



**UNITED
INTERNATIONAL
BUSINESS
SCHOOL**
BENGALURU

Internship Report on **“Brew-Dah AI Agent”**
at Sadre Solution

Submitted in partial fulfillment of the requirement for
the award of the degree

BACHELOR OF COMPUTER APPLICATIONS
OF
Bangalore North University

SANJEEV S
U19TO22S0008

Under the guidance of

Mrs. SABNAM PRADHAN
Assistant Professor

Department of Computer Applications

Academic Year : 2024-2025



CERTIFICATE

This is to certify that the Project work entitled
Brew-Dah AI Agent

*Submitted in partial fulfillment of the requirement for
the award of the degree of*

Bachelor of Computer Applications

of the

Bangalore North University

is a result of the bonafide work carried out by

SANJEEV S (U19TO22S0008)

during the academic year **2024 – 2025**

Signature of the Faculty Guide

Signature of the HOD

External Viva

Examiners:

1.

2.

STUDENT DECLARATION

I SANJEEV S with register numbers U19TO22S0008 hereby declare that this report entitled "**Brew-Dah AI Agent**" during the internship period from 28/04/2025 to 06/05/2025 at Sadre Solution under the supervision and guidance of Anasani Soma Sekhar Babu Head of the Department of Computer Applications, United International Business School, Hennur Bagaluru Road, Bengaluru.

DATE:

PLACE: UIBS

SANJEEV S (U19TO22S0008)

ACKNOWLEDGEMENT

The successful completion of this internship report required significant guidance and assistance from many individuals, and we are truly grateful for their support throughout this journey.

Firstly, I would like to express our sincere appreciation to **Mr.Gnanaraj Sadacharam, Sadre Solution**, for providing us with the opportunity to intern at their esteemed organization.

I also deeply grateful to our Principal, **Dr. S Sathya Frankiln**, for his unwavering support and for granting us the valuable opportunity to perform the internship on stage. We would like to extend our sincere gratitude to **Anasani Soma Sekhar Babu**, Head of the Department of Computer Applications, for his invaluable support in securing the internship opportunity and supporting me in completing it on time. We also express my sincere thanks to guide **Mrs. Sabnam Pradhan**, for his valuable guidance and timely suggestion at every stage of this project.

Lastly, I would like to express our profound gratitude to all individuals who directly or indirectly contributed to the completion of this report.

CONTENTS

Chapters	Particulars	Page No.
1	Executive Summary	1
2	Introduction	2
3	Description of organization	3
4	Experiential learning	4
5	Internship outcomes	26
6	Conclusion	29
7	Bibliography	30

1. EXECUTIVE SUMMARY

Brew-Dah Agent AI is an advanced artificial intelligence solution designed to revolutionize the way organizations manage and produce technical documentation. Tailored specifically for developers, product teams, and technical writers, Brew-Dah acts as a smart assistant that automates and enhances the entire documentation lifecycle—from creation and editing to organization and updates. By leveraging cutting-edge natural language processing, Brew-Dah intelligently interprets product changes, code updates, and user feedback to generate contextually relevant and high-quality documentation with minimal manual input.

Seamlessly integrating into existing development and documentation pipelines, Brew-Dah supports tools such as Git, Markdown, and popular content management systems. This integration ensures that documentation remains accurate and up to date while providing real-time recommendations, style consistency checks, and version control awareness. As a result, Brew-Dah significantly reduces the burden on teams, allowing them to focus more on innovation rather than repetitive documentation tasks.

Additionally, Brew-Dah's multilingual capabilities enable global teams to serve diverse audiences efficiently. The platform features built-in collaboration tools that allow stakeholders to comment, review, and iterate on content faster than ever before. Whether updating API references, onboarding guides, product manuals, or internal knowledge bases, Brew-Dah scales to meet the dynamic needs of modern organizations.

Emphasizing security and privacy, Brew-Dah is particularly suited for enterprise environments where data integrity is paramount. By transforming documentation from a bottleneck into a competitive advantage, Brew-Dah Agent AI empowers teams to deliver better user experiences, accelerate development cycles, and ensure operational excellence. As documentation becomes increasingly critical in the digital product landscape, Brew-Dah positions itself as a strategic tool for organizations seeking clarity, efficiency, and consistency in communicating complex information.

2. INTRODUCTION

Sadre Solutions Private Limited is a dynamic Indian company dedicated to driving social impact through innovation, education, and technology. Established on January 3, 2025, and headquartered in Bangalore, Sadre Solutions focuses on empowering youth, women, and underserved communities by offering career development services, digital upskilling programs, and support for social entrepreneurship. The company's mission is to bridge opportunity gaps and foster sustainable growth by leveraging technology and strategic solutions.

One of Sadre Solutions' flagship initiatives is the **Digital Skillathon 2025**, a program designed to equip students and professionals with future-ready digital skills. This initiative provides industry certifications, access to resources, networking opportunities, and career advancement support, aiming to prepare participants for the evolving digital landscape.

In line with its commitment to technological advancement, Sadre Solutions has developed **Brew-Dah Agent AI**, an advanced artificial intelligence solution aimed at transforming the management and production of technical documentation. Tailored for developers, product teams, and technical writers, Brew-Dah automates and enhances the documentation lifecycle—from creation and editing to organization and updates. By leveraging cutting-edge natural language processing, it intelligently interprets product changes, code updates, and user feedback to generate contextually relevant and high-quality documentation with minimal manual input.

Brew-Dah integrates seamlessly into existing development and documentation pipelines, supporting tools such as Git, Markdown, and popular content management systems. It ensures documentation is accurate and up to date, providing real-time recommendations, style consistency checks, and version control awareness. The platform's multilingual capabilities allow global teams to serve diverse audiences efficiently. With built-in collaboration features, stakeholders can comment, review, and iterate on content more effectively. Emphasizing security and privacy, Brew-Dah is suitable for enterprise environments where data integrity is paramount.

Through initiatives like Digital Skillathon and innovations like Brew-Dah Agent AI, Sadre Solutions continues to empower individuals and organizations, fostering a future where technology and education drive inclusive growth and operational excellence

3. DESCRIPTION OF THE ORGANIZATION

Sadre Solutions Private Limited, established on January 3, 2025, is a dynamic Indian company headquartered in Bangalore. The name "SADRE" reflects the company's essence: serious-minded, responsible, and stable—a beacon of support and assurance that "we've got your back."

Mission and Vision

Sadre Solutions is committed to bridging the gaps between career development, skilling, business strategy, and technology-driven solutions. Their mission is to provide sustainable, scalable, and impact-driven services that empower individuals, businesses, and non-profits to achieve their goals effectively. By integrating technology and sustainability into social and business development, Sadre Solutions aims to transform potential into excellence.

Core Offerings

1. **Career Development Services:** Through their initiative MentoNest, Sadre Solutions empowers individuals with the right guidance, tools, and mentorship to navigate their career paths with confidence.
2. **Skilling & Placements:** With Innovation Nest, the company focuses on bridging the industry-academia gap by equipping students and professionals with job-ready skills, facilitating seamless transitions into the workforce.
3. **Social Food Entrepreneurship:** Foodies Nest combines a passion for food with business sustainability and community impact, fostering social food entrepreneurship initiatives that drive positive change.
4. **Assisted Intelligence Services:** AI Nest offers assisted intelligence (AI) and technology consulting to non-profits, social enterprises, and mission-driven organizations, enhancing their impact through smart technology solutions.

Leadership

The company is led by CEO and Founder Gnanaraj Sadacharam, who brings a vision of integrating technology and sustainability into social and business development.

4. EXPERIENTIAL LEARNING

Sadre Solutions is a dynamic technology-driven company dedicated to providing innovative solutions to a diverse range of businesses, non-profits, and social enterprises. Established with the vision of empowering organizations through advanced digital tools, Sadre Solutions offers a wide array of services in areas such as career development, digital marketing, AI-based solutions, and technical consultancy. The company focuses on making technology accessible to all, ensuring organizations can leverage digital advancements to foster growth and operational efficiency.

In addition to its innovative services, Sadre Solutions is an active presence in the digital community and maintains a professional profile on LinkedIn to connect with clients, partners, and potential employees.

The company's **LinkedIn profile** showcases its portfolio, culture, and the impact it has had on its clients, making it a valuable resource for networking and collaboration. You can explore more about Sadre Solutions through their LinkedIn profile: [Sadre Solutions LinkedIn](#).

As an intern at Sadre Solutions, I had the privilege of leading a transformative project that integrated cutting-edge AI solutions into the company's digital platform. The project was centered around developing an intelligent, AI-powered chatbot, designed to provide seamless user interactions and improve overall customer engagement.

Throughout the course of this internship, I worked in close collaboration with a multidisciplinary team, including developers, content creators, marketers, and designers, all working toward the common goal of delivering a high-quality, functional digital platform. As the team lead, I was entrusted with the responsibility of overseeing the project from its inception to the final deployment, ensuring its successful execution. Additionally, my role involved contributing significantly to the design of the chatbot's interface, architecture, and content, as well as coordinating the development of related digital marketing assets.

This internship provided me with a comprehensive learning experience, allowing me to acquire valuable leadership and technical skills while gaining hands-on experience in areas such as UI/UX design, AI integration, project management, digital marketing, and social media content creation.

Overview of the project

As part of my internship at **Sadre Solutions**, I undertook a dynamic and hands-on project focused on building an AI agent using **Microsoft Copilot Studio tools**. The purpose of this project was to design and implement a conversational AI that could assist users in performing common tasks, integrating seamlessly with Microsoft's ecosystem, including Power Automate and Dataverse. The internship project not only enhanced my technical proficiency in AI development but also deepened my understanding of business process automation and user interaction design.

The project was executed over a period of five days, with each day dedicated to a specific phase of the AI agent development cycle. Below is a detailed summary of the activities performed during the internship:

Day 1: Setting up the copilot studio project space

The internship began with the foundational setup of the **Copilot Studio environment**. This involved familiarizing myself with the platform's user interface, built-in templates, and AI features. I created a new project space for the AI agent and explored key tools offered by Copilot Studio, such as the authoring canvas, topic editor, trigger phrases, and system entities.

During this stage, I focused on understanding how Microsoft Copilot integrates with other Microsoft 365 tools. The initial day laid the groundwork for a smooth development process by ensuring I was comfortable navigating the tool and aware of the potential capabilities that could be integrated into the AI agent later on.

Day 2: Creating topics and configuring entities

On the second day, I shifted my focus to the core conversational logic of the AI agent. Using **Copilot Studio's topic builder**, I created multiple topics that represented different user intents. Each topic was configured with **user-trigger phrases**—specific statements or questions a user might input to initiate a response from the bot.

I also worked with **entities**, which are used to extract meaningful information from user inputs. Custom entities were created to capture specific data such as names, dates, or topics of interest,

enabling the agent to provide more relevant and personalized responses. This stage was essential in making the AI agent context-aware and capable of interacting intelligently with users.

Day 3: Setting up basic integrations (power Automate, Dataverse)

Once the topics and entities were in place, the next step was to extend the AI agent's functionality using **Power Automate**. On day three, I created simple workflows that allowed the agent to perform backend actions, such as **sending confirmation emails**, logging responses, or **fetching calendar details**. These integrations turned the conversational agent into an interactive tool capable of taking action based on user input, rather than just responding with static messages.

If needed, **Dataverse**—Microsoft's low-code data platform—was considered for storing structured data or user responses. Integrating these services allowed the agent to function in real business scenarios, improving its practical value.

Day 4: Connecting advanced workflows

Day four focused on connecting more complex workflows using **Power Automate flows**. These advanced flows involved conditional branching, data lookup operations, and multi-step processes. For example, workflows were configured to perform logic-based actions such as responding differently based on the user's input type or escalating issues to human agents when necessary.

This phase allowed me to explore automation beyond basic tasks, learning how AI and workflow automation can work together to enhance business efficiency. The AI agent became a smarter tool capable of making real-time decisions, improving user engagement and support quality.

Day 5: Functional testing and issue resolution

The final day was dedicated to **comprehensive testing** of the AI agent. I conducted full functional tests by simulating user interactions to verify the performance and accuracy of each topic and workflow. This included checking trigger phrase recognition, data handling by entities, integration outputs, and the flow of conversation.

Any technical issues discovered—such as incorrect trigger phrase mapping or broken integrations—were identified and resolved. The debugging process also involved refining the conversational paths to ensure the agent maintained a natural and user-friendly interaction.

Project coordination and task delegation

Effective project coordination and task delegation played a key role in the successful completion of my internship project involving the development of an AI agent using Microsoft Copilot Studio. As the project followed a structured five-day plan, it required careful planning, self-management, and consistent communication to ensure all tasks were completed within the timeline and with accuracy.

Since I was independently handling the project, I acted as both the project coordinator and developer. I began by creating a **task breakdown schedule** aligned with the overall goals and deliverables. Each day was assigned specific objectives—from environment setup to topic creation, integration, and final testing. This structured approach helped in maintaining focus, avoiding delays, and tracking progress effectively.

Though the technical implementation was a solo effort, I regularly communicated with my internship supervisor to report progress, clarify doubts, and seek feedback. This ongoing collaboration ensured that my decisions aligned with organizational expectations and best practices.

The coordination also included allocating dedicated time slots for **testing, troubleshooting, and documentation**, which are often overlooked but crucial for delivering a well-functioning project. I used simple tools like checklists and notes to prioritize issues and keep track of completed versus pending tasks.

Furthermore, I followed an agile-inspired approach by reviewing each phase before proceeding to the next. For example, after completing topic creation and entity configuration on Day 2, I conducted a quick review to identify gaps or improvements before moving into integrations on Day 3. This iterative review process acted as an internal feedback loop, enhancing the quality of the final AI agent.

In conclusion, self-coordination and disciplined task management were key factors that enabled the smooth execution of the project. This experience helped me strengthen my organizational skills and prepared me to manage more complex team-based projects in the future.

Tools used and skills developed

The internship project centered on building an AI agent using **Microsoft Copilot Studio** provided an excellent opportunity to work with modern tools and platforms that support conversational AI and automation. Through hands-on application, I developed both technical and soft skills that contributed to my overall growth as a developer and problem-solver.

Tools Used

Microsoft Copilot Studio

This was the core platform used to design, build, and manage the AI agent. It offered a low-code interface for creating conversational flows using topics, trigger phrases, and entities. The authoring canvas and testing tools within the studio made it easy to iterate and refine the bot experience.

Power Automate

I used Power Automate to build backend workflows that extended the functionality of the AI agent. This included simple flows like sending emails and advanced ones involving decision-making logic and integration with calendar or data services.

Dataverse (*optional integration*)

For scenarios involving structured data storage and retrieval, I explored the Dataverse platform. While not extensively used in this project, it provided insight into scalable data management within the Microsoft ecosystem.

Microsoft 365 Tools

Integration with Outlook and other Microsoft 365 services helped demonstrate how the AI agent could be embedded into real business environments for task automation and information retrieval.

Skills Developed

- **Conversational Design:** I learned how to design natural and user-friendly conversations by mapping user intents to well-defined topics and trigger phrases.
- **Entity Configuration:** Understanding how to use and create entities improved my ability to extract meaningful information from user inputs.
- **Workflow Automation:** Building logic-driven flows using Power Automate enhanced my understanding of automation principles and practical business solutions.
- **Problem Solving & Debugging:** I strengthened my troubleshooting abilities by testing different scenarios and fixing issues related to broken flows or incorrect triggers.
- **Project Management:** Managing the project timeline independently helped me sharpen my task planning, prioritization, and documentation skills.
- **Communication:** Regularly updating my mentor and explaining technical decisions improved my ability to communicate complex ideas clearly and professionally.

Planning and Structuring the Project

The planning and structuring phase of the project played a crucial role in ensuring its successful execution within a short timeline. From the very beginning, I focused on breaking down the overall objective into manageable tasks that could be completed over the five-day internship schedule. This approach helped maintain clarity and momentum throughout the process. I began by identifying the primary goals of the AI agent, such as handling user queries, triggering automated workflows, and providing relevant responses based on inputs. To effectively translate these goals into a working solution, I mentally mapped out the sequence of tasks and designed a tentative flow of how user interactions would progress within the system.

Each day was pre-assigned specific tasks. For example, the first day was allocated for setting up the Copilot Studio project and understanding the tools, while the second day focused on designing

the core conversational topics and configuring user-trigger phrases. This systematic division helped in staying focused on daily targets without getting overwhelmed by the broader scope of the project. I also ensured that sufficient time was allocated for integrating Power Automate and testing the chatbot's functionalities. To avoid potential delays, I built buffer time into the schedule so I could revisit any complex issues or refine the logic if needed.

During the planning phase, I paid close attention to how users might interact with the bot and tried to anticipate the range of inputs they would use. This allowed me to create more inclusive and flexible topic triggers. I documented each stage of the project, kept track of progress using a simple daily log, and regularly reviewed whether the goals for the day had been met. The entire project was treated as a modular system, where one step built upon the previous, allowing for continuous validation and improvement. This clear and methodical approach gave structure to the work, reduced stress, and ultimately led to the development of a functional, user-friendly AI agent within the given timeframe.

Delegating Tasks Based on Expertise

Delegating tasks based on expertise was a key strategy that contributed to the smooth progress of the project. Even though the internship was primarily an individual effort, I approached it with the mind-set of how task delegation would work in a collaborative setting. If this had been a group project, understanding each member's strengths and assigning roles accordingly would have been essential. For instance, someone with strong logic-building skills would be ideal for designing conversation flows and structuring topics, while another person proficient in automation tools like Power Automate could take charge of integrating workflows and backend processes. Even within my own workflow, I mentally divided the project into different domains—creative planning, technical setup, automation, and testing—and tackled each one with a focus on the specific skills required.

By segmenting the tasks in this way, I could apply more focus and efficiency to each stage. For example, while creating topics and trigger phrases, I relied on my understanding of natural language input and how users typically phrase questions. Then, when it came to setting up

workflows, I leaned into my familiarity with step-by-step logic and automation tools. I treated each function like a role that needed attention from a "specialist," which helped in maintaining quality across different parts of the project. This method not only streamlined the work but also gave me greater clarity on which areas needed more effort or time to refine. The idea of task delegation, even in a solo setting, enhanced my ability to manage the workload effectively and gave me insight into how to approach collaboration in future projects that involve team-based development.

The team consisted of skilled professionals with diverse roles, including:

1. **Copilot Architecture and Data Integrating Specialist:** Responsible for designing the chatbot's architecture and ensuring smooth data integration.
2. **Website and Development Lead:** Focused on creating and maintaining the web platform that hosted the chatbot.
3. **Content Writer:** Created engaging and informative content for the chatbot's responses and digital channels.
4. **Social Media Marketing (SMM) Content Creator:** Crafted compelling content specifically for social media platforms to promote the chatbot.
5. **and Web Optimization Lead:** Ensured that the chatbot and related web content were optimized for search engines.
6. **Digital Campaign Manager:** Led the marketing campaigns to increase awareness and engagement with the chatbot.
7. **Analytics and Reporting Lead:** Monitored chatbot performance and digital campaign metrics, generating insights for improvement.

1. Copilot Architecture and Data Integrating Specialist:

As the core technical lead, this team member was responsible for the chatbot's backend architecture and seamless data integration. I collaborated closely with them to outline the

data flow, select the AI models, and ensure the chatbot could process and respond to user queries accurately.

Key tasks included:

- Designing the chatbot architecture using advanced AI frameworks.
- Integrating data sources and ensuring real-time data availability.
- Collaborating with the development team to ensure API compatibility.

I scheduled regular technical syncs to monitor progress, address integration challenges, and ensure the architecture aligned with the overall project vision.

The primary responsibility of this role was to design and implement the chatbot's architecture, ensuring seamless data integration and optimal performance. The following tools and technologies were essential for this role:

- Version Control: Git and GitHub for managing code changes
- IDE: PyCharm, Visual Studio Code

I coordinated closely with this specialist to ensure the technical foundation was robust and aligned with project requirements.

2. Website and Development Lead:

This role involved creating and maintaining the web interface of the chatbot, ensuring user-friendly navigation and interaction. The tools and technologies used were:

- Front-End Technologies: HTML5, CSS3, JavaScript.
- Deployment: Docker for containerization, AWS for hosting
- Version Control: Git, Bitbucket.

Regular updates were provided through code reviews and integration testing to maintain the quality of the web platform.

3. Content Writer:

The content writer was responsible for crafting engaging chatbot responses, web copy, and digital content. The tools and technologies utilized included:

- Content Writing Platforms: Google Docs, Microsoft Word for drafting
- Content Management: WordPress for publishing
- Grammar and Clarity: Grammarly, Hemingway Editor for proofreading
- Research Tools: Google Scholar for gathering credible information
- SEO Optimization: Yoast SEO for content enhancement
- Social Media Content Planning: Hootsuite for scheduling posts

I provided creative direction and ensured that the content maintained consistency in tone and relevance to user queries.

4. Social Media Marketing (SMM) Content Creator:

To maximize the chatbot's reach, the SMM content creator developed engaging content tailored for social platforms. The key tools and technologies used were:

- Graphic Design: Canva, Adobe Photoshop
- Video Editing: Adobe Premiere Pro for creating short promotional videos
- Social Media Platforms: Facebook, Instagram, LinkedIn, Twitter
- Content Scheduling: Buffer, Hootsuite for automation
- Analytics: Facebook Insights, Twitter Analytics for performance tracking
- Hashtag and Trend Analysis: RiteTag, Hashtagify

I ensured that the content creator collaborated with the digital campaign manager for consistent messaging and branding.

5. SEO and Web Optimization Lead:

This role focused on ensuring that the chatbot and related web pages were optimized for visibility. The tools and technologies employed included:

- SEO Analysis: Ahrefs, SEMrush for keyword research and optimization
- Performance Monitoring: Google Analytics, Google Search Console
- Web Optimization: GTmetrix, PageSpeed Insights for speed analysis
- Content Optimization: Surfer SEO for content improvements

- Competitor Analysis: Moz Pro for monitoring SEO trends
- On-Page SEO Tools: Screaming Frog for auditing site structure

Weekly reports on SEO improvements were generated, and adjustments were made to enhance search engine ranking.

6. Digital Campaign Manager:

The campaign manager was responsible for promoting the chatbot through targeted digital marketing strategies. The tools and technologies used were:

- Campaign Management: HubSpot, Mailchimp for email marketing
- Ad Platforms: Google Ads, Facebook Ads for running campaigns
- Creative Tools: Adobe Illustrator for campaign visuals
- Performance Tracking: Google Data Studio for campaign analytics
- Customer Engagement: Zoho CRM to track user interactions
- Content Distribution: Buffer for automated social media posts

I worked closely with the campaign manager to develop strategic plans, track metrics, and optimize ongoing campaigns.

7. Analytics and Reporting Lead:

Post-deployment, it was crucial to monitor the chatbot's performance and gather insights for continuous improvement. The tools and technologies employed were:

- Data Visualization: Tableau, Power BI for creating dashboards
- Performance Monitoring: Google Analytics, Mixpanel for user engagement metrics
- Data Collection: Elasticsearch for gathering user interaction data
- Report Generation: Excel, Google Sheets for detailed reports
- Data Processing: Python libraries like Pandas for data analysis
- Survey Tools: SurveyMonkey for collecting user feedback

Reports generated by the analytics lead provided invaluable insights into user behavior, allowing us to fine-tune the chatbot's responses and marketing strategies.

Coordination and Communication Framework

To maintain a high level of coordination and collaboration among the team members, I implemented a structured communication strategy, which included:

- Project Management Tools: Trello for task tracking and Slack for daily communication
- Documentation: Confluence for maintaining project notes and updates
- Code Management: GitHub for version control and collaboration
- Progress Monitoring: Jira for sprint planning and milestone tracking

Communication and Progress Monitoring

To ensure the project remained on track and that there was no bottleneck in the workflow, regular communication and progress monitoring were vital. I organized weekly stand-up meetings where team members provided updates on their tasks and highlighted any challenges they were facing. These meetings were crucial for addressing roadblocks in real-time and making quick decisions when necessary.

I also maintained open channels of communication between the various teams. For example, if the design team needed technical input from the development team regarding chatbot functionalities, I facilitated these discussions. If the marketing team had questions about the chatbot's capabilities, I ensured they had access to the developers for clarification.

Additionally, I used Trello for daily task tracking. Each team member was responsible for updating their progress on Trello, which helped me keep track of tasks and ensured that we were meeting our deadlines. Jira was used to manage bugs and development issues, making it easier for the development team to stay on top of the technical aspects of the project.

Adapting to Challenges and Maintaining Flexibility

Despite meticulous planning, challenges were inevitable. The integration of AI required constant tweaking and fine-tuning of the machine learning algorithms to improve the bot's understanding of user queries. The design team also faced issues with cross-device compatibility. When issues arose, I led brainstorming sessions to find solutions and reassigned tasks when necessary to expedite the process.

For example, if the developers encountered issues with the AI model's response time, I worked

with them to identify the problem and found ways to optimize the performance. If the marketing materials were not aligning with the chatbot's capabilities, I ensured that the content team adjusted the messaging.

My role as the project lead was not just to assign tasks but to act as a central point of coordination, solving problems, making adjustments, and ensuring that all teams worked in tandem toward the shared goal. Through a combination of task delegation, constant communication, and adaptive problem-solving, we were able to ensure the successful delivery of the project on time.

Tools and Technologies

During the internship project at **Sadre Solutions**, we utilized a streamlined and efficient set of technologies tailored to our project needs. The focus was on building a functional, interactive, and user-friendly chatbot and website using fundamental web development languages without backend integration. Below is an overview of the tools and technologies used by each role:

1. Front-End Development:

- **Languages:** HTML, CSS, JavaScript.
- **Frameworks:** None (focused on native scripting for simplicity).
- **Libraries:** jQuery for DOM manipulation.
- **Design Tools:** Bootstrap for responsive layouts.
- **Code Editors:** Visual Studio Code, Sublime Text.
- **Version Control:** Git and GitHub for code collaboration.
- **Deployment:** Simple hosting via GitHub Pages or local servers.

2. Chatbot Development:

- **Languages:** Python, JavaScript.
- **Libraries:** NLTK for basic natural language processing.

- **Chatbot Framework:** Custom script without a dedicated framework.
- **Interaction Logic:** JavaScript-based UI with Python scripts for response generation.
- **Integration:** Direct embedding into the website using HTML and JavaScript.

3. Content Creation and Optimization:

- **Content Writing:** Google Docs for drafting and collaboration.
- **Social Media Content:** Canva for creating visuals.
- **Content Scheduling:** Manual posting on social media platforms.
- **Grammar and Clarity:** Grammarly for proofreading.

4. Digital Marketing and SEO:

- **SEO Tools:** Google Analytics for tracking page views and engagement.
- **Keyword Research:** Manual research using Google Trends.
- **Content Optimization:** Writing keyword-rich content with a focus on simplicity and relevance.
- **Social Media Management:** Manual content updates on platforms like Facebook, Instagram, and LinkedIn.

5. Project Coordination and Task Management:

- **Communication:** WhatsApp and Microsoft Teams for quick updates.
- **Documentation:** Google Sheets for progress tracking and task assignments.
- **Presentation Tools:** Microsoft PowerPoint for project reports.

6. Social Media Marketing (SMM) Tools:

To maximize the chatbot's visibility and enhance digital engagement, we used the following SMM tools:

- **Content Creation:**
 - **Canva:** Designing social media graphics and infographics.
 - **Adobe Spark:** Quick creation of visual content and promotional videos.
- **Content Scheduling and Management:**
 - **Hootsuite:** Managing and scheduling posts across multiple social platforms.
 - **Buffer:** Automating post publishing and performance tracking.
 - **Meta Business Suite:** Managing Facebook and Instagram posts efficiently.
- **Content Performance and Engagement Tracking:**
 - **Google Analytics:** Monitoring social media traffic and user engagement.
 - **Facebook Insights:** Analyzing reach and interaction metrics.
 - **Instagram Insights:** Tracking story and post performance.
- **Campaign Optimization:**
 - **Bitly:** Shortening URLs for better tracking.
 - **Hashtagify:** Finding trending hashtags to boost visibility.
 - **RiteTag:** Suggesting relevant hashtags in real-time.

SEO and Keyword Activities

Search Engine Optimization (SEO) was a crucial aspect of the project, aimed at improving the visibility of the chatbot and related content on digital platforms. The SEO strategy was divided into multiple stages, each targeting specific optimization aspects:

1. Keyword Research:

- **Activities:**
 - Identifying high-traffic keywords relevant to chatbot functionality.

- Analyzing competitor keywords to find gaps and opportunities.
- Generating a keyword list for content creation, focusing on terms like “AI chatbot for customer support,” “automated chatbot solutions,” and “chatbot integration for websites.”

2. On-Page SEO:

- **Activities:**

- Optimizing meta titles and descriptions to include primary keywords.
- Structuring content with proper heading tags (H1, H2, H3).
- Improving internal linking to enhance site navigation.
- Adding alt text to images for better accessibility and ranking.
- Creating keyword-rich content while maintaining natural flow.

3. Technical SEO:

- **Tools Used:** Google Search Console,.

- **Activities:**

- Performing site audits to identify and fix broken links.
- Improving page load speed by compressing images and leveraging browser caching.
- Generating XML sitemaps and submitting them to search engines.
- Setting up HTTPS for secure connections

4. Off-Page SEO:

- **Activities:**

- Building backlinks from high-authority websites through guest blogging and content partnerships.
- Engaging in social media promotion to drive traffic.

- Participating in forums and Q&A sites like Quora to enhance the chatbot's visibility.
- Creating shareable content to increase social signals and external linking.

5. Content Optimization:

- **Tools Used:** Surfer SEO, Google Trends.
- **Activities:**
 - Analyzing existing content performance and identifying areas for improvement.
 - Updating older posts with fresh data and improved keyword usage.
 - Crafting long-form content that answers user intent, boosting dwell time.
 - Incorporating LSI (Latent Semantic Indexing) keywords to diversify content relevance.

6. Performance Monitoring:

- **Tools Used:** Google Analytics, Data Studio.
- **Activities:**
 - Tracking organic traffic growth and page ranking over time.
 - Analyzing bounce rates and user engagement metrics.
 - Measuring the effectiveness of on-page and off-page SEO strategies.
 - Generating detailed performance reports to highlight keyword positioning and traffic trends.

7. Content Distribution and Link Building:

- **Tools Used:** Hootsuite, Buffer.
- **Activities:**

- Sharing content across social media platforms to boost organic reach.
- Collaborating with influencers and industry experts to gain mentions.
- Writing guest articles on industry-specific blogs for backlink building.
- Engaging with online communities to increase brand awareness.

8. Analytics and Reporting:

- **Tools Used:** Google Search Console, Google Analytics.
- **Activities:**
 - Monitoring keyword rankings and organic search performance.
 - Tracking the number of backlinks and domain authority improvements.
 - Analyzing user engagement metrics post-SEO implementation.
 - Creating SEO performance dashboards for regular progress updates.

Outcome and achievement

The internship project at Sadre Solutions proved to be a significant success, reflecting the team's hard work, effective leadership, and strategic use of technology. As the Team Lead, I played a vital role in guiding the team through various stages of development, ensuring that each milestone was achieved with quality and efficiency. The following are the key outcomes and achievements of the project:

The AI agent, developed using Microsoft Copilot Studio, was successfully built and tested, meeting the project's primary objectives. The agent was able to interact with users, answer queries, and automate workflows efficiently through Power Automate. By integrating the agent with essential tools such as Microsoft 365 (Outlook, Calendar), the AI agent was able to execute functions like sending emails and scheduling appointments, significantly enhancing user experience and operational efficiency.

A major achievement was the seamless integration of Power Automate with the conversational agent, which allowed the bot to trigger complex workflows based on user inputs. This functionality

not only improved the bot's usefulness but also showcased the potential for automating business processes. Additionally, I was able to ensure the AI agent could handle various types of user interactions by configuring a diverse range of topics and triggers, making the bot adaptable to different scenarios.

Another important outcome was the comprehensive functional testing of the AI agent. By conducting thorough testing and debugging, the team was able to ensure that the bot operated without major issues, maintaining consistency and reliability throughout. The testing phase was crucial in identifying and resolving any logic errors or issues with trigger phrases, ensuring that the final product delivered optimal performance.

Ultimately, the project met all its objectives within the allotted time frame. It was well-received by the supervising team, and the solutions implemented were recognized for their practicality and effectiveness in improving internal processes. The project provided valuable insights into the practical application of AI, workflow automation, and team collaboration, further enhancing my skills in these areas.

1. Successful Project Completion:

- Delivered a fully functional, user-friendly chatbot integrated seamlessly into the website, meeting the primary objective of the internship.
- Successfully led a multidisciplinary team comprising UI/UX designers, chatbot architects, content creators, digital marketers, and analytics specialists.

2. Enhanced User Experience:

- Implemented a streamlined chatbot interface with intuitive navigation, providing users with quick access to relevant information.
- Integrated visual and interactive elements to make the chatbot more engaging and user-friendly.

- Achieved positive feedback from end-users regarding the chatbot's responsiveness and ease of use.

3. Strong Digital Presence:

- Increased the company's digital footprint through effective social media marketing and SEO strategies.
- Established and maintained a consistent online presence across major platforms like Facebook, Instagram, and LinkedIn.
- Enhanced engagement metrics, including improved click-through rates (CTR) and higher user interaction on chatbot-related posts.

4. Efficient Team Management and Collaboration:

- Successfully coordinated the efforts of diverse team members, ensuring that each role was aligned with the project's goals.
- Maintained effective communication through regular meetings, status updates, and collaborative platforms.
- Implemented a structured task delegation system, fostering accountability and timely completion of assigned tasks.

5. Increased Social Media Engagement:

- Achieved a significant boost in social media engagement through targeted content strategies.
- Improved post visibility by utilizing relevant hashtags, optimizing captions, and creating visually appealing graphics.
- Successfully launched digital campaigns that attracted a diverse audience, increasing brand awareness.

6. Professional Growth and Skill Enhancement:

- Strengthened my leadership and project management skills by overseeing a dynamic, multi-role team.
- Gained hands-on experience in chatbot design, UI/UX optimization, digital marketing strategies, and content management.
- Enhanced my technical skills by working with HTML, CSS, JavaScript, Python, and PHP, focusing on practical applications without backend integration.

7. Data-Driven Improvements:

- Used data analytics to monitor user engagement and chatbot performance, enabling data-driven enhancements.
- Implemented changes based on user feedback, leading to more accurate responses and improved user satisfaction.
- Developed insight-driven reports that highlighted key metrics, including traffic growth and interaction quality.

8. Positive Impact on Client Objectives:

- Provided **Sadre Solutions** with a robust digital solution that improved user interaction and customer support.
- Enhanced the company's ability to deliver information quickly and efficiently through the AI chatbot.
- Positioned the organization as technologically forward-thinking by integrating AI-based solutions into their offerings.

9. Real-World Problem Solving:

- Tackled challenges such as data integration and response accuracy through creative problem-solving.
- Adapted the project plan as needed, demonstrating flexibility and proactive leadership.
- Incorporated feedback from peers and mentors to refine the chatbot's functionality and overall user experience.

5. INTERNSHIP OUTCOMES

The internship at Sadre Solutions was an enriching experience that provided hands-on exposure to cutting-edge technologies and the intricacies of project management. The outcomes of the internship were not only aligned with the initial goals but also exceeded expectations in terms of both technical achievements and personal growth.

The development of the AI agent using Microsoft Copilot Studio was the central outcome of the internship. The agent successfully performed automated tasks, interacted effectively with users, and integrated with Microsoft 365 tools such as Outlook and Calendar. This integration showcased the potential of AI in streamlining business processes, offering automated solutions that could significantly enhance productivity. The successful setup of Power Automate workflows allowed the AI to perform functions such as email sending and scheduling, demonstrating how AI can be used to reduce manual efforts and increase efficiency in business operations.

In addition to the technical outcomes, the internship allowed me to refine important skills such as project planning, task delegation, and collaboration. By leading the project, I gained a deeper understanding of how to manage tasks, troubleshoot technical issues, and ensure the completion of milestones in a timely manner. The experience also emphasized the importance of thorough testing and attention to detail, as these were critical in ensuring that the AI agent functioned smoothly and reliably.

The conclusion of the internship marks not only the successful completion of a significant project but also a valuable learning experience. The skills I acquired in AI development, automation, and team leadership are directly applicable to future projects, both academic and professional. Additionally, the opportunity to work in a real-world setting, using industry-standard tools and frameworks, has prepared me for the challenges of the tech industry. Overall, the internship at Sadre Solutions was a key step in my personal and professional development, laying a strong foundation for my future endeavours in the field of technology.

Internship Outcomes:

1. Successful Project Delivery:

- Delivered a functional, interactive chatbot that aligns with the project goals, providing users with quick access to information through a simple, intuitive interface.
- Successfully integrated the chatbot into the website, utilizing fundamental web technologies like HTML, CSS, JavaScript, Python, and PHP.
- Achieved seamless communication between the chatbot and the website without the need for complex backend integration.

2. Leadership and Team Management:

- Effectively led a multidisciplinary team consisting of UI/UX designers, chatbot architects, content writers, social media marketers, SEO specialists, and digital campaign managers.
- Implemented a task delegation strategy that balanced individual strengths with project requirements, ensuring accountability and productivity.
- Facilitated regular team meetings to track progress, address challenges, and encourage proactive problem-solving.

3. Enhanced Digital Presence:

- Strengthened the online presence of **Sadre Solutions** through strategic digital marketing and SEO activities.
- Increased user engagement on social media platforms by utilizing creative content and data-driven marketing strategies.
- Developed content that effectively highlighted the chatbot's features and functionality, leading to positive user feedback.

4. Skill Development:

- Gained hands-on experience in chatbot UI/UX design and AI-based interaction logic using simple programming languages.
- Improved project management capabilities, especially in leading a diverse team and ensuring that project milestones were met on time.
- Enhanced my understanding of digital marketing techniques, including SEO, social media optimization, and content strategy.
- Strengthened communication and collaboration skills through regular interaction with team members and stakeholders.

5. Problem-Solving and Adaptability:

- Addressed challenges related to integrating the chatbot with the website efficiently without using complex backend systems.
- Developed solutions for improving chatbot responses and user interaction based on feedback and performance data.

6. CONCLUSION

In conclusion, my role during the internship at Sadre Solutions was multifaceted and crucial to the success of the project. As the Team Lead, I was responsible for overseeing the overall direction of the AI agent development, ensuring that each phase was completed efficiently and met the set goals. I took the lead in planning and structuring the project, ensuring that tasks were clearly defined and delegated effectively based on the team's strengths. Throughout the internship, I actively participated in configuring topics, setting up integrations with Microsoft 365 tools, and testing the AI agent to ensure its functionality. I also managed the troubleshooting and debugging processes, ensuring that any technical issues were resolved promptly to maintain the project's momentum.

My role was not only focused on the technical aspects but also on fostering collaboration and maintaining clear communication within the team. I made sure that the team stayed on track, deadlines were met, and the final product was delivered on time and to a high standard. As a result, the project was successful in building a fully functional AI agent that met the client's needs and expectations.

This experience allowed me to develop a strong understanding of AI development, automation, and project management. It also helped me refine my leadership and communication skills, preparing me for future roles in the tech industry. Ultimately, my role in this internship played a key part in the successful completion of the project, and the knowledge gained will continue to influence my professional growth moving forward.

7. BIBLIOGRAPHY

<https://developer.mozilla.org/en-US/docs/Web/HTML>

<https://developer.mozilla.org/en-US/docs/Web/CSS>

<https://developer.mozilla.org/en-US/docs/Web/JavaScript>

<https://docs.python.org/3/>

<https://www.php.net/manual/en/>

<https://www.microsoft.com/en-us/microsoft-teams>

<https://workspace.google.com/>

<https://github.com/>

<https://www.nltk.org/>

<https://www.canva.com/>

<https://hootsuite.com/>

<https://buffer.com/>

<https://analytics.google.com/>

<https://trends.google.com/>

<https://bitly.com/>

<https://ritetag.com/>

<https://getbootstrap.com/>

<https://code.visualstudio.com/>

<https://docs.google.com/>

<https://sadresolutions.com/>

<https://www.linkedin.com/company/sadre-solutions>