

## Annexure – IV

### Project Diary – Weekly Report

**Name of Student:** Likhit Abhay Chirmade**Name of Guide:** B.R.Amrutkar**Enrollment No:** 2206109**Semester:** Even 2024 (6th)**Project Batch Number:** PRJO21H302

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

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

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

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

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)**