**Name:** Priyanshu Gupta **Roll No.:** 47

**Project Title:** Zentra Chatbot - Website Content Analysis Chatbot  **Semester: 2nd**

**Technology Used:** Python, Flask, MERN Stack, LangChain, Vector Store **Mentor Name:** Santosh Jain

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sr No. | Week (Specify  Date1 – Date2) | Activities/Tasks  Done in Project | Challenges Faced Week | Plan for next  Week | Self-Evaluation:  1-5 |
| 1 | **Week 1** (15/2 - 28/2) Conducted initial research and requirement analysis | Research, environment setup, Flask backend, vector store, and document processing. | LLM selection, vector store optimization, memory management. | Implement website scraping functionality, Design frontend architecture | 4 |
| 2 | **Week 2** (1/3 - 14/3) Developed website scraping module. | Website scraping, content extraction, frontend components, authentication, and MongoDB integration. | Dynamic content handling, CORS issues, concurrent requests. | Implement chat interface, Develop response generation system | 4 |
| 3 | **Week 3** (15/3 - 28/3) | - Built chat interface | Chat interface, response generation, document upload, real-time processing, and security testing. | Response time optimization, file size limits, security vulnerabilities. | Conduct performance testing, Begin Documentation | 3 |
| 4 | **Week 4** (29/3 - 11/4) | - Conducted performance testing. | Performance optimization, documentation, bug fixes, deployment, and presentation. | Edge cases, performance tuning, final deployment. | Final testing phase, Prepare project presentation | 5 |
| 5 | **Week 5** (12/4 - 25/4) | - Conducted final testing. | Final testing (edge cases, performance).  Optimized vector store searches.  Prepared docs & presentation. | Edge cases (malformed files, timeouts).  Performance-accuracy trade-off. | Deployment, dry-run, submission. | 5 |
| 6 | **Week 6** (26/4 - 30/4) | - Deployed on AWS/Vercel. | Delivered final presentation.  Handed over project docs.  Recorded walkthrough. | Deployment issues.  Demo Q&A nerves. | Multilingual support, case study. | 5 |

Prepared By : Priyanshu Gupta Approved By : Santosh Jain