EXECUTIVE SUMMARY

This report documents the internship work completed by **Bhoomika G R [1B21CS026]** as part of the course *Industry Internship (21INT82)* during the academic year 2024–2025. The internship was undertaken at **Cognizant Technology Solutions**. The internship spanned a duration of four months, from **March 2025 to June 2025 (Ongoing)**, and was carried out under the academic supervision of **Dr. Naveena C**, Professor, Department of Computer Science and Engineering, **SJB Institute of Technology**.

The internship's primary goal was to help with cloud-based enterprise integration and low-code application development for a big financial services customer going through a digital transformation. The intern helped to create powerful interfaces using Oracle Integration Cloud (OIC), which allows for seamless interaction between SaaS and on-premises applications. Configuring adapters, building orchestrated integration flows, handling fault rules, and implementing data mapping logic using OIC's visual designer were all part of my responsibilities.

In parallel, Oracle Cloud Infrastructure (OCI) was used to manage cloud resources like as computing, storage, and networking for deployment settings. The intern acquired hands-on experience with creating and maintaining OCI services using the OCI Console and Resource Manager. Significant work was also done in OCI Data Integration (OCI-DI), where the intern created scalable data pipelines to handle ETL workloads that included Oracle Autonomous Data Warehouse and Object Storage. These pipelines featured data profiling, transformation, and load orchestration utilizing a metadata-driven method.

Additionally, Oracle APEX (Application Express) was utilized to develop low-code apps for internal reporting. To serve internal analytics use cases, the intern created interactive web apps that used APEX capabilities including dynamic forms, charts, RESTful web services, and role-based access control. The project lifecycle consisted of requirement analysis, service delivery, integration design, deployment automation, monitoring, and documentation. Agile methods were used throughout the engagement.

The project lifecycle involved requirement analysis, service provisioning, integration and pipeline development, deployment automation, monitoring, and detailed documentation. Agile practices, including daily stand-ups, sprint planning, and collaborative reviews, were actively followed to ensure smooth project execution.

The internship significantly improved hands-on proficiency in Oracle cloud services while enhancing key professional skills such as problem-solving, collaboration, and stakeholder communication. Overall, this internship provided a strong foundation in the Oracle cloud ecosystem, with practical exposure to enterprise integration, cloud infrastructure management, data engineering, and low-code development. The experience has laid a solid groundwork for a future career in cloud-based data and application engineering, blending deep technical knowledge with practical, industry-relevant expertise.