

SUMMER INTERNSHIP REPORT



Submitted by

NAVEEN KUMAR M

(Reg. No: 611222244030)

In partial fulfilment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND BUSINESS SYSTEMS

KNOWLEDGE INSTITUTE OF TECHNOLOGY, SALEM

(AN AUTONOMOUS INSTITUTION)

SALEM

NOVEMBER 2024

BONAFIDE CERTIFICATE

Thi	is is t	o certif	fy that	the	Summer	Internship	Report	is	the	Bonafide	work	of	NAV	EEN
KUMAR :	M (Re	eg. No.	61122	2244	030), who	has succes	sfully co	omp	lete	d the sumr	ner int	erns	hip a	s part
of the acad	lemic 1	requirer	nents.											

SIGNATURE OF MENTOR

Mr. S. SASIDHARAN M.E., ASSISTANT PROFESSOR

Department of Computer Science and Business Systems Knowledge Institute of Technology Salem-637504.

SIGNATURE OF HOD

Dr.M. RAMKUMAR M.E., Ph.D., HEAD OF THE DEPARTMENT

Department of Computer Science and Business Systems

Knowledge Institute of Technology
Salem-637504.

Submitted for Semester internship presentation held on _____

INTERNAL EXAMINER / IPT CO-ORDINATOR

Table of Contents

S. No.	Title	Page No.
	Details of Contact Information	
	1.1 Student Contact Information	
1	1.2 Industry Contact Information	3
	1.3 Mentor Contact Information	
2	Abstract	4
	Details of Organisation	
	3.1 About Gateway Solution, Coimbatore	
3	3.2 Services Offered	5
	3.3 Vision and Mission	
	3.4 Industry Position	
	Final Project	
4	4.1 AWS	
4	4.2 Green Arena	- 6
	4.3 AWS Features	
	Work Carried Out & Outcome	
5	5.1: Soft Skills	9
	5.2: Technical Skills	
6	Key Learnings	10
7	Certification	11
/	7.1 Internship Certificate	_ 11
8	Internship / IPT Post-Assessment Form	12
9	Questions: Internship Skills	13
10	Assessment for Summer Internship	14

	Assessment Details (for college use)				
S. No.	Title	Max. Marks	Awarded Marks		
1	Internship Certificate & Attendance	20			
2	Internship Report	40			
3	Presentation & Viva-Voice	40			
4	Total Marks	100			

1.DETAIL OF CONTACT INFORMATION

1.1 Student Contact Information

Name of the Student	NAVEEN KUMAR M
Reg. No.	611222244030
Year / Sem	III/V
Phone / Mobile	9994134531
Mail ID	2k22csbs30@kiot.ac.in

1.2 Industry Contact Information

Name of the Industrial supervisor	VISHNU
Designation	PYTHON DEVELOPER
Company/Organization	GATEWAY SOLUTION
Address	GANDHIPURAM, COIMBATORE
Phone / Mobile	7708881208
Mail ID	GLsathil998@gmail.com

1.3 Mentor Contact Information

Name of the Faculty Mentor	Mr. S. SASIDHARAN
Designation	MENTOR
Phone / Mobile	9994070620
Mail ID	mgcsbs@kiot.ac.in

2.ABSTRACT

I completed my internship at AWS, where I focused on cloud infrastructure and solutions. During this internship, I worked on optimizing cloud resource management for scalability and cost efficiency. My tasks included setting up and managing AWS services like EC2, S3, and RDS to streamline deployment processes. I collaborated closely with a cross-functional team, including developers and solutions architects, to ensure that the cloud solutions aligned with business requirements and performance goals.

This internship helped me gain a deeper understanding of cloud infrastructure and the AWS ecosystem. I also learned how to optimize cloud services for performance and cost-effectiveness. Additionally, I gained hands-on experience in automating deployments and monitoring resources using AWS tools like CloudWatch and Lambda. The project required balancing scalability with reliability, which enhanced my technical problem-solving and analytical skills.

Overall, it was an invaluable learning experience that connected my theoretical knowledge with practical cloud solutions. This opportunity not only enhanced my technical skills in cloud infrastructure but also taught me how to work efficiently in a team and contribute to the seamless deployment of scalable applications. It has inspired me to further explore cloud technologies and develop innovative solutions to address the evolving needs of businesses in the cloud.

3.DETAILS OF THE ORGANIZATION

3.1 About GATEWAY SOLUTION, Coimbatore:

Gateway Solution is an educational technology company that creates innovative tools to enhance learning experiences. It offers digital platforms aimed at improving accessibility, engagement, and interactivity for both students and educators. The company focuses on continuously evolving its solutions to meet the needs of modern education.

3.2 Services Offered:

- 1.Learning Management Systems (LMS) for course management.
- **2.Interactive Tools** to engage students.
- **3.Student Analytics** to track performance.
- 4.Custom Education Solutions for tailored needs

3.3 Vision and Mission:

Gateway Solution Company aims to transform education with innovative technology that enhances learning experiences. It empowers educators and students with tools that promote engagement, collaboration, and growth. The company focuses on making education more accessible and impactful.

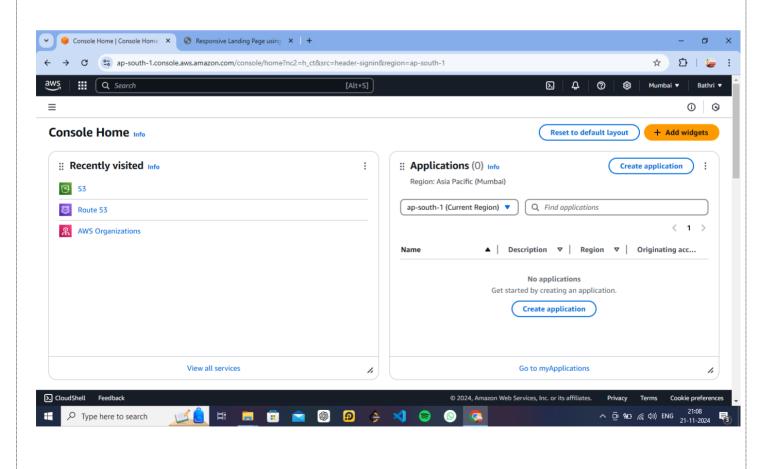
3.4 Industry Position:

Gateway Solution Company is a leading provider of innovative edtech solutions, offering tools that enhance learning experiences, improve engagement, and support educators in delivering effective, accessible education.

4.FINAL PROJECT

4.1 AWS

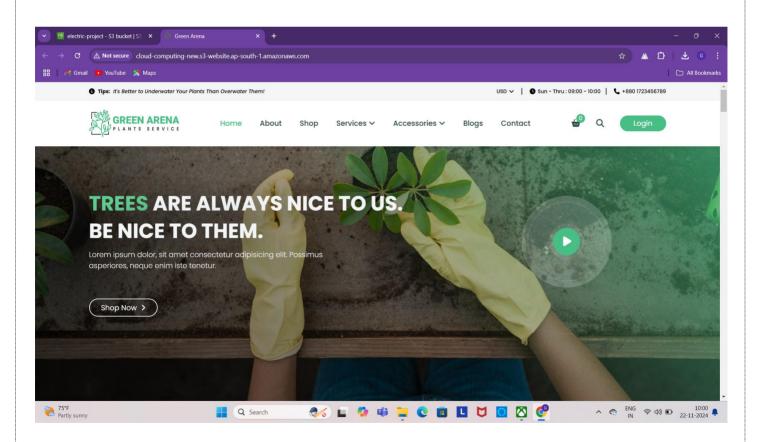
Description: Amazon Web Services (AWS) is the world's leading cloud computing platform, offering a vast array of services that empower businesses to scale, innovate, and operate efficiently. It provides robust solutions across compute, storage, databases, and artificial intelligence, catering to startups, enterprises, and government agencies alike. Renowned for its reliability and global reach, AWS enables seamless deployment of applications with unparalleled security and flexibility. Its pay-as-you-go model ensures cost efficiency while fostering agility in a competitive digital landscape. With cutting-edge tools like Lambda for serverless computing and SageMaker for machine learning, AWS drives technological excellence. Its global infrastructure supports millions of customers in building resilient, high-performing systems. AWS stands as a cornerstone of modern cloud architecture and digital transformation.



4.2 GREEN ARENA

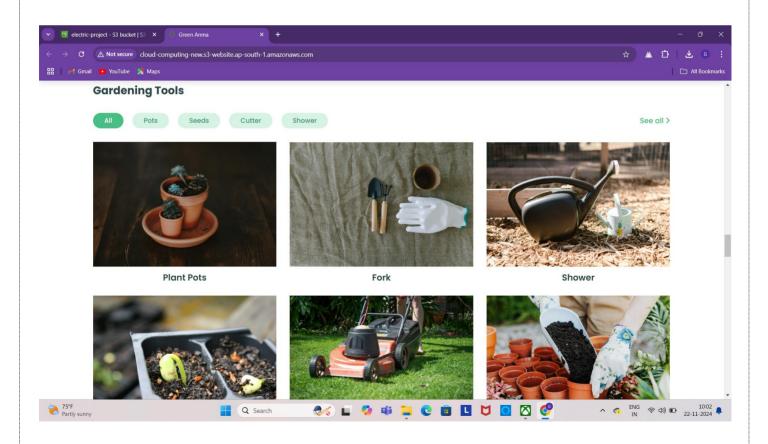
Description: Green Arena

Green Arena, hosted on AWS, is a transformative web platform dedicated to fostering eco-conscious practices through innovative cloud-based solutions. Utilizing AWS services like EC2, S3, and Lambda, Green Arena offers a scalable, reliable, and sustainable environment for users to engage in environmental initiatives. The platform features robust tools for tracking, managing, and promoting green projects, empowering communities and organizations to make a measurable impact. Designed with user-friendliness and security at its core, Green Arena ensures seamless data management and collaboration across teams. Its intuitive interface and real-time analytics enable actionable insights, accelerating the adoption of sustainable practices. Leveraging AWS's global infrastructure, Green Arena guarantees high availability, enabling users to connect and contribute anytime, anywhere. This platform represents the intersection of technology and sustainability, driving a greener future for all.



4.3 AWS FEATURES

Description: Green Arena, hosted on AWS, is a dynamic web platform designed to inspire and empower users to adopt eco-friendly practices through cutting-edge cloud-based solutions. Leveraging AWS services like EC2, S3, and Lambda, the platform delivers exceptional scalability, security, and performance, enabling users to manage and promote environmental projects with ease. AWS, a globally trusted cloud computing platform, provides Green Arena with a robust infrastructure that ensures high availability and responsiveness across diverse regions. With tools for real-time collaboration and secure data handling, the platform fosters seamless teamwork and impactful outcomes. Green Arena's intuitive interface simplifies complex tasks, allowing users to focus on driving innovation and sustainability. The platform offers actionable insights and analytics to track progress and measure impact effectively. By harnessing AWS's advanced capabilities, Green Arena ensures a reliable, efficient, and sustainable experience for users. It represents the perfect integration of technology and eco-consciousness, paving the way for a greener and more sustainable future.



5.WORK CARRIED OUT & OUTCOME

5.1 SOFT SKILLS:

- 1. Problem-solving
- 2. Team collaboration
- 3. Communication
- 4. Adaptability
- 5. Critical thinking
- 6. Time management
- 7. Customer-centric mindset
- 8. Continuous learning
- 9. Conflict resolution

5.2 TECHNICAL SKILLS:

- 1. Cloud computing
- 2. AWS services (EC2, S3, RDS, etc.)
- 3. Infrastructure as Code (IaC)
- 4. Networking and security
- 5. Automation and scripting
- 6. Data management and analytics
- 7. DevOps practices
- 8. Monitoring and troubleshooting
- 9. Containerization (Docker, Kubernetes)
- 10. CI/CD pipelines

6.KEY LEARNINGS

During my internship at GateWay Software Solutions, I learned:

1.Cloud Infrastructure Management:

Type your text

Gained hands-on experience with key AWS services like EC2, S3, and RDS for scalable solutions.

2. Automation & Scripting:

Learned to automate resource deployment using AWS Lambda and CloudFormation.

3.Security Best Practices:

Developed an understanding of AWS security protocols, including IAM roles and VPC configurations.

4.Cost Optimization:

Gained insights into optimizing cloud resources for cost efficiency using tools like AWS Cost Explorer.

5.Monitoring & Troubleshooting:

Used AWS CloudWatch for monitoring, troubleshooting, and ensuring high availability of applications.

S.NO	WEEK	LEARNINGS
1	Week 1	S3 Bucket
2	Week 2	Route 53
3	Week 3	EC2
4	Week 4	Static Hosting

7. CERTIFICATION

7.1 INTERNSHIP CERTIFICATE





KNOWLEDGE INSTITUTE OF TECHNOLOGY, SALEM – 637504

(AUTONOMOUS)

Approved by AICTE, affiliated to Anna University, Chennai, Accredited by NAAC 'A' Grade and NBA (B.E.: Mech, ECE, EEE & CSE)

IPT

Internship / IPT Post - Assessment Form

Student Reflections on Industry Internship

Name of the student	NAVEEN KUMAR M	Year / Semester	III/V
Register No	611222244030	Department	CSBS
Period (From – To)	15-07-2024 to 15-08-2024	No. of Days	30
Name of the Company	GATEWAY SOLUTION	Stipend	NOT PAID
Name of the Industry Mentor	VISHNU	Designation	FOUNDER

Compared to my learning experiences in theory and lab classes during college, to what extent have the following aspects improved:

B. Students who participated in the Internship / IPT are required to answer the following questions on a scale from 0 (no impact) to 05 (high impact)

S.No	Questions	Score
1.	Application of theory to practice	05
2.	Problem solving skills	04
3.	Analyse the complex Problem	04
4.	Learning various tools	05
5.	Communication skills	04
6.	Leadership skills	05
7.	Career skills	04
8.	Overall Experience	04

	С	Write 3 Points you learnt new:				
		Working in an agile environment was a new experience. I learned how to breakdown large proje				
into smaller tasks, adapt quickly to changes, and work efficiently within sprints. The iterat nature of agile helped me to stay organized and deliver high-quality work consistently.						

Write 2 Points for improvements of such Internship / IPT in future Organizing more hands-on workshops and opportunities for interns to work collaboratively on real world projects can improve the overall experience. These practical sessions would help interns deepen their technical and problem-solving skills while fostering teamwork and innovation in a supportive environment.

9. Questions: Internship skills

1. Application of theory to practice:

Compared to lab experiments, internships have significantly helped in applying the theoretical knowledge learned in the classroom to practical applications.

2. Problem solving skills:

Compared to my current classroom experience and lab experiments, my internship has greatly enhanced my problem-solving skills.

3. Analyse the complex Problem:

My internship has significantly improved my ability to design and analyze complex engineering problems at an industry level.

4. Learning various tools:

Compared to my current classroom experience, my internship has greatly enhanced my ability to learn and use various tools for solving industry-level problems.

5. Communication skills:

Compared to my college experience, my internship has significantly improved my understanding of industry-level communication requirements, both written and oral.

6. Leadership skills:

Compared to my college environment, my internship has greatly helped me gain key soft skills such as teamwork, interpersonal skills, decision-making, influencing others, adapting to industry culture, and working in various cultural and environmental settings.

7. Career skills:

My internship has significantly helped me develop my interest and ability to plan my career goals and explore various career options.

10.Assessment for Summer Internship

The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical Training / Internship / Summer Project, the student shall submit an attendance certificate from the organization where he / she has undergone training and a brief report. The evaluation will be made based on this report and a viva-voce Examination, conducted internally by a three-member Departmental Committee constituted by the Head of the Institution consisting of the course coordinator and two experts from the Department. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Institution to the Controller of Examinations.

	Internal Assessment					
S. No.	Title	Max. Marks	Awarded Marks			
1.	Internship Certificate & Attendance	20				
2.	Internship Report	40				
3.	Presentation & Viva-Voce	40				
4.	Total Marks	100				

Guidelines for Internship report split-up:

S. No.	Title	Max. Marks	Awarded Marks
1.	Abstract	5	
2.	Brief details of the Industry / Organization	10	
3.	Task assigned		
4.	Works carried out & Outcome	15	
5.	Key learning mapped with POs	10	
6.	Total	40	