

Annexure – IV

Project Diary – Weekly Report

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Enrollment No: 2206109

Semester: Even 2024 (6th)

Project Batch Number: PRJO21H302

Week (From - to date)	Discussion Topics/Activity Details	Work Allotted Till Next Session/Corrections Suggested/Faculty Remarks	Dated Signature of Faculty
06/01/2025 To 08/01/2025 (Week 1)	<ul style="list-style-type: none"> Initiated project discussions to explore various domains and ideas. Finalized three potential topics: SQLify, EEG to Text, and Women Safety Device. Created a comprehensive 3-page abstract for the selected topic SQLify, covering its objective, scope, use case, and proposed modules. 	<ul style="list-style-type: none"> Prepare detailed system design diagrams including workflow and architecture. Define individual modules and their interdependencies. 	
13/01/2025 To 15/01/2025 (Week 2)	<ul style="list-style-type: none"> Designed the system architecture and logical workflow of the SQLify application. Initialized GitHub repository, Python virtual environments, and scaffolded the React frontend. 	<ul style="list-style-type: none"> Document all project requirements including software/hardware tools, APIs, and libraries. Plan and distribute tasks using a development timeline. 	

	<ul style="list-style-type: none"> • Set up Flask backend and connected MySQL for database operations. • Installed key dependencies and libraries. 		
20/01/2025 To 22/01/2025 (Week 3)	<ul style="list-style-type: none"> • Implemented schema generation using Code Llama (LLM) with prompt engineering. • Integrated SQLCoder-7B for NL-to-SQL query generation, supporting Trino, MySQL, and PostgreSQL. • Enhanced LLM efficiency using quantization to reduce response time significantly. 	<ul style="list-style-type: none"> • Benchmark generated schemas on multiple datasets. • Develop functionality to connect and execute queries on a local database instance. 	
27/01/2025 To 29/01/2025 (Week 4)	<ul style="list-style-type: none"> • Migrated to Meta Llama 3 API for better schema generation quality. • Designed UI mockups using Figma and initiated frontend development for dashboard, SQL editor, and schema viewer. • Implemented REST APIs and unit tests for the Schema and Query Modules. • Integrated real-time database connection features. 	<ul style="list-style-type: none"> • Enable support for dialect-specific responses across multiple databases. • Conduct demo of integrated modules and gather initial feedback. 	
03/02/2025 To	<ul style="list-style-type: none"> • Finalized module integration with database engines (Trino, MySQL, PostgreSQL). • Designed and implemented a 	<ul style="list-style-type: none"> • Test learning module functionality with mentor. • Improve user engagement and interactivity. 	

05/02/2025 (Week 5)	<p>gamified SQL learning module with storyline-based level segmentation (Basic, Intermediate, Advanced).</p> <ul style="list-style-type: none"> • Integrated SQL practice scenarios into the platform. 		
10/02/2025 To 12/02/2025 (Week 6)	<ul style="list-style-type: none"> • Developed an automatic SQL answer evaluation and scoring mechanism. • Began working on synthetic data generation to simulate real-world datasets. • Performed UI adjustments and integrated modules into the existing system. 	<ul style="list-style-type: none"> • Complete synthetic data generation logic and define its parameters. • Conduct integration testing for newly added modules. 	
17/02/2025 To 19/02/2025 (Week 7)	<ul style="list-style-type: none"> • Completed development and testing of synthetic data generator. • Integrated Supabase-based login and registration system with session management. • Implemented secure state preservation and result logging for users. 	<ul style="list-style-type: none"> • Resolve navigation-based UI bugs and enhance session management features. • Finalize responsive layout designs. 	
24/02/2025 To 26/02/2025 (Week 8)	<ul style="list-style-type: none"> • Improved UX by resolving UI inconsistencies and page routing bugs. • Finalized responsive design for desktop and mobile devices. • Conducted internal testing to 	<ul style="list-style-type: none"> • Analyze performance limitations and initiate feedback collection. • Conduct team review of implemented features. 	

	evaluate overall usability and accessibility.		
03/03/2025 To 05/03/2025 (Week 9)	<ul style="list-style-type: none"> • Conducted rigorous unit and integration testing of all core modules. • Documented test cases, test logs, and bug tracking records. • Fixed API schema mismatches and improved backend error handling. 	<ul style="list-style-type: none"> • Begin codebase optimization and frontend refinement. • Ensure functional parity across all components. 	
10/03/2025 To 12/03/2025 (Week 10)	<ul style="list-style-type: none"> • Polished frontend components for Schema Viewer and SQL Editor. • Enhanced backend response speed and optimized query generation fallback. • Refined SQL learning module visuals and scoring indicators. 	<ul style="list-style-type: none"> • Prepare detailed demonstration walkthroughs. • Freeze current features and plan project wrap-up. 	
17/03/2025 To 19/03/2025 (Week 11)	<ul style="list-style-type: none"> • Created presentation slides and demo scripts for final evaluation. • Successfully demonstrated SQLify to the mentor. • Received and addressed design and functionality feedback. 	<ul style="list-style-type: none"> • Draft and complete the final report with visuals, diagrams, and structured module explanations. 	
24/03/2025 To	<ul style="list-style-type: none"> • Completed project report: Testing logs, UI screenshots, results, and future work. • Final proofreading, 	<ul style="list-style-type: none"> • Prepare for internal viva and final evaluation. • Update project presentation as per feedback. 	

26/03/2025 (Week 12)	formatting, and softcopy submission. • Published final codebase and documentation to GitHub.		
31/03/2025 To 02/04/2025 (Week 13)	• Conducted mock presentations and refined slides. • Practiced team Q&A for evaluation readiness. • Finalized submission brief for external panel.	• Archive final assets. • Submit student reflections and complete formalities.	
15/04/2025 To 16/04/2025 (Week 14)	• Archived all project assets and finalized GitHub structure. • Submitted signed weekly and daily reports. • Composed and submitted individual reflection and feedback.	• Stay prepared for viva and future academic presentations.	

Signature of Faculty
(Mrs. B.R.Amrutkar)

Signature of HOD
(Mrs. J.R.Hange)