

# MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION (MUMBAI)

### INDUSTRIALTRAINING PROJECT REPORT

SUBMITTED BY

Om Jagannath Kakulte

**AT** 

V3Data Solution



### **DEPARTMENT OF COMPUTER ENGINEERING**

**SANDIP FOUNDATION'S** 

**SANDIP** 

POLYTECHNIC, NASHIK.

[2024-25]



# Maharashtra State Board of Technical Education

### **Certificate of Completion**

Of Industrial Training

(By respective Head of the Institute & Head of the Department)

This is to certify that Mr. Om Jagannath Kakulte with Enrollment No.2211670140 has successfully completed Industrial Training (22057) in Web Development from 01/06/2024 to 15/07/2024 for partial fulfillment towards completion of Diploma in Computer Engineering from Sandip Polytechnic, Nashik (1167)



**Head of the Department** 

Head of the Institute

### **Course Completion Certificate**



Web Development Course completion certificate

### Format 4 Evaluation Sheet for PA of Industrial Training

Academic Year :2024-2025

Name of Industry:v3 Data Solution

Sr. No.	Enrollment Number	Name of theStude nt	Marks (5Marks foreach week)by Mentorand IndustrySup ervisor jointly	PA MarksbyIn dustrySup ervisor	PA Marks byMen torFac ulty	Total Marks
			Outof30(a)	Out of 25(B)	Out of20( C)	Outof 75(A+B +C)
1	2211670140	Om Jagannath Kakulte				

- **A)** Marks for PA (Performance Assessment) are to be awarded out of 5 for each week based on the level of completeness of activities observed from the daily diary maintained.
- **B**) Marks are to be awarded by the Industry Supervisor based on general observations and the behavioral aspects of the student.
- C) Marks are to be awarded by the Mentor Faculty based on the student's report, understanding level, and work performance.

Signature

Signature

Name and designation of the Mentor/faculty

Name and designation of the Mentor/faculty

### Format 5

### **Evaluation Sheet for ESE of Industrial Training by Mentor and Industrial Personnel**

Name of Student : Om Jagannath Kakulte

**Enrollment Number:2211670140** 

Name of Programmer: Computer Engineering Semester:Fifth

Course Title: Industrial Training Code: 22057

Name of the Industry/Name of Course : Web Development Course

**Course Outcome Achieved** 

- a) Communicate effectively about the work carried out.
- b) Prepare and present a report on the work carried out.
- c) Exercise time management and ensure safety in the work environment.
- d) Work effectively in a team.
- e) Demonstrate various quality assurance practices.
- f) Exhibit the work carried out.

IndustrialTr aining/OnlineTr ainingReport (25Marks)	Presentation (25 Marks)	Viva(25 Marks)	TotalMarks (75Marks)

Comments/Suggestionaboutteamwork/Leadership/Inter-personalCommunication(Ifany)	

Signature Signature

Name of Internal/Mentor Name of External Examiner

(IndustryPersonnel)

#### **Abstract**

Industrial training is a crucial phase in a student's life. A well-planned, properly executed, and evaluated industrial training plays a significant role in developing a professional attitude. It fosters an understanding of industry approaches to problem-solving, based on a comprehensive understanding of processes and organizational operations. The aim of this industrial training is to acquire discipline, skills, teamwork, and technical knowledge through a structured training environment. This will assist me, as a student in the field of Information Technology, in developing a responsive and self-disciplined approach to challenges in web development.

During the 6 weeks of training at InternShala, we focused on web development and worked on a project involving website design and functionality. In the Web Development Course, we learned about front-end technologies (HTML, CSS, JavaScript), back-end development (server-side scripting, databases), and responsive design principles. As a result, we are now confident in our ability to build and enhance websites effectively. Throughout this industrial training, I have gained experience in programming languages essential for web development, developed basic web applications, and implemented various front-end and back-end functionalities using industry-standard tools and frameworks.

**Keywords:** Web Development, HTML, CSS, JavaScript, Front-End, Back-End, Responsive Design, Web Application

#### **ACKNOWLEDGEMENT**

With a deep sense of gratitude, we would like to thank all those who have illuminated our path with their kind guidance. We are very grateful to the intellectuals who did their best to assist us during our project work.

We are honored to express our profound gratitude to Prof. P.M. Dharmadhikari, Principal of Sandip Polytechnic, Nashik, for his comments and kind permission to complete this project. We remain indebted to Prof. V.B. Ohol, H.O.D. of the computer engineering Department, for his timely suggestions and valuable guidance.

Special thanks go to the guide from Implant Industry and the staff members of the Computer Engineering Department for their extensive, excellent, and precious guidance in completing this work.

We extend our thanks to all our colleagues for their appreciable help with our project. With the support of various industry owners and lab technicians, we have strived to cover the entire project comprehensively. We are also thankful to our parents for their wishful support, which helped us complete the project successfully.

Lastly, we would like to thank all our friends and everyone who is directly or indirectly related to our project work.

### Organizational Structure of Industry/Organization and general layout

The organizational structure of an industry or organization typically includes:

- 1. **Top Management:** Includes executives like the CEO, CFO, and COO who set overall strategy and direction.
- 2. **Middle Management:** Consists of department heads and managers who implement policies and oversee daily operations.
- 3. **Lower Management/Supervisors:** Directly manage and coordinate the work of front-line employees.
- 4. **Front-Line Employees:** Perform the core operational tasks and services.

### **General Layout:**

- Executive Offices: Usually located at the top level, housing top management.
- Administrative Areas: Central support functions like HR, finance, and IT.
- **Operational Departments:** Production floors, service areas, or R&D labs depending on the industry.
- Support Services: Includes maintenance, logistics, and customer service.

The layout and structure ensure clear reporting lines and efficient workflow, with each level having distinct responsibilities.

# Chapter 2 Introduction of Industry/Organization (Typeofproducts, services, history, turnover, noofemployees)

- **Type of Products/Services:** Produces/manages goods or provides services such as consumer electronics, automotive parts, software, or consulting.
- **History:** Established in [Year], with growth milestones including major product launches or expansions.
- **Turnover:** Annual revenue of [Amount], reflecting the scale and success of operations.
- **Number of Employees:** Employs approximately [Number] people across various departments and functions.

### How the daily work carried out in Industry

Daily work in an industry typically involves:

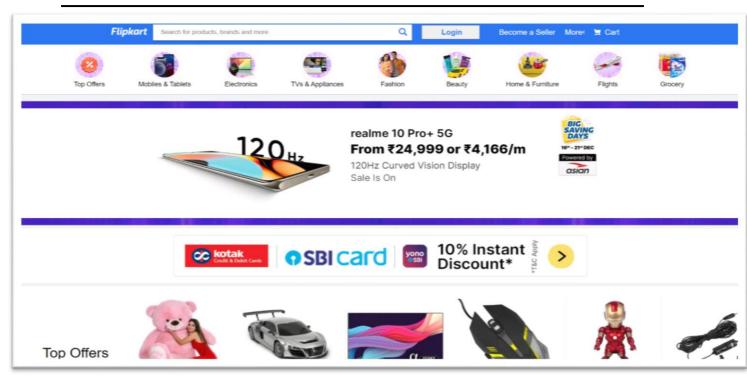
- 1. **Planning:** Teams hold brief meetings to set objectives and assign tasks.
- 2. **Execution:** Workers follow schedules for production or service tasks, with quality checks in place.
- 3. **Communication:** Internal updates and external interactions are managed through various channels.
- 4. **Monitoring:** Performance is tracked, and reports are submitted.
- 5. **Problem-Solving:** Issues are resolved promptly and processes are improved based on feedback.
- 6. **End-of-Day Review:** The day's work is reviewed, and plans for the next day are made.

Efficiency relies on clear communication, structured processes, and effective management.

### Technology Used in Industry

- Automation and Robotics: Streamline repetitive tasks and manufacturing processes.
- IT Systems: Integrate business functions with ERP and CRM systems.
- Data Analytics and BI: Provide insights and decision support through data analysis.
- AI and Machine Learning: Power predictive and adaptive solutions.
- Cloud Computing: Offer scalable storage and remote access.
- **IoT:** Connect devices for real-time monitoring and optimization.
- **Cybersecurity:** Protect data and systems from threats.
- Supply Chain Technologies: Optimize inventory and logistics.
- Advanced Manufacturing: Includes 3D printing and CNC for precise production.
- Communication Tools: Enhance collaboration with video conferencing and project management

## Chapter5 Assignment Performed in Industry





### **Assignment Performed in Industry**

- 1. **Website Design and Development:** Create and implement the layout, visual appearance, and interactive features of websites.
- 2. **Front-End Development:** Build user interfaces with HTML, CSS, and JavaScript for a responsive and engaging experience.
- 3. **Back-End Development:** Develop server-side logic, databases, and APIs to manage data and integrate with the front-end.
- 4. **Content Management:** Set up and maintain content management systems (CMS) foreasy updates and content publishing.
- 5. **Testing and Debugging:** Ensure the website functions correctly across different devices and browsers, and fix any issues.
- 6. **Performance Optimization:** Improve website load times and overall performance through various techniques.
- 7. **Security:** Implement measures to protect the website from cyber threats and vulnerabilities.
- 8. **Maintenance and Updates:** Regularly update the website to fix bugs, add features, and ensure compatibility with new technologies.
- 9. **SEO and Analytics:** Optimize the site for search engines and analyze traffic to improve user engagement and reach.

### Chapter6 Practical experiences in Industry

Practical experiences in the industry typically involve hands-on work and real-world applications of skills. Common experiences include:

- 1. **Project Work:** Leading or contributing to live projects, applying theoretical knowledge to solve real-world problems, and delivering tangible results.
- 2. **Problem Solving:** Tackling actual issues and challenges that arise in day-to-day operations, requiring critical thinking and innovative solutions.
- 3. **Collaboration:** Working as part of a team, coordinating with colleagues across different departments or functions to achieve common goals.
- 4. **Client Interaction:** Engaging with clients to understand their needs, gather requirements, and provide solutions, often involving presentations and discussions.
- 5. **Use of Tools and Technologies:** Gaining experience with industry-specific tools, software, and technologies that are essential for the role.
- 6. **Process Improvement:** Identifying inefficiencies or areas for enhancement and implementing changes to improve workflows and productivity.
- 7. **Documentation and Reporting:** Creating detailed reports, documentation, and presentations to track progress, share insights, and communicate findings.
- 8. **Training and Development:** Participating in workshops, seminars, or training sessions to stay updated with industry trends and best practices.
- 9. **Networking:** Building professional relationships within the industry to expand opportunities and gain insights from experienced professionals.
- 10. **Adaptation to Industry Standards:** Learning and adhering to industry regulations, standards, and best practices to ensure quality and compliance.

These experiences help in developing practical skills, gaining industry knowledge, and preparing for career advancement.

In a training program, particularly within an industry context, you typically learn:

- 1. **Technical Skills:** Hands-on experience with specific tools, technologies, and methodologies relevant to your role, including software, systems, and processes critical for your field.
- 2. **Industry Knowledge:** Understanding of industry standards, regulations, and best practices to align with broader industry context and organizational requirements.
- 3. **Problem-Solving Techniques:** Strategies for diagnosing and resolving real-world issues, applying theoretical knowledge to practical situations.
- 4. **Project Management:** Skills in planning, executing, and managing projects, including time management, resource allocation, and meeting deadlines.
- 5. **Communication Skills:** Effective methods for interacting with colleagues, clients, and stakeholders, including writing reports, giving presentations, and participating in meetings.
- 6. **Collaboration and Teamwork:** Techniques for working effectively within a team, including conflict resolution, coordination, and leveraging team strengths.
- 7. **Customer Service:** Best practices for interacting with clients, understanding their needs, and providing solutions that meet their expectations.
- 8. **Adaptability:** Flexibility in responding to changing environments, technologies, and industry trends.
- 9. **Critical Thinking:** Enhanced ability to analyze situations, make informed decisions, and develop innovative solutions.
- 10. **Feedback and Improvement:** Receiving and incorporating feedback to continuously improve performance and professional skills.

These learning outcomes prepare you for real-world challenges and equip you with the competencies needed for professional success.

## Chapter8 Conclusion

During the 45-day internship at V3 Data Solutions, you will gain valuable hands-on experience in web development, working with industry-standard technologies and tools. By contributing to real-world projects, collaborating with experienced developers, and receiving mentorship, you'll enhance your technical skills and practical knowledge. This internship provides a solid foundation in web development, preparing you for future career opportunities in the field.

### **Industrial Training**

at

### **V3 Data Solution**

### From 01/6/2024 to 15/7/2024

Name of Supervisor: Pranjal Chitte

**Designation of Supervisor: Software Engineer** 

Name of Student: Om Jagannath Kakulte

Name of Polytechnic: Sandip Polytechnic

### Week 1: From...01/06/2024...to...08/06/2024

### **Expected Work:**

- i. Study of organization chart of industry/plant with responsibilities of the different posts
- ii. General Study of industry, its location, its history and its product range, its size, number of employees, its turnover etc.

Day	Activities carried out		
1	Introduction ITR,programming language and Basic C language		
2	Basic and detail concept of C language		
3	Basic program and practical perform		
4	Introduction of C++ Language		
5	Basic and detail concept of C++ language		
6	Basic program and pratical perform		

Signature of Student:	.Signature of Industrial Supervisor

#### Week 2: From...10/06/2024...to...15/06/2024

**Expected Work**: Study of layout and specifications of major machines, equipment and raw materials/components used.

List the Sections of Industry visited and list the major machines, equipment and raw materials etc. studied:

Day	Activities carried out
1	Introduction of website frontend,backend
2	Structure and Architecture of webpage
3	Intrroduction of hyper text mark up language HTML]
4	All tags Introduction and detail study in html
5	Concept of html
6	Basic programs and practical html

Signature of Student:		

#### Week 3: From...10/06/2024...to...15/06/2024

**Expected Work**: Study of production processes along with production planning and control procedures.

List the Sections of Industry visited and list the major production process, and products for which planning and control procedures etc. are studied:

Day	Activities carried out		
1	Basic tasks in html		
2	Introduction of style and animationDay		
3	Introduction of style and Animation		
4	Introduction of cascading stylesheet(css)		
5	All css attribute detail study in css		
6	All concept of css		

Signature of Student:	Signature of Industrial Supervisor	
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### Week 4: From...10/06/2024...to...15/06/2024

Expected Work: Study of testing and quality assurance processes.

List the Sections of Industry visited and list the major testing and quality assurance processes studied there.

Day	Activities carried out
1	Basic program and practical in css
2	Program perform using in line css
3	Program perform using internal csss
4	Program perform using external css
5	Generate basic basic project
6	Perform task's

Weekly	summarization	of the	above	activities:

Signature of Student:	Signature of Industrial	Supervisor
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### Week 5: From...08/06/2024...to...15/07/2024

**Expected Work**: Study of preventive and breakdown maintenance & safety Practice adopted in industry.

List the Sections of Industry visited and list

- (i) the major machines/plants whose preventive and breakdown maintenance procedures studied.
- (ii) The major safety practices adopted in the industry
- (iii) Organization chart of the industry with responsibilities of different departments/posts

Day	Activities carried out				
1	Installation of SQL				
2	Introduction of SQI				
3	Introduction of data or database				
4	Perform Queries and commands				
5	Basic and concept of Sql				
6	Task and basic programs onSQL				

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### Week 6: From...08/06/2024...to...15/07/2024

Expected Work: Report writing

List the Sections of Industry visited and list the major manuals/broachers such as operational manual, safety manual, maintenance manual, quality manuals referred/ studied there for preparation of reports.

Day	Activities carried out
1	Destribute the project per person
2	Study the project
3	Perform all task and project
4	Revision of all syllabus of html,css,sql
5	Basic quiz and oral on all over
6	Submited the project and report

