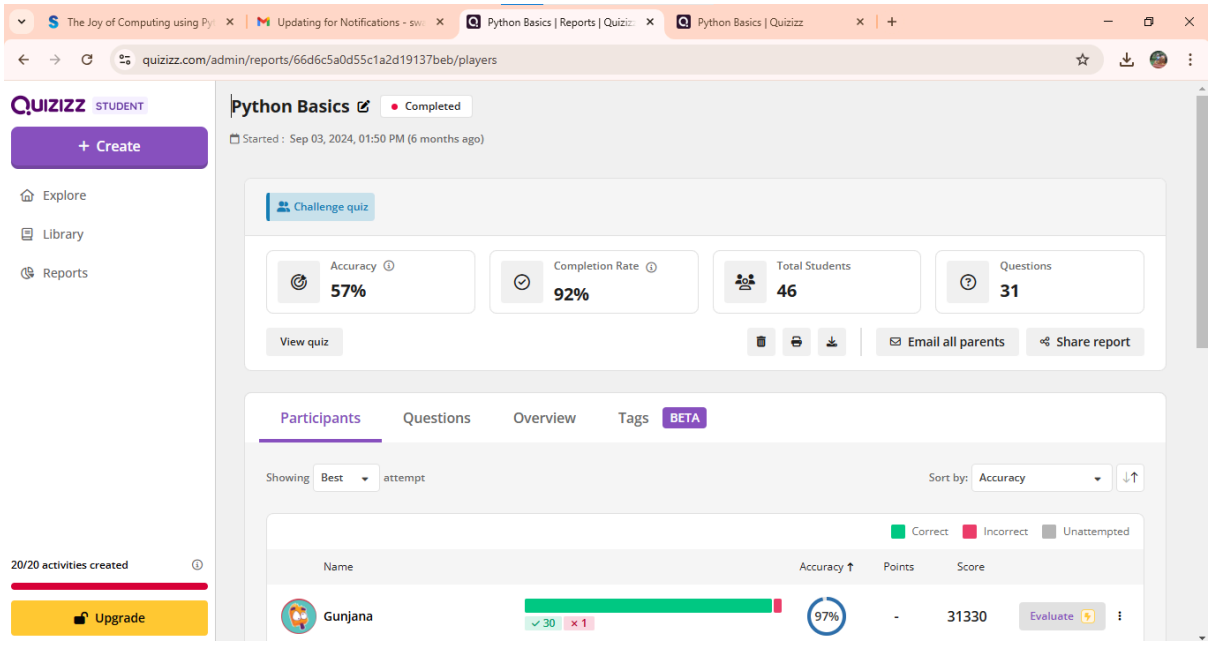
Class : CSE

Quizizz:

Quizizz is an innovative educational platform that empowers faculty to enhance their teaching and learning methods. I have used Quizizz to conduct an interactive quiz on **"Python Programming"** for assessment of students which include various question types such as multiple-choice, true/false, and short answer. It provides real-time feedback to students, allowing them to understand their mistakes and learn from them immediately. This feature helps in reinforcing learning and improving retention




The Joy of Computing using Py
Updating for Notifications - sw
My Reports - Quizizz
Python Basics | Quizizz
quizizz.com/admin/reports
QUIZIZZ STUDENT
+ Create
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Reports
20/20 activities created
Upgrade
Search in my reports
Get help
Filter by :
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All Classes
Filter by Date
Type
Quiz Name
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Code
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Actions
Live
Python Basics
Sep 6, 2024
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QUIZIZZ STUDENT
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Upgrade
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Challenge quiz
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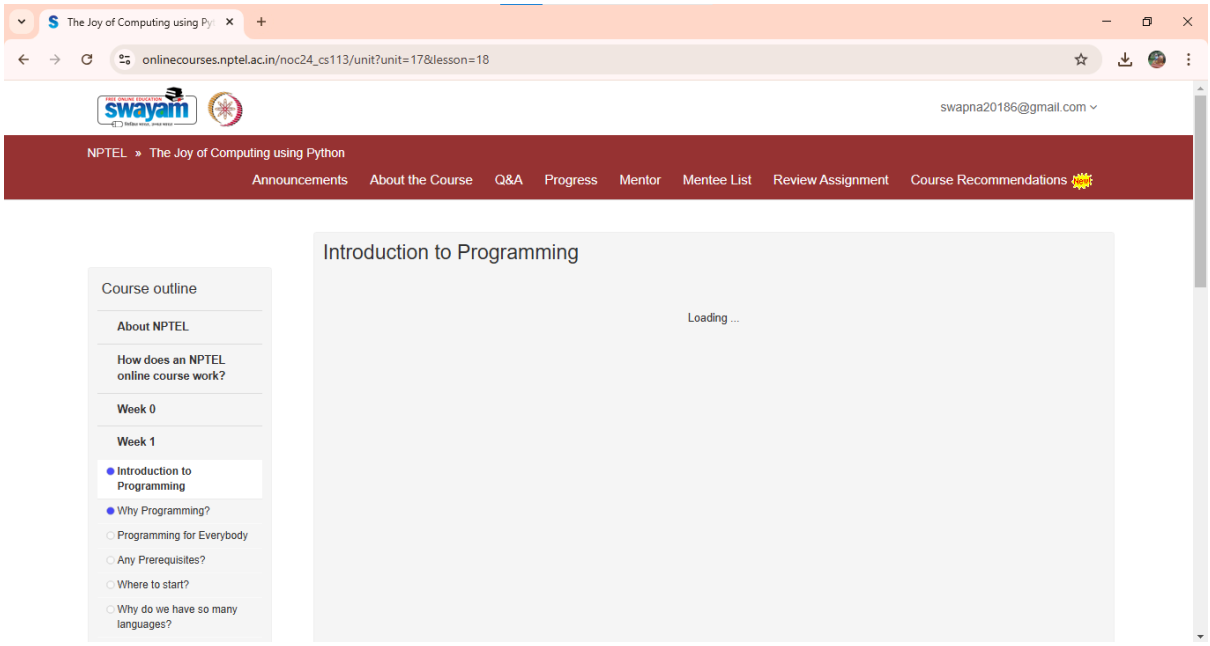
NPTEL

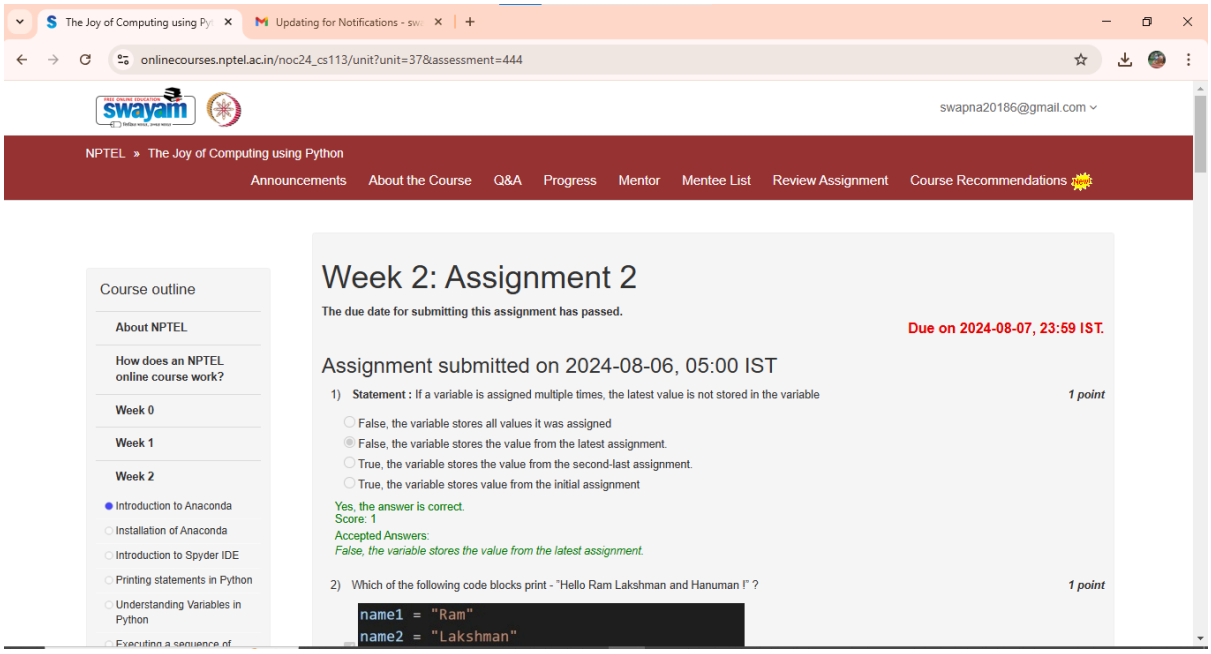
I Mentor the students regarding The NPTEL course "The Joy of Computing using Python". It is a remarkable example of innovation in teaching and learning. This course, offered by IIT Ropar and coordinated by Prof. SudarshanIyengar and Prof. Yayati Gupta, brings a fresh and engaging approach to learning programming.

Here are some innovative aspects of the course:

1. **Engaging Content**: The course is designed to make learning programming fun and accessible. It uses anecdotes, analogies, and illustrative examples to explain complex concepts, turning abstractions into insights and engineering into art.
2. **Logical Thinking**: The course focuses on inspiring learners to think logically and arrive at solutions programmatically. This approach helps students develop critical thinking and problem-solving skills.
3. **Real-World Applications**: The course includes practical examples and applications, such as creating a currency converter, analysing Facebook data, and developing games like Tic Tac Toe and Snakes and Ladders. These real-world applications make learning more relevant and interesting.
4. **Current Advances in Computing**: Towards the end of the course, students are introduced to some of the latest advances in computing, motivating enthusiastic learners to pursue further studies in the field.
5. **Accessibility**: The course is available online, making it accessible to a wide audience. It is designed for anyone interested in learning programming, regardless of their background.

By incorporating these innovative elements, "The Joy of Computing using Python" enhances the teaching and learning experience, making it a valuable resource for both educators and students.


The Joy of Computing using Py
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swayam
swapna20186@gmail.com
NPTEL » The Joy of Computing using Python
Announcements
About the Course
Q&A
Progress
Mentor
Mentee List
Review Assignment
Course Recommendations
Course outline
About NPTEL
How does an NPTEL online course work?
Week 0
Week 1
Introduction to Programming
Why Programming?
Programming for Everybody
Any Prerequisites?
Where to start?
Why do we have so many languages?
Introduction to Programming
Loading ...


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Announcements
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Course outline
About NPTEL
How does an NPTEL online course work?
Week 0
Week 1
Week 2
Introduction to Anaconda
Installation of Anaconda
Introduction to Spyder IDE
Printing statements in Python
Understanding Variables in Python
Executing a sequence of
Week 2: Assignment 2
The due date for submitting this assignment has passed.
Due on 2024-08-07, 23:59 IST.
Assignment submitted on 2024-08-06, 05:00 IST
1) Statement : If a variable is assigned multiple times, the latest value is not stored in the variable
1 point
False, the variable stores all values it was assigned
False, the variable stores the value from the latest assignment.
True, the variable stores the value from the second-last assignment.
True, the variable stores value from the initial assignment
Yes, the answer is correct.
Score: 1
Accepted Answers:
False, the variable stores the value from the latest assignment.
2) Which of the following code blocks print - "Hello Ram Lakshman and Hanuman !" ?
1 point
name1 = "Ram"
name2 = "Lakshman"

Faculty Name: M. Swapna Rani.

Subject : Design and Analysis of Algorithms

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE

Peer Discussions:

I have divided the class into small groups to discuss applications of greedy algorithms such as (Prims algorithm, Kruskal Algorithm, Job Sequencing with deadlines,0/1 knapsack problem, Single source shortest path problem). Peer discussions enhance collaborative learning, critical thinking, and understanding of complex concepts through active engagement.

Objectives:

- Develop a deeper understanding of algorithms and their applications.
- Encourage collaborative learning and knowledge sharing among students.
- Enhance critical thinking and problem-solving skills through discussion.


GPS Map Camera
Secunderabad, Telangana, India
Cheeryal Village, Keesara Mandal, Medchal District., Chiryala Village, Secunderabad, Telangana 501301, India


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Cheeryal Village, Keesara Mandal, Medchal District., Chiryala Village, Secunderabad, Telangana 501301, India
Lat 17.521117° Long 78.630735°

Faculty Name: Dr. Neha Nandal

Academic Year : 2024-25

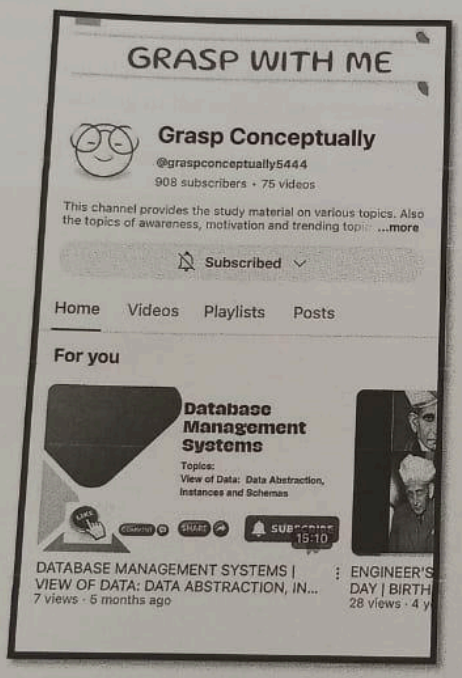
Year : II-B. Tech I-Sem

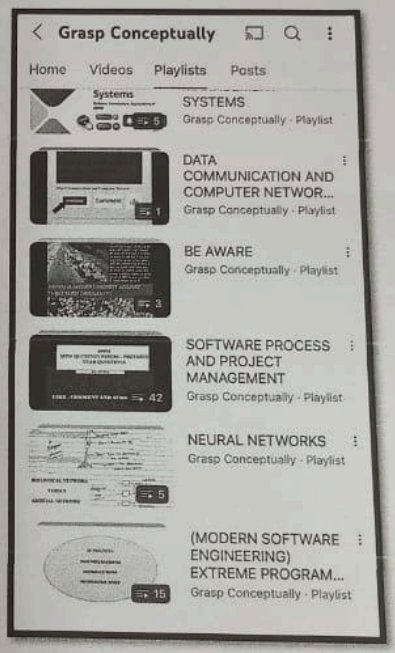
Class : CSE

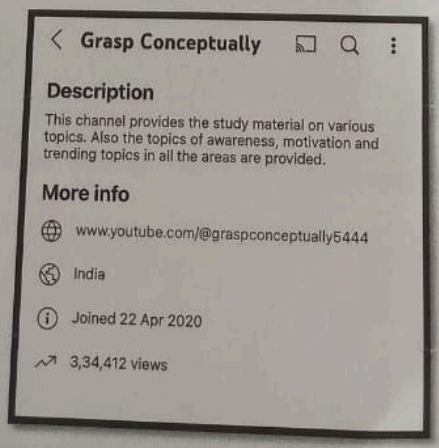
Facility used: Youtube

I have been using YouTube as a platform to teach my students by creating and uploading educational videos. These videos cover key concepts, explanations, and demonstrations to enhance their learning experience. My YouTube channel serves as an extension of classroom teaching, allowing students to revisit lessons at their convenience. Attached are screenshots of my channel and video analytics as evidence of my engagement in online education.

Link: https://youtube.com/@graspconceptually5444?si=_EFeIVkTEGmP_XyB







S.NO	Name of the faculty	Course	Methodology
1	Ushashree P	Big Data Analytics	Case Study

To make the Big Data Analytics course more engaging and practical for final-year students, a case study-based teaching approach was introduced. Primarily it was used to help students understand the real-world applications of R programming and Tableau by working with actual datasets.Students were given different datasets through Google Classroom and were asked to analyze them using Tableau to derive meaningful insights. This hands-on experience allowed them to explore data visualization techniques, interpret patterns, and develop analytical thinking. By applying concepts to real-world scenarios, students gained a deeper understanding of the subject and improved their problem-solving skills.

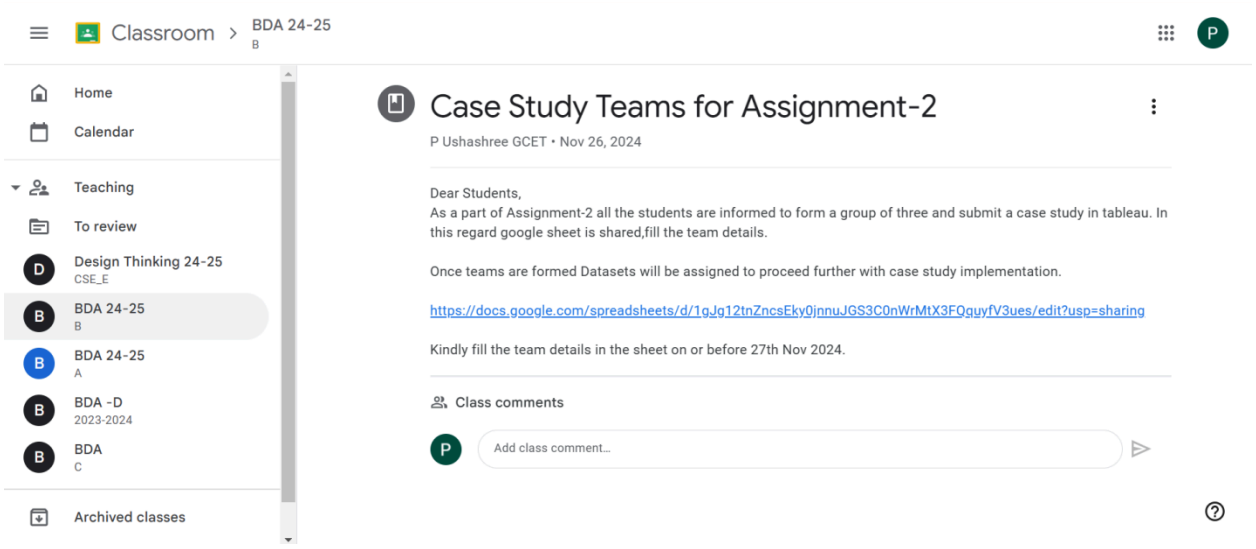
Students engagement during the case study based teaching



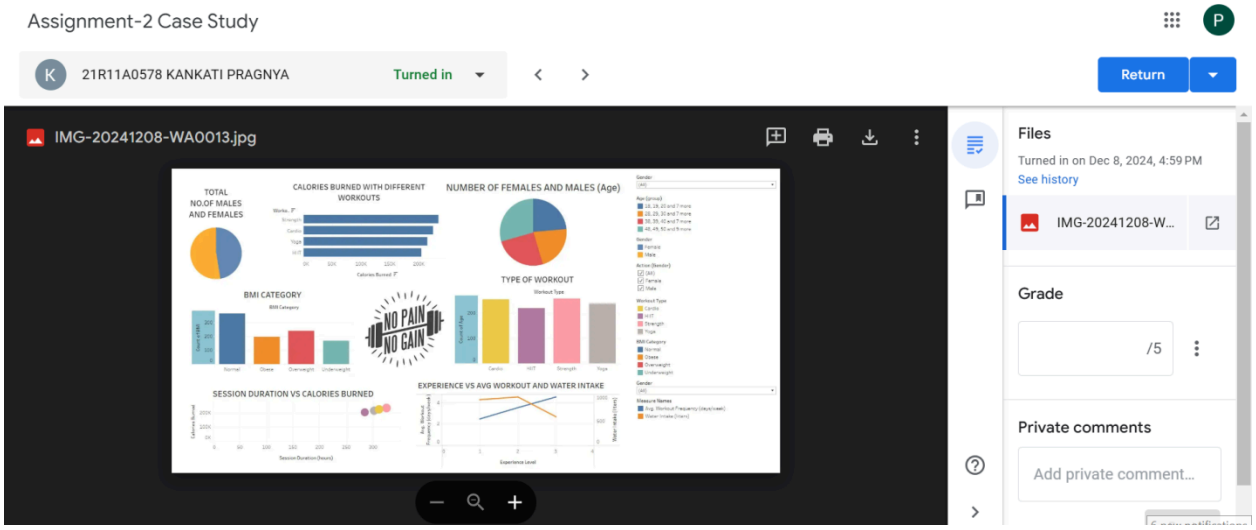




Snaps of students being Assigned case study using google classroom



Student Submissions Sample



Assignment-2 Case Study

21R11A0569 GALIPALLY SANDHYA RANI Turned in

Return

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3. DASHBOARD

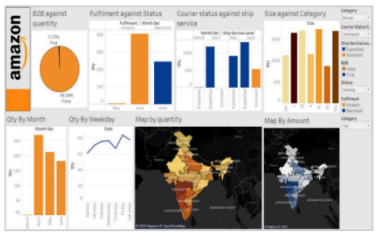


Fig-3 Amazon Sale Dashboard

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Grade

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Private comments

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