GOVERNMENT COLLEGE OF TECHNOLOGY
(An Autonomous Institution affiliated to Anna University)
COIMBATORE - 641 013
DEPARTMENT OF INFORMATION TECHNOLOGY

INTERNSHIP REPORT

SOFTYUGA, COIMBATORE

DURATION : 01.07.2025 – 30.07.2025

LOCATION :No 62,1st floor,Trichy Road,Kamachipuram,Coimbatore.
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Submitted by
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B.TECH – IV YEAR (2022–2026) IT BATCH
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Name of the student : DHANUSRI R

Register Number : 71772218L01

Department : Information Technology

Batch : 2022-2026

Faculty Advisor (Previous Semester)	**Senior Faculty**	**Faculty Advisor& Program co-ordinator**

INDUSTRIAL CERTIFICATE

SOFTYUGA
ISO 9001:2015

CERTIFICATE

OF INTERNSHIP COMPLETION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

DHANUSRI.R

pursuing GOVERNMENT COLLEGE OF TECHNOLOGY

from CT

who has successfully completed the Internship training in the field of JAVA from 01.07.25 to 30.7.25 in our Organization. During the training, we observed that the candidate was hard-working in nature and sincere throughout the training period. We wish him/her better prospects in their studies as well as in their career.

Place:

Industry Award

HR Manager

Managing Director

ACKNOWLEDGEMENT

I hereby declare that this internship report entitled "**EXPENSE TRACKER**" is prepared by me during Seventh Semester in the academic year 2025- 2026 under the company "**SOFTYUGA**" from 01.07.2025 to 30.07.2025.

I further affirm that the report is original, authentic, and has not been submitted elsewhere for any academic purpose.

Place : Coimbatore

Date :

Name : Dhanusri R

Roll No : 71772218L01

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CHAPTER 1 – ABSTRACT

The internship at **Softyuga, Coimbatore**, provided me with an excellent opportunity to gain practical exposure and strengthen my technical skills in **Core Java development**. During the one-month internship, I applied the theoretical concepts learned in academics to real-world applications, enhancing my understanding of **object-oriented programming, database integration, and application design**.

As part of the training, I developed a project titled **"Expense Tracker"**, aimed at efficiently managing and tracking daily financial transactions. The project focused on creating a desktop-based application using **Java and JDBC** for backend integration with a relational database. My responsibilities included implementing key modules such as user authentication, expense categorization, data storage, and summary generation. This project helped me understand the complete software development lifecycle—from requirement gathering to testing and deployment.

Through this internship, I not only improved my technical proficiency in **Java, JDBC, and SQL**, but also enhanced my analytical thinking, debugging, and problem-solving skills. Additionally, the experience strengthened my ability to work independently, manage deadlines, and apply coding standards effectively. Overall, the internship served as a vital step toward my professional growth as a Java developer and prepared me for future roles in the software industry.

CHAPTER 2 – INTRODUCTION

Internships serve as a vital platform for engineering students to gain real-time industry exposure and understand how theoretical knowledge is applied to solve practical problems. As a third-year Information Technology student, I had the opportunity to pursue my internship at **Softyuga, Coimbatore**, a reputed organization known for its excellence in software development and technical training. This experience played a significant role in strengthening my foundation in programming and understanding professional software practices.

The internship primarily focused on **Java programming and application development**, providing me with in-depth knowledge of **object-oriented programming (OOP) concepts, exception handling, file handling, JDBC (Java Database Connectivity), and GUI-based application design**. Throughout the internship, I worked on developing a real-time project titled **"Expense Tracker"**, which aimed to simplify daily expense management through an interactive and efficient Java-based application.

This internship helped me enhance not only my technical skills but also my logical thinking, debugging, and software design capabilities. Moreover, I gained valuable experience in problem-solving, documentation, and project execution key skills required in the software development industry. Overall, the internship at Softyuga was an enriching experience that improved my technical expertise, boosted my confidence, and better prepared me for a successful career in the field of software engineering.

CHAPTER 3 – COMPANY PROFILE

Softyuga is an ISO-certified IT solutions provider recognized for its excellence in software development, consulting, and industrial training. The organization has built a strong reputation for delivering quality client solutions while offering skill-based training programs tailored for engineering students and aspiring developers. Training at Softyuga emphasizes modern technology domains, including Full Stack Development, Internet of Things (IoT), Artificial Intelligence (AI), Data Science, and Java development.

For its Java internship program, Softyuga offers a hands-on learning environment where participants actively apply theoretical concepts to real-world projects using Java and related technologies such as Spring Boot, JDBC, and APIs. The company integrates technical expertise with the latest industry standards, ensuring that solutions are both reliable and efficient. Through practical project work, live coding sessions, and professional mentorship, interns develop strong software engineering foundations and problem-solving skills.

Softyuga's team of skilled developers, trainers, and consultants fosters a professional and educational atmosphere, enabling students to bridge the gap between academic knowledge and industry demands. The program prioritizes experiential learning, empowering participants to complete portfolio-worthy Java projects while cultivating teamwork and communication abilities essential for a successful software career.

CHAPTER 4 – WORK DESCRIPTION

During my internship at Softyuga, I worked on a real-time project titled “Expense Tracker,” designed to help users manage and monitor their financial transactions and spending habits efficiently. This project offered valuable hands-on exposure to practical software development with Java, covering all phases from requirements gathering to deployment.

The training and project work were structured progressively. Initial guided sessions introduced me to core Java concepts, essential tools, and project development workflows. Gradually, I took on independent roles in the project, which allowed me to apply theoretical knowledge to address real-world challenges in expense management systems. This approach deepened my understanding of how user interfaces, business logic, and persistent storage integrate to build a complete application.

My responsibilities spanned user interface creation, backend logic implementation, and database operations. On the frontend, I contributed to building interactive and user-friendly input forms and dashboards for tracking expenses. On the backend, I developed Java-based modules to process user inputs, manage data flow, and enforce application logic. In addition, I participated in designing the data model, implementing secure data storage, and optimizing queries for efficient retrieval of financial records. Collectively, these experiences strengthened my Java programming skills and enhanced my ability to devise robust, maintainable solutions for practical problems.

4.1 - Modules Assigned

During my internship at Softyuga, I worked on several fundamental modules of the Expense Tracker application. These modules provided comprehensive exposure to secure user management, expense operations, data import/export, JDBC connectivity, and database integration.

1. **User Authentication Module**
   This module focused on user registration, secure login, and password hashing using BCrypt. It ensured that each user's data was isolated, maintaining privacy and security. My responsibilities included designing and implementing logic for user authentication and ownership of expense data within the application.
2. **Expense Management Module**
   Here, I handled the core functionalities related to adding, viewing, updating, and deleting expense entries. The module also facilitated filtering expenses by category and calculating totals. I developed business logic for full CRUD operations and user-scoped queries, ensuring that users could effectively manage their financial records.
3. **CSV Import/Export Module**
   This module allowed users to export their expenses to CSV files for backup and import bulk entries from CSV format. My tasks included implementing logic for formatting, validation, and data migration, enabling seamless portability of user financial data.
4. **JDBC & Repository Module**
   I managed database connectivity and data access via JDBC protocols. This included designing systems for connection pooling, executing SQL statements, and mapping database results to application models. Emphasis was placed on centralized error handling and robust DB operations.
5. **Database Integration Module**
   This area involved designing the database schema, creating tables for users, expenses, and categories, and applying constraints and indexes.

4.2 – Core JAVA Module

In the Core Java module, my work centered on developing an interactive console application that managed key business logic for user authentication and expense tracking. This involved designing a seamless, menu-driven experience that allowed users to register, log in securely, and access a range of functionalities including expense management and CSV data handling.

My key contributions included:

- Designing a robust console menu to guide users through registration, login, adding, viewing, updating, and deleting expense transactions.
- Implementing precise input validation for numbers and dates, ensuring all user data was accurate and professionally presented with clear, tabular formatting.
- Enforcing per-user data access by linking session context to user operations, so that expense data remained private and isolated for each user.
- Integrating features for exporting and importing expenses to and from CSV files, enhancing data portability and backup.

Through this module, I focused on delivering a smooth console experience with clear prompts, reliable user input handling, and formatted outputs for readability. Dividing responsibilities cleanly between the user interface, service logic, and data management components improved the maintainability of the codebase. Overall, this module deepened my expertise in console application development, user experience design, and the orchestration of business logic in Core Java.

4.3 - JDBC Module

In the JDBC module, my work focused on persisting and querying data securely using JDBC with prepared statements. I implemented Data Access Objects (DAOs) for both users and expenses to manage SQL queries, map results to models, and log errors effectively. A key aspect of this module was ensuring that all expense operations were user-specific by filtering data based on the user's ID. My key contributions included:

- Developing operations for user management, including creation, lookup by username or ID, and existence checks.
- Building comprehensive expense functionalities such as adding, retrieving by ID, listing (by user and by category), updating, deleting, and computing totals.
- Centralizing database connection management with configuration driven by properties files to ensure secure and efficient connections.

Through this module, I gained experience in designing a safe and reusable data layer with well-defined interfaces and minimal dependencies on the user interface code. This separation of concerns enhanced the maintainability and scalability of the application, while providing robust backend data management.

4.4 - Database Module

In the Database Integration module, I worked with MySQL to design and configure the database schema that underpins the Expense Tracker application. This involved defining relational tables for users, expenses, and categories, ensuring that the structure supported reliable data storage and efficient access.
My key contributions included:

- Designing the database schema with appropriate foreign keys, such as associating expenses with user IDs to maintain data integrity.
- Adding indexes on critical columns like date, category, and user ID to optimize query performance.
- Creating seed data for categories to facilitate categorization of expenses.
- Setting up environment configuration via a properties file for seamless local MySQL integration.

This module gave me practical experience in organizing data effectively and safeguarding referential integrity while optimizing database lookups. It completed my full stack development exposure by providing a strong foundation for how the backend interacts consistently with the database layer.

4.5 - Version Control System (Git/GitHub)

During my internship at Softyuga, I used Git and GitHub for version control to manage the Expense Tracker Java project efficiently. This experience helped me understand professional software workflow practices, including branch management, code review, and project organization.

My key contributions and learnings included:

- Repository Setup: Initialized the Git repository with a clear Maven project structure, organizing source code and resource files logically to facilitate easy navigation and build processes.
- Branching Strategy: Created feature branches for individual modules such as authentication, expense DAO, CSV handling, database schema, and console UI enhancements. Merged changes into the main branch only after peer review and local testing.
- Commit Practices: Maintained frequent, focused commits with descriptive messages to document feature additions and bug fixes, enabling easy tracking and rollback if needed.
- Pull Requests & Code Review: Used pull requests for integrating features, ensuring that the code compiled correctly, passed local tests, and that database changes were compatible and well-documented.

This version control approach reinforced my understanding of collaborative development, codebase management, and release workflows, preparing me for real-world software engineering environments.

CHAPTER 5 – SKILLS GAINED

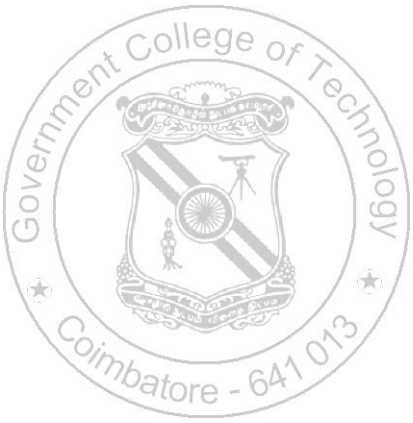
The internship at Softyuga provided a meaningful opportunity to connect academic learning with real-world industry experience. It deepened my understanding of professional development processes, coding standards, and project collaboration within an IT company. The guidance from mentors and teamwork enhanced both my technical skills and professional growth.

Technical Skills:

- Java Development: Gained practical skills in Core Java, JDBC, and console-based application development.
- Database Management: Designed and implemented MySQL database schemas with foreign key constraints and indexes for performance.
- Version Control: Effectively used Git and GitHub for source code management, branching, pull requests, and issue tracking.
- Data Handling: Developed features for CSV import/export to support real-world data backup and transfer.
- Debugging & Testing: Enhanced debugging skills and implemented error handling for robust application behavior.

Professional Skills:

- Problem Solving: Strengthened problem-solving capabilities by working through real-world programming challenges.
- Team Collaboration: Improved through peer reviews, collaborative development, and constructive feedback.
- Communication: Enhanced ability to document progress and articulate technical details clearly.
- Time & Task Management: Learned to manage deadlines and multitask efficiently across project modules.
- Industry Insight: Acquired awareness of industry best practices, workflow processes, and professional coding standards.



CHAPTER 6 – CONCLUSION

The internship at Softyuga provided me with essential hands-on experience in Java development, database design, and application architecture, bridging the gap between academic concepts and industry practices. Working on the Expense Tracker project enhanced my skills in core Java programming, JDBC, MySQL integration, and version control with Git and GitHub, while emphasizing software design principles and data security.

This opportunity significantly improved my technical abilities, including building secure authentication systems, implementing data persistence, managing database schemas, and practicing collaborative development workflows. It also strengthened my problem-solving capabilities by working on real-world application requirements and debugging challenges.

Beyond technical skills, the internship fostered my professional growth in teamwork, communication, and project management, preparing me for future roles in software development. Mentorship, code reviews, and team collaboration provided valuable insights into industry workflows and standards.

Overall, the internship at Softyuga was a transformative experience that equipped me with practical knowledge and professional readiness to excel in the IT field and contribute effectively to future software projects.