CRITERION 1 – CURRICULAR ASPECTS

1.4 FEEDBACK REPORT

1.4.2 FEEDBACK PROCESS OF THE INSTITUTION MAY BE CLASSIFIED AS:

OPTIONS (SELECT ANY ONE THAT IS APPLICABLE):

A. **FEEDBACK COLLECTED, ANALYSED AND ACTION TAKEN ON FEEDBACK AND RELEVANT DOCUMENTS ARE MADE AVAILABLE ON THE INSTITUTIONAL WEBSITE**
B. **FEEDBACK COLLECTED, ANALYSED AND ACTION HASBEEN TAKEN**
C. **FEEDBACK COLLECTED AND ANALYSED**
D. **FEEDBACK COLLECTED**
E. **FEEDBACK NOT OBTAINED/COLLECTED**

Option A

Criterion Number	**1**
Metric	**1.4.2**
Details	Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management/School of Computing Sciences
Pages	**1 to 39**

ACTION TAKEN REPORT

SCHOOL OF COMPUTING SCIENCES

2022-2023

SCHOOL	STAKE HOLDERS	CONSOLIDATED REPORT	ACTION TAKEN
School of Computing Sciences	Academic Peers	• Design the curriculum to focus on skill development, employability, and entrepreneurship.	• All the computing science programs have been framed based on skill development, employability, and entrepreneurship.
	Professionals	• Considering the present trend in the respective fields and industry-relevant interdisciplinary courses.	• New courses like Block chain Technology and Data Science Programmes have been introduced based on current emerging areas.
	Parents	• Implementing project-based learning and enriching the students with more practical skills to the students	• Research Projects and Internships have been made compulsory for all final-year students. This is implemented for students' skill development and good placement opportunities.

	Alumni	• Students must be encouraged to enhance their skills in the latest advancements in the industry. They can undergo skill enhancement courses and enrich their Resume for their job opportunities.	• Skill enhancement courses are introduced to students every year. • A career development program has been given to all the pre-final year students.
	Employers	• Strengthening the curriculum with the latest industrial trends and providing the latest emerging threats and technology developments.	• New programmes like cybersecurity have been introduced based on new emerging technology in the current field.
	Students	• Hands-on training for Hackathon idea development projects.	• Students are encouraged to participate in Hackathon projects with the guidance of a faculty.

VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS) Pallavaram, Chennai-600 117.

SAMPLE PROOF OF ACTION TAKEN REPORT

VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI
ACCREDITED BY NAAC WITH 'A' GRADE
Marching Beyond 30 Years Successfully
INSTITUTION WITH UGC 12B STATUS

School of Computing Sciences

4th BOARD OF STUDIES MEETING – MINUTES

Venue:

Dr. Radha Krishnan Block,

Vels Institute of Science, Technology and Advanced Studies

Date & Time

22.04.2022 & 02.30pm

VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
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INSTITUTION WITH UGC 12B STATUS

Date: 22-04-2022

MINUTES OF MEETING OF THE BOARD OF STUDIES

SCHOOL OF COMPUTING SCIENCES

The meeting of the Board of Studies in School of Computing Sciences (UG & PG) of The Department of Computer Applications, Department of Computer Science and Department of Information Technology, School of Computing Sciences VISTAS was held on 22.04.2022 at 2.30 pm **to discuss about the Syllabus revision of UG Programmes in the Curriculum of B.Sc Computer Science – Artificial Intelligence and Machine Learning, B.Sc Computer Science- Cyber Security, BCA (Hons), B.C.A Data Science, BCA - Cloud technology and Information Security (BCA-CTIS), MCA (Master of Computer Applications) and the newly introduced PG Programme of M.Sc. Data Science and Business Analytics** for the regulations 2022 which to be followed from the academic year 2022-2023.

Members Present:

S. No	Name & Designation	Address	Role
1	Dr. P. MAGESH KUMAR	Director School of Computing Sciences	Internal Member
2	Dr. S. PRASANNA	Professor and Head Department of Computer Applications	Internal Member
3	Dr. S.PERUMAL	Professor and Head Department of Computer Science	Internal Member
4	Dr. P. SUJATHA	Professor and Head, Department of BCA & IT	Internal Member
5	Dr. T. VELMURUGAN	Associate Professor & HEAD, Department of Computer Science, DG Vaishnav College, Chennai.	Academic Expert (External Member)

6	Dr. SHAMBUNATH SHARMA	Engineering Manager Quality, Caratlane Trading Pvt. Ltd. Chennai	Industrial Expert (External Member)
7	Mr. R. BALAMURUGAN	SCOPUS Ltd., Chennai	Alumni Member (External Member)

AGENDA OF THE MEETING

Item No.	Particulars
BoS / 2022 / SCS / UG & PG / 4.1	Review and confirm minutes of 1st BOS meeting held on 04.05.2021
BoS / 2022 / SCS / UG & PG / 4.2	Develop curriculum based on Choice Based Credit System (CBCS) and Learning Outcome based Curriculum Framework (LOCF).
BoS / 2022 / SCS / UG & PG / 4.3	Objective of the Revision for new syllabus shown in Annexure I – Curriculum Structure.
BoS / 2022 / SCS / UG & PG /4.4	Feedback from Stakeholders to ensure that the syllabus of the courses include the state-of-the-art technologies focusing on skill development, employability, and entrepreneurship
BoS / 2022 / SCS / UG & PG / 4.5	Percentage of revision carried out in UG and PG Curriculum
BoS / 2022 / SCS / UG & PG / 4.6	As per the UGC Policy, effective from the Academic Year 2022-2023 is approved.

MINUTES OF THE MEETING

Dr. P. Mayilvahanan Professor & Head, Chairperson, BoS initiated the meeting with a warm welcome and introduced the external members, the internal and co-opted members, and thanked them for accepting the invitation to the Board of Studies meeting.

BoS / 2021 / SCS / UG & PG / 4.1

The Second BoS Meeting for School of Computing Sciences under regulation 2020 was held on 04.05.2021 and confirmed the following points

- To implement the guidelines and suggestions of the new education policy
- Syllabi for the technical papers offered by the School of Computing Sciences
- Value Added Courses for First and Second Year Students
- Admission Details Department Vision, Mission in line with Institute‟s vision and Mission

Minutes are Reviewed and Confirmed

BoS / 2022 / SCS / UG & PG / 4.2

- To develop the curriculum and syllabi based on the guidelines of Choice Based Credit System (CBCS) and Learning Outcome based Curriculum Framework (LOCF).

BoS / 2022 / SCS / UG & PG / 4.3

Objective of the Revision for new syllabus

- To introduce the curriculum based on Learning Outcome Based Curriculum Framework (LOCF) for MCA as per AICTE norms.
- To develop the curriculum based on Learning Outcome Based Curriculum Framework (LOCF)

  B.Sc Computer Science – Artificial Intelligence and Machine Learning, B.Sc Computer Science- Cyber Security, BCA (Hons), B.C.A Data Science, BCA - Cloud technology and Information Security (BCA-CTIS), MCA (Master of Computer Applications) as per the AICTE Norms and the newly introduced PG Programme of M.Sc. Data Science and Business Analytics and UG Programme of BCA IoT as per UGC norms.
- To consider present trends in the respective fields and industry relevant interdisciplinary courses.
- To implement the guidelines and suggestions of the new education policy while preparing the curriculum.
- To eliminate obsolete syllabus contents and introduce the latest / updated technologies, new knowledge and practices.

- To design the curriculum focusing on skill development, Employability and Entrepreneurship

BoS / 2022 / SCS / UG & PG / 4.4

Feedback from Stakeholders to ensure that the syllabus of the courses include the state-of-the-art technologies focusing on skill development, employability, and entrepreneurship

S.No	Name & Designation	Comments	Role
1	Mr. M. Anbazhagan Lead Consultant Tek Play System Chennai	The syllabus is to be revised with the current trends of Industry and Academia.	Industry Expert
2	Dr. P. Muthulakshmi, Associate Professor of Computer Science, College of Science and Humanities SRM Institute of Science and Technology Kattankulathur Campus-Chennai	The curriculum has the scope for development of requisite skills among the students. More hands-on exposure to be provided to students to link theory with practice.	Academic Expert
3	Dr. B. Sree Vidya, Assistant Professor, Department of PG & Research Department of Computer Science, SSS Jain College for Women, T. Nagar, Chennai- 600017.	The curriculum designed for the programme is updated one and has the scope for providing knowledge on recent developments.	Academic Expert
4	Mr. A. Praveen Kumar Application Development Analyst Accenture Bangalore	The curriculum is in tune with the recent technological advancements	Alumni

BoS / 2022 / SCS / UG & PG / 4.5

Syllabus Revision : B.Sc Computer Science with specialization AI & ML – 25%% , B.Sc Computer Science with specialization Cyber Security -25% syllabus revision was carried out for UG (As per Annexure – I(a))

S. No.	Available Course 2020-2021	Revised Course 2022-2023

	Code	Name	Code	Name
1	20CBAL11	Basics Of Artificial Intelligence And Machine Learning	22CBAL11	Artificial Intelligence
2	20CBAL22	Statistical Structure in Data using R	22CBAL22	Statistical Structure in Data using R
3	20PBAL21	R Programming Lab	22PBAL21	R Programming Lab
4	20CBAL31	Java Programming	22CBAL31	Object Oriented Programming Languages
5	20CBAL33	Advanced Data Base Systems	22CBAL33	Advanced Data Base Systems
6	20CBAL34	Pattern Recognition	22CBAL34	Pattern Recognition
7	20CBAL41	Natural Language Processing	22CBAL41	Natural Language Processing
8	20CBAL44	Internet of Things	22CBAL44	Internet of Things
9	20CBAL52	Big Data Analytics	22CBAL52	Big Data Analytics
10	20CBAL31	Java Programming Lab	22CBAL31	Object Oriented Programming Languages Lab
11	20CBAL43	Machine Learning and its Applications	22CBAL43	Machine Learning and its Applications
New Courses Introduced				
1	23CBAL11		Object Oriented Programming using Python	

B.Sc Computer Science with specialization Cyber Security

S. No.	Available Course 2020-2021		Revised Course 2022-2023	
	Code	Name	Code	Name

1	20CBCY11	Problem Solving and Python Programming	22CBCY31	Problem Solving using Python Programming
2	20CBCY12	Software Engineering	22CBCY42	Software Engineering
3	20CBCY21	Mobile and Web Application Security	22CBCY22	Mobile and Web Application Security
4	20CBCY42	Data Communication and Networking	22CBCY41	Data Communication and Networking
5	20CBCY44	Cloud Computing and its Security	22CBCY44	Cloud Computing and its Security
6	20CBCY52	Applied Cryptography	22CBCY51	Applied Cryptography
7	20CBCY51	Artificial Intelligence	22CBCY52	Artificial Intelligence
8	20DBCY51	Ethical Hacking	22DBCY51	Ethical Hacking
9	20DBCY55	Database Security	22DBCY55	Database security
10	20CBCY53	Intrusion Detection and Prevention System	22CBCY53	Intrusion Detection and Prevention System
11	20DBCY61	Penetration Testing	22DBCY61	Penetration Testing
New Courses Introduced				
1	22CBCY11		C Programming and Embedded System	
2	22PBCY11		C Programming and Embedded System Lab	
3	22CBAL21		Object Oriented Programming Languages	
4	22CBCY32		Advanced Database Systems	

5	22CBCY33	Information Security and Audit Monitoring System

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BoS / 2022 / SCS / UG & PG / 4.5

Syllabus Revision : B.C.A Data Science, -32% BCA - Cloud technology and Information Security (BCA-CTIS)- **36% syllabus revision was carried out for UG (As per Annexure – I(b))**

B.C.A Data Science

S. No.	Available Course 2019-2020		Revised Course 2022-2023	
	Code	**Name**	**Code**	**Name**
1	19PBDS11	PROGRAMMING IN C LAB	22PBDS11	PROGRAMMING IN C LAB
2	19PBDS12	MS OFFICE LAB	22PBDS12	MS OFFICE LAB
3	19CBDS21	DATA STRUCTURES AND ALGORITHM	22CBDS21	DATA STRUCTURES AND ALGORITHM
4	19PBDS21	OPRATING SYSTEM LAB	22PBDS21	OPRATING SYSTEM LAB
5	19PBDS22	DATA STRUCTURES AND ALGORITHM LAB	22PBDS22	DATA STRUCTURES AND ALGORITHM LAB
6	19CBDS32	DATABASE MANAGEMENT SYSTM	22CBDS32	DATABASE MANAGEMENT SYSTM
7	19CBDS34	INTRODUCTION TO DATA SCIENCE	22CBDS34	INTRODUCTION TO DATA SCIENCE
8	19CBDS43	R PROGRAMMIG	22CBDS43	R PROGRAMMIG
9	19PBDS42	COMPUTER NETWORKS LAB	22PBDS42	COMPUTER NETWORKS LAB
10	19CBDS52	Big Data Analytics	22CBDS52	Big Data Analytics
11	19PBDS51	Big Data Analytics Lab	22PBDS51	Big Data Analytics Lab

12	19CBDS62	ADVANCED BIG DATA ANALYTICS	22CBDS62	ADVANCED BIG DATA ANALYTICS
New Courses Introduced				
1	NIL			

BCA - Cloud technology and Information Security (BCA-CTIS)

S. No.	Available Course 2019-2020		Revised Course 2022-2023	
	Code	**Name**	**Code**	**Name**
1	19CBCT11	PROGRAMMING IN C	22CBCT11	PROGRAMMING IN C
2	19PBCT11	PROGRAMMING IN C LAB	22PBCT11	PROGRAMMING IN C LAB
3	19PBCT22	DATA STRUCTURES AND ALGORITHM LAB	22PBCT22	DATA STRUCTURES AND ALGORITHM LAB
4	19PBCT21	OPRATING SYSTEM LAB	22PBCT21	OPRATING SYSTEM LAB
5	19CBCT32	DATABASE MANAGEMENT SYSTM	22CBCT32	DATABASE MANAGEMENT SYSTM
6	19CBCT33	CLOUD COMPUTING	22CBCT33	CLOUD COMPUTING
7	19CBCT34	INFORMATION SECURITY	22CBCT34	INFORMATION SECURITY
8	19CBCT41	PRINCIPLES OF VIRTUALIZATION	22CBCT41	PRINCIPLES OF VIRTUALIZATION
9	19CBCT43	COMPUTER NETWORKS	22CBCT43	COMPUTER NETWORKS
10	19CBCT53	Cloud Web Services	22CBCT53	Cloud Web Services
11	19PBCT51	Cloud Web Services Lab	22PBCT51	Cloud Web Services Lab
12	19UGE506	Web technology fundamentals	22UGE506	Web technology fundamentals

13	19CBCT62	Digital Forensics	22CBCT62	Digital Forensics
New Courses Introduced				
1	NIL			

BoS / 2022 / SCS / UG & PG / 4.5

Syllabus Revision BCA (Hons) - syllabus revision was carried out for UG (As per Annexure – I(c))

Department of MCA

- BCA(H)

S. No.	Available Course 2018-2019		Revised Course 2022-2023	
	Code	**Name**	**Code**	**Name**
1	18CBCH11	Logic Builiding And Effective Problem Solving& Personal Computing & Ne(Pcne)	22CBCH11	Problem Solving Techniques
2	18CBCH12	Programming In Java With Oops Concept	22CBCH12	Programming in C++
3	18CBCH21	Rdbms Essentials & T Sql Programming	22CBCH21	Relational Database Systems
4	18CBCH31	Developing Web Applications Using Servlets & Jsp	22CBCH31	Advance Java Programming
5	18CBCH41	Developing Mobile Apps For The Android Platform	22CBCH41	MOBILE APP DEVELOPMENT
6	18CBCH51	Implementing Jsf,Hibernate, And Spring In Java Eee Applications	22CBCH51	Data Mining
7	18CBCH52	Developing Apps For Touch And Mobile Devices	22CBCH52	Mobile Networks

S. No.	Available Course 2018-2019		Revised Course 2022-2023	
	Code	**Name**	**Code**	**Name**
8	18BHC103	Internet Of Things	22BHC103	Internet Of Things
9	18BHC151	Enterprise Resource Panning	22BHC151	Enterprise Resource Panning
10	18BHC156	Business Intelligence	22BHC156	Business Intelligence
11	18BHC157	E-Commerce	22BHC157	E-Commerce

BoS / 2022 / SCS / UG & PG / 4.5

Syllabus Revision of MCA Curriculum (As per Annexure – I(f))

Department of MCA

- MCA

S. No.	Available Course 2020-2021		Revised Course 2022-2023	
	Code	**Name**	**Code**	**Name**
1	20CMCA14	Operating Systems	22CMCA14	Operating Systems
2	20CMCA15	Software Engineering	22CMCA15	Software Engineering
3	20CMCA22	Programming in Java	22CMCA22	Programming in Java
4	20CMCA23	Data Science	22CMCA23	Data Science
5	20CMCA31	Advanced Java Programming	22CMCA31	Advanced Java Programming
6	20CMCA33	Cloud Computing	22CMCA33	Cloud Computing

S. No.	Available Course 2020-2021		Revised Course 2022-2023	
	Code	**Name**	**Code**	**Name**
7	20PMCA31	Advanced Java Programming Laboratory	22PMCA31	Advanced Java Programming Laboratory

BoS / 2022 / SCS / UG & PG / 4.5

Introduction of new programme PG Curriculum (As per Annexure – I(g))

Department of BCA & IT

- M.Sc. Data Science and Business Analytics

BoS / 2020 / SCS / UG & PG / 4.6

As per the AICTE norms & University Grants Commission's guidelines, effective from the Academic Year 2022-2023 is approved.

Status of Implementation of CBCS, ECS & LOCF:

- Resolved to recommend that the Curriculum & Syllabus for the programmes **UG Programmes in the Curriculum of B.Sc Computer Science – Artificial Intelligence and Machine Learning, B.Sc Computer Science- Cyber Security, BCA (Hons), B.C.A Data Science, BCA - Cloud technology and Information Security (BCA-CTIS), and the newly introduced PG Programme of M.Sc. Data Science and Business Analytics, MCA (Master of Computer Applications)** are revised based on Choice Based Credit System (CBCS), Elective Course System (ECS) and Learning outcome-based curriculum framework (LOCF) guidelines of UGC and AICTE for the Academic year 2022 - 2023 be approved.
- Revision of courses in both UG & PG programmes are focused on Activities/Content with direct on Employability / Competency/ Entrepreneurship / Skill development / Interdisciplinary which is introduced and revised during the Academic year 2022-23 is enclosed in the below Annexure.

Considered the Programme Curriculum and Syllabus presented before the Board of Studies and discussed in details and are resolved as follows:

- The M.Sc. Data Science and Business Analytics as per UGC norms have been introduced in the academic year 2022-2023 approving the syllabus prescribed by the respective statutory bodies.
- Resolved to recommend that the Curriculum & Syllabus revision for the programmes UG Programmes in the Curriculum of B.Sc Computer Science – Artificial Intelligence and Machine Learning, B.Sc Computer Science- Cyber Security, BCA (Hons), B.C.A Data Science, BCA - Cloud technology and Information Security (BCA-CTIS), and the newly introduced PG Programme of M.Sc. Data Science and Business Analytics, MCA (Master of Computer Applications) are revised and designed as per the guidelines and Model Curriculum Framework of UGC for the Academic year 2022 - 2023 has been approved by the members of Board of Studies.

Syllabus Revision of UG & PG Programmes /courses focused on Activities/Content with direct on Employability / Competency/ Entrepreneurship / Skill development / Interdisciplinary and New courses introduced during the Academic year 2022-23 enclosed in Annexure I.

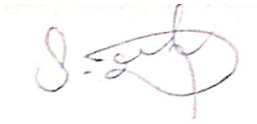
Signature of the Members:

Internal Member

1. Dr. P. MAGESH KUMAR
Managing Director,
Calibsoft Technologies Pvt Ltd, Chennai.

2. Dr.S.PRASANNA

Professor & Head,
Department of Computer Applications, School of Computing Sciences,
Vels Institute of Science, Technology and Advanced Studies, Chennai.



3. Dr.S.PERUMAL,

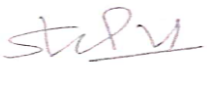
Professor & Head,
Department of Computer Science,
School of Computing Sciences,
Vels Institute of Science, Technology and Advanced Studies, Chennai.

4. Dr. P. SUJATHA
Professor & Head,
Department of Information Technology,
School of Computing Sciences,
Vels Institute of Science, Technology and Advanced Studies, Chennai.

External Member- Academic Expert:

5. Dr.T.VELMURUGAN
Associate Professor & Head,
Department of Computer Science, DG Vaishnav College, Chennai.

External Member- Industry Expert:



6. Dr. SHAMBUNATH SHARMA
Engineering Manager Quality,
Caratlane Trading Pvt. Ltd.
Chennai

Alumni Member:

Mr.R. BALAMURUGAN
Software Engineer,
Scopus Technologies,
Chennai

RESEARCH PROJECT

VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI
ACCREDITED BY NAAC WITH 'A' GRADE
Marching Beyond 30 Years Successfully

GOLD PRICE PREDICTION USING PYTHON

Submitted in partial fulfillment of

The requirements for the award of the degree of

B.Sc., Computer Science with Specialization in Artificial Intelligence & Machine Learning

Submitted by

Name: Karthik.K

Reg. No: 20148111

Name: Pursotham.R

Reg. No: 20148118

Under the Guidance of

Mrs.R.Padma.Msc.,M.Phil..,(Ph.D)

Associate Professor,

Department of Computer science,

Vels Institute of Science, Technology and Advanced Studies (VISTAS),

Pallavaram, Chennai-600 117.

MAY 2023

VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI
ACCREDITED BY NAAC WITH 'A' GRADE
Marching Beyond 30 Years Successfully

SCHOOL OF COMPUTING SCIENCES
DEPARTMENT OF COMPUTER SCIENCE

CERTIFICATE

This is to Certify that the project entitled "**GOLD PRICE PREDICTION USING PYTHON**" being submitted to VISTAS by Karthik.A(20148110), Pursotham.R(20148118), in partial fulfillment for the award of degree in **B.Sc., Computer Science with Specialization in Artificial Intelligence & Machine Learning** is a record work carried out by him under my guidance and supervision during the academic year 2020-2023.

2/5/23

PROJECT GUIDE **HEAD OF THE DEPARTMENT**

This project report is submitted for the viva-voce examination held on _____ in the Department of Computer Science at VISTAS, pallavaram, Chennai-600 117.

External Examiner **Internal Examiner**

VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI
ACCREDITED BY NAAC WITH 'A' GRADE
Marching Beyond 30 Years Successfully

SMART FOOD ORDERING WITH SECURE PAYMENTS

Submitted in partial fulfillment of

The requirements for the award of the degree of

B.Sc.,Computer Science with Specialization in Artificial Intelligence and Machine Learning

Submitted by

Name: Jayanthi.D

Reg. No: 20148109

Name: Keerthana.N

Reg. No: 20148112

Under the Guidance of

Dr. A.S.ARUNACHALAM M.C.A., M.Phil., Ph.D

Associate Professor,

Department of Computer Science,

School of Computing Sciences,

Vels Institute of Science, Technology and Advanced Studies(VISTAS),

Pallavaram, Chennai-600 117.

MAY 2023

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI
ACCREDITED BY NAAC WITH 'A' GRADE
Marching Beyond 30 Years Successfully

SCHOOL OF COMPUTING SCIENCES

DEPARTMENT OF COMPUTER SCIENCE

This is to Certify that the project entitled **"SMART FOOD ORDERING WITH SECURE PAYMENTS"** being submitted to VISTAS by Jayanthi.D(20148109), Keerthana.N(20148112),in partial fulfillment for the award of degree in **B.Sc.**,Computer Science with Specialization in Artificial Intelligence and Machine Learning is a record work carried out by her under my guidance and supervision during the academic year 2020-2023.

PROJECT GUIDE 28/4/23

HEAD OF THE DEPARTMENT

This project report is submitted for the viva-voce examination held on 02/05/23 in the Department of Computer Science at VISTAS, pallavaram, Chennai-600 117.

External Examiner

Internal Examiner

VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI
ACCREDITED BY NAAC WITH 'A' GRADE
Marching Beyond 30 Years Successfully

SOIL MOISTURE SENSOR USING IoT

Submitted in partial fulfillment of

The requirements for the award of the degree of

B.Sc., Computer Science with Specialization in Artificial Intelligence & Machine Learning

Submitted by

Name: Amarnath Nilkar J

Reg. No: 20148102

Name: Dinesh P

Reg. No: 20148106

Under the Guidance of

Mr. R. Balamurugan MCA., M.Phil., (Ph.D)

Assistant Professor,

Department of Computer Science,

Vels Institute of Science, Technology and Advanced Studies (VISTAS),

Pallavaram, Chennai-600 117.

MAY 2023

INTERNSHIP

Tech Learning
Solutions Pvt Ltd

Training-cum-Internship Certificate

This is to certify that

Mr. NITHISH KUMAR B (Reg.No 22207132)

of **I year M.Sc Computer Science**

studying in **VISTAS**

has successfully completed **6(six)** *weeks*

Training-cum-Internship Program on

Machine Learning with Python

CERTIFIED ISO 9001:2015 COMPANY

Awarded on: **30-04-2023**

Certificate No:**ONLNST2023123**

CHANDRAKANT PRASAD
Director, Tech Learning Solutions Pvt Ltd

Organised by:

mywbut
home for engineers

EMERTXE
The future-ready IT Institute

Affiliated to
N-S-D-C National Skill Development Corporation
ESSCI

CERTIFICATE OF INTERNSHIP

PRESENTED TO

Mr. AMUTHAN A (Reg. No. 22207102)

of I year M.Sc. Computer Science from VISTAS

For Successfully Completing Online Internship on

Internet of Things (IoT)

This Internship Provided Hands-On Exposure on

- Foundational Programming Skills in C & Micro-Controllers
- SDLC Based Project Building in IoT

Internship Start Date : 13-03-2023 **Internship End Date :** 30-04-2023

Technology Head, Emertxe
(Mubeen Jukaku)

CERTIFICATE ID
E2023-139

Director, Emertxe
(Jayakumar Balasubramanian)

www.emertxe.com

Shia#sh
Focus on Deliverables

03rd May 2023

PROJE CTCOMPLETION CERTIFICATE

This is to certify that **Mr. BARANI L(Reg. No. 22207103),** student of **M.Sc.,** Computer Science, at Vels Institute of Science Technology and Advanced Studies (**VISTAS**) successfully completed the **6 weeks internship** in the field of **Data Science** under the guidance of Shiash Info Solutions, Chennai, Tamil Nadu.

During the period of his internship program with us, tie had been exposed to different processes and was found diligent, hardworking, and inquisitive.

We wish him every success in his life and career.

For Shiash Info Solutions Private Limited

Ashwini Conivaptan
Manager – Human Resources

#51, Level 4, Tower A, Rattha TEK Meadows, Old Mahabalipuram Road,
Sholinganallur, Chennai – 600 119, Tamil Nadu, India
+91 44 66255681 info@shiash.com

Hayy Technologies

Providing IT Solutions and Services

Date.02-05-2023

TO WHOM IT MAY CONCERN

This is to certify that **Mr. GOKULAKRISHNA S (Reg. No. 22207104),** student of **M.Sc.,** Computer Science, at Vels Institute of Science Technology and Advanced Studies (VISTAS) successfully completed the **6 weeks internship** in the field of **PHP & JavaScript** under the guidance of Hayy Technologies, Chennai, Tamil Nadu,

During the period of his internship program with us, tie had been exposed to different processes and was found diligent, hardworking, and inquisitive.

We wish him every success in his life and career.

For Hayy Technologies,

Signature of Authority

No 49/50L, Whites Road, 7th Floor, EA Chambers Tower II, Royapettah,
Chennai - 600 014, Tamil Nadu, INDIA.
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CAREER DEVELOPMENT PROGRAM

VELS

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School of Computing Sciences
Department of Computer Applications

Organizes a Seminar
on

An Insight to Cloud Computing

Date : 23/8/22 Time : 10.30 am to 12.30 pm
Venue : Conference hall, APJ block, VISTAS

Resource Person

Mr. Dwarakanath Selvaraj

Sr. Member of Technical Staff ,
PayPal Inc,
Sholinganallur, Chennai

Convener
Dr. S. Prasanna
Professor & Head
Department of Computer Applications, VISTAS

Co-Conveners

Dr. S. Poonguzhali
Associate Professor
Department of Computer Applications
VISTAS

Dr. P. Sripriya
Professor
Department of Computer Applications
VISTAS

VELS

HACKATHON PROJECT

SMART INDIA HACKATHON 2023

Ministry/Organization Name/Student Innovation: **Ministry Of Coal**

PS Code: **1312**

Problem Statement Title: **Chatbot to respond to text queries pertaining to various Acts, Rules, and Regulations applicable to Mining industries**

Team Name: **Query Coders**

Team Leader Name: **Rithick J**

Institute Code (AISHE): **U-0491**

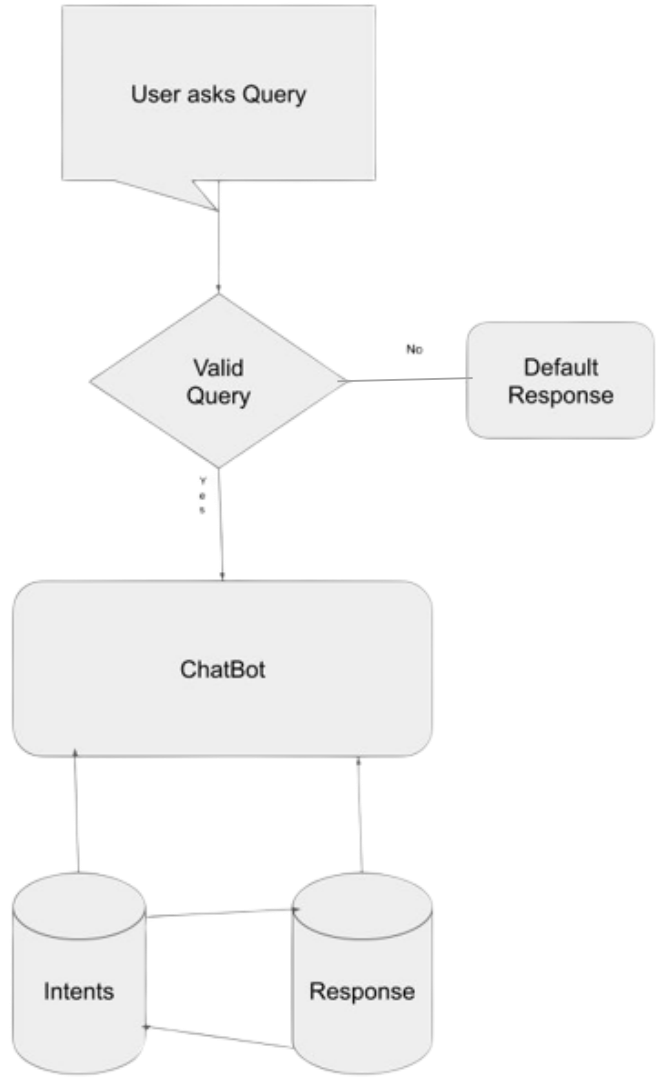
Institute Name: **Vels Institute of Science, Technology & Advanced Studies**

Theme Name: **Smart Automation**

Idea/Approach Details

The need of chatbot is high in this modern day that too in mining department because it involves lots of miners and public, our idea is to develop a chatbot that response with the summary of an act or rule and can explain further about the rule or it can direct them to the official web page where the act or rule can be explained well and we can also make the chatbot response for the updates in the circulars and the new rules that had been formed.

Flow Chart Of Chatbot



Idea/Approach Details

Use Cases

- User can enter the text in our chatbot and straight away ask their queries to the bot.
- After the query has been asked chatbot first analyses the intent of the query
- Once it finds the intent of the query, bot prompts the correct response to the user and asks whether the user is satisfied.
- If yes the chat ends, if no then the bot asks for some more details.
- If the bot does not have the correct response for the query it apologies and stores the query it does not have answer.
- This helps to improve the bot, now we can access those queries and response can be added by us.

Show stopper here

- Needs a lot of sample queries to understand the user queries,
- Some queries cannot be understood by the Chatbot,
- Crash may happen when too much of queries asked to the bot,
- Lack of understanding the emotion or the way in which the query has been asked,
- May misunderstand the query of the user.

Team Member Details

Team Leader Name: **Rithick J**

Branch: MSc Stream :IT Year: II

Team Member 1 Name: **Thabresh U**

Branch: MSc Stream :IT Year: II

Team Member 2 Name: **Ajith Kumar R**

Branch: MSc Stream :IT Year: II

Team Member 3 Name: **Siva P**

Branch: MSc Stream :IT Year: II

Team Member 4 Name: **Syed Ismail S**

Branch: MSc Stream :IT Year: II

Team Member 5 Name: **Amibika V**

Branch: MSc Stream :IT Year: II

Team Mentor 1 Name: **Dr.A.Vidhya**

Category : Academic Expertise : AI Domain Experience (in years): 5

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