Sinhgad Technical Education Society's

SINHGAD INSTITUTE OF TECHNOLOGY

Accredited by NAAC with Grade "A"
(Affiliated to Savitribai Phule Pune University, Approved by AICTE and NAAC Accredited)
Gat No. 309, Off Pune-Mumbai Express Way, Kusgaon (Bk.), Lonavala-410401.
Website: sit.sinhgad.edu
Department of Information Technology

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SINHGAD INSTITUTE OF TECHNOLOGY, LONAVALA

Department of Information Technology

INTERNSHIP WORKBOOK

Third Year (IT)
Academic Year
2023-24

Internship Faculty Incharge   HOD (IT)
                                                                     Dr. R.V. Babar

Dr. P. C. Latane

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Vision and Mission of Institute

VISION

उत्तमपुरुषान् उत्तमाभियंतृन् निर्मातुं कटीबध्दा: वयम् |

We are committed to produce not only good engineers but good human beings, also.

MISSION

Holistic development of students and teachers is what we believe in and work for. We strive to achieve this by imbibing a unique value system, transparent work culture, excellent academic and physical environment conducive to learning, creativity & technology transfer. Our mandate is to generate, preserve and share knowledge for developing a vibrant Society.

Vision Mission of department

VISION

The department of IT visualizes teaching learning methodologies to create groomed, technically competent, skilled intellectual IT professionals to achieve the challenges of dynamic needs of local as well global industry and professional community.

MISSION

The department offers students and faculty with an open environment that fosters professional and personal growth. Acquiring knowledge of Information Technology and learning its application through innovative practices and possess high morale, ethics, lifelong learning skills, concern for the society and environment.

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Short Term Goals

• The department offers students and faculty with an open environment that fosters professional and personal growth.

• To strengthen the institute-industry relationship for mutual benefits.

• To initiate technical development programs and certification examinations for skills development of students.

• To establish project-based learning model for real life learning to improve academic performance of students and maintain high placement record

Long Term Goals

• To provide dynamic curriculum to meet the requirements of industries.

• To strengthen patent-based research and product development efforts for supporting indigenous market.

• To foster research in the field of Information Technology for the benefits of society.

• To create better entrepreneurs in the IT Sector.

Program Educational Objectives: PEOs

• To provide strong fundamental concepts in mathematics, science, engineering and Technology to address technological challenges.

• To provide knowledge and skills in the field of Computer Science and Information Technology for analyzing, designing and implementing complex engineering problems of any domain with innovative approaches.

• Possess an attitude and aptitude for research, entrepreneurship and higher studies in the field of Computer Science and Information Technology.

• Shall Have commitment to ethical practices, societal contributions through communities and lifelong learning.

• Possess better communication, presentation, time management and teamwork skills leading to responsible & competent professionals and will be able to address challenges in the field of IT at global level.

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Program Specific Outcomes: PSOs

1. An ability to apply diverse Information Technology concepts to solve complex business and computational problems through the analysis, design, development and management of information processing systems and applications in interdisciplinary domains.

2. Acquire technical, professional and social skills through the use of latest technology to be competent enough for professional responsibilities

Program Outcomes: POs

Students will be able to:

i) **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

ii) **Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

iii) **Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

iv) **Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems:

- that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline as against problems given at the end of chapters in a typical text book that can be solved using simple engineering theories and techniques;

- that may not have a unique solution. For example, a design problem can be solved in many ways and lead to multiple possible solutions;

- that require consideration of appropriate constraints / requirements not explicitly given in the problem statement such as cost, power requirement, durability, product life, etc.;

- which need to be defined (modelled) within appropriate mathematical framework; and

- that often require use of modern computational concepts and tools, for example, in the design of an antenna or a DSP filter.

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v) **Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

vi) **The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

vii) **Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

viii) **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

ix) **Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

x) **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

xi) **Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

xii) **Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

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Internship Details

Name of Student:	Aditya Anand Shahane		
Roll Number:	TI-23	**Student Contact:**	9307676503
Online/Offline:	Online	**Duration:**	1 Month
Start Date:	1/1/2024	**End Date:**	31/01/2024
Stipend received (If any):	NO	**Is Paid:**	NO
Area/Domain:	Web Development		
Name of Company:	TECHNOHACKS		
Company address: (With website link)	10, 2nd Floor, Devikrupa Apartment, Vidya vikas circle, Gangapur Rd, above New Singh Cycles, Nashik, Maharashtra 422005 https://technohacks.co.in/		
Company Email:	info.technohacks@gmail.com	**Company Contact:**	+918208937014

* Attach internship Completion certificate at the end.

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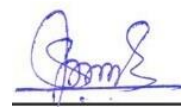
Week 1 Diary

Week Starting date: December 15, 2023 -
December 21, 2023

Day	Date	Work done
Friday	January 1, 2024	➢ Introduction to MERN Stack. ➢ Overview of MongoDB, Express.js, React.js, and Node.js. ➢ Setting up development environment.
Saturday	January 2, 2024	➢ Deep dive into MongoDB: CRUD operations. ➢ Hands-on exercises with MongoDB. ➢ Introduction to Mongoose for MongoDB interactions.
Sunday	January 3, 2024	➢ Understanding Express.js: Routing, Middleware, and Handlers. ➢ Setting up basic Express server. ➢ Building RESTful APIs with Express.
Monday	January 4, 2024	➢ Introduction to React.js: Components, Props, and State. ➢ Setting up React environment. ➢ Creating basic React components.
Tuesday	January 5, 2024	➢ Exploring React.js further: Hooks and Lifecycle methods. ➢ Hands-on exercises with React components. ➢ Integrating React components with Express backend.
Thursday	January 6, 2024	➢ Understanding Node.js: Event-driven architecture and asynchronous programming. ➢ Building backend services with Node.js. ➢ Integrating Express.js with Node.js.
Friday	January 7, 2024	➢ Recap of Week 1. ➢ Q&A session to address any doubts. ➢ Planning for the Twitter Clone project.

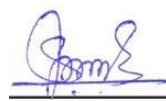**Signature by Student: _____**   **Signature by Supervisor or Manager: _____**

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Week 2 Diary

Week Starting date: December 22, 2023 -
December 28, 2023

Day	Date	Work Done
Saturday	January 8, 2024	➢ Planning and designing the Twitter Clone project. ➢ Database schema design for MongoDB. ➢ Wireframing UI components for React.
Sunday	January 9, 2024	➢ Setting up project structure: Frontend and Backend folders. ➢ Initializing Git repository for version control. ➢ Implementing user authentication with JWT.
Monday	January 10, 2024	➢ Creating backend endpoints for user authentication. ➢ Implementing registration and login functionality. ➢ Validating user inputs.
Tuesday	January 11, 2024	➢ Minor bug fixes and improvements. ➢ Reviewing codebase for potential optimizations.
Wednesday	January 12, 2024	➢ Implementing frontend components for user authentication. ➢ Designing login and registration forms. ➢ Integrating frontend with backend API endpoints.
Thursday	January 13, 2024	➢ Developing Tweet CRUD operations on backend. ➢ Implementing API endpoints for creating, reading, updating, and deleting tweets. ➢ Testing API endpoints using Postman.
Friday	January 14, 2024	➢ Developing frontend components for Tweet functionalities. ➢ Creating UI for composing, displaying, and interacting with tweets. ➢ Integration testing of frontend components with backend APIs.

Signature by Student: _____   **Signature by Supervisor or Manager:** _____

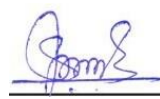**Sinhgad Technical Education Society's**

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Week 3 Diary

Week Starting date: December 29, 2023 -
January 4, 2024

Day	Date	Work done
Saturday	January 15, 2024	➢ Task 1: Introduce Premium Plans. ➢ Designed UI for premium plans section. ➢ Integrated Stripe for payment gateway. ➢ Added basic premium plans functionality.
Sunday	January 16, 2024	➢ Task 2: Dynamic Themes. ➢ Researched APIs for weather and time. ➢ Implemented dynamic theme change based on location. ➢ Added snow effect animation.
Monday	January 17, 2024	➢ Task 2: Dynamic Themes. ➢ Added rain effect animation. ➢ Implemented theme change based on time of day.
Tuesday	January 18, 2024	➢ No Work Done
Wednesday	January 19, 2024	➢ Task 2: Dynamic Themes. ➢ Implemented hot sun effect. ➢ Fine-tuned theme change animations.
Thursday	January 20, 2024	➢ Task 3: Live Stream. ➢ Researched WebRTC technology. ➢ Set up basic live streaming functionality.
Friday	January 21, 2024	➢ Task 3: Live Stream. ➢ Implemented screen sharing feature. ➢ Added video streaming through camera.

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Week 4 Diary

Week Starting date: January 5, 2024 - January 11, 2024

Day	Date	Work done
Saturday	January 22, 2023	Task 3: Live Stream. Implemented voice chat feature. Fine-tuned live streaming UI.
Sunday	January 23, 2023	Task 1: Introduce Premium Plans. Expanded premium plans options. Added more benefits for premium users.
Monday	January 24, 2023	Task 1: Introduce Premium Plans. Implemented subscription management. Integrated email notifications for subscription renewals.
Tuesday	January 25, 2023	Task 2: Dynamic Themes. Fixed bugs related to theme change. Improved performance of theme animations.
Wednesday	January 26, 2023	Task 2: Dynamic Themes. Added more dynamic elements based on weather conditions. Optimized code for better efficiency.
Thursday	January 27, 2023	Task 3: Live Stream. Conducted extensive testing for live streaming feature. Fixed various bugs and issues.
Friday	January 28, 2023	Final testing and debugging. Preparing documentation and final presentation for the project.

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Feedback of Student
[To be taken after completion of Internship]

Name of Student: Abhinav Raosaheb Gore

Attendance	□ Good	□ Acceptable	□ Needs Attention
Punctuality	□ Good	□ Acceptable	□ Needs Attention
Suitability of Office Attire	□ Good	□ Acceptable	□ Needs Attention
Ability to Communicate	□ Good	□ Acceptable	□ Needs Attention
Behavior	□ Good	□ Acceptable	□ Needs Attention
Industry Skills	□ Good	□ Acceptable	□ Needs Attention
Working without supervision	□ Good	□ Acceptable	□ Needs Attention
Working as part of a Team	□ Good	□ Acceptable	□ Needs Attention
Working Safely	□ Good	□ Acceptable	□ Needs Attention
Flexibility	□ Good	□ Acceptable	□ Needs Attention
Interest shown	□ Good	□ Acceptable	□ Needs Attention
Organizing own work	□ Good	□ Acceptable	□ Needs Attention
Attitude to work	□ Good	□ Acceptable	□ Needs Attention
Relationship with Supervisor	□ Good	□ Acceptable	□ Needs Attention

(Sandip Gavit)
Manager's or Supervisor's Signature   **Date:**