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CHAPTER - 1

INTRODUCTION TO COMPANY

1.1 ABOUT THE COMPANY

SAMPURV TECHNOLOGIES LLP stands as a registered entity under the esteemed Ministry of Corporate Affairs in the Government of India. Our core commitment lies in the delivery of superior services and support to our clients, underscored by our recognition through the ISO 9001:2015 certification, emblematic of our unwavering dedication to quality management and ongoing enhancement.

Our diverse array of services encompasses pivotal areas such as software development, comprehensive courses training, skill development workshops, examination facilitation, certification services, and valuable placement assistance. The strength of our organization lies in the collective expertise of our committed team of professionals who strive to provide bespoke solutions precisely tailored to meet the unique needs and requirements of our clients. At SAMPURV, we firmly believe in the empowerment of individuals, recognizing that knowledge and skills are the cornerstones of success in one's career. Our passion is evident in our commitment to fostering the professional growth and development of our clients. By availing our services, both individuals and organizations stand to gain significantly from our wealth of expertise and experience, propelling them towards the realization of their full potential. In essence, SAMPURV TECHNOLOGIES LLP is dedicated to being a catalyst for success, offering not just services, but a pathway for transformative growth and achievement.

Creating a recruitment app on Salesforce.com involves leveraging the robust capabilities of the platform to streamline and enhance the entire recruitment process. This app aims to optimize talent acquisition by providing a user-friendly and efficient solution for recruiters and hiring managers.

Key features of the recruitment app may include a centralized database for managing candidate profiles, resume parsing for quick data extraction, and integration with job boards for seamless posting and tracking of job listings. The app could facilitate collaboration among team members through real-time updates and notifications, ensuring a smooth communication flow.

Utilizing Salesforce's automation tools, the recruitment app can automate repetitive tasks, such as scheduling interviews, sending follow-up emails, and updating candidate statuses. Additionally, incorporating AI-driven analytics can provide insights into candidate sourcing, helping recruiters make informed decisions and improve the overall hiring strategy.

Applicants can benefit from a user-friendly portal for submitting resumes, tracking application statuses, and engaging in communication with recruiters. Integration with social media platforms can enhance candidate sourcing and engagement.

Furthermore, the app can offer customizable reporting features, enabling stakeholders to track key recruitment metrics and measure the effectiveness of the hiring process. With Salesforce's security features, sensitive candidate information remains confidential and compliant with data protection regulations.

In essence, building a recruitment app on Salesforce.com empowers organizations to modernize their hiring processes, improve collaboration, and make data-driven decisions, ultimately leading to a more efficient and effective talent acquisition strategy.

1.2 HISTORICAL BACKGROUND

The CEO and founder of the software solution startup Sampurv Technologies LLP is Mr. Prashil Shahakar. It was aimed at providing Software Solutions to all business problems. This organization stands as a registered entity under the esteemed Ministry of Corporate Affairs in the Government of India. Their core commitment lies in the delivery of superior services and support to our clients, underscored by our recognition through the ISO 9001:2015 certification, emblematic of our unwavering dedication to quality management and ongoing enhancement. Sampurv Technologies LLP firmly believes in the empowerment of individuals, recognizing that knowledge and skills are the cornerstones of success in one's career. In essence, Sampurv technologies LLP is dedicated to being a catalyst for success, offering not just services, but a pathway for transformative growth and achievement.

1.3 LOCATION

The Company located near G. H. Raisoni College of Engineering Boy's Hostel, Opp. Sai Nashta Point, Police Nagar Road, CRPF, Lokmanya Metro Station, Hingna Road, Nagpur.

1.4 OPERATIONAL STRUCTURE

The company's top priority is to deliver the right products and deliver excellent services to clients. The services provided by the company are as follows:

a) Web Engineering: Web engineering is a discipline that focuses on the development, design, and maintenance of websites and web applications. It encompasses various aspects of software engineering and incorporates technologies such as HTML,CSS, JavaScript, and server-side programming languages such as Python, PHP, or Java. Some key areas in web engineering:

- **Front-end Development:** This includes designing the user interface and user experience (UI/UX) of a website or web application. It includes designing and coding using HTML, CSS, and JavaScript to create interactive web pages. Digital content may include text (such as electronic files), images, multimedia files (such as audio or video files), or other forms of information accompanying the content of life that needs to be managed.
- **Back-end Development:** The back-end of a website consists of server-side programming, databases, and server configurations. It involves implementing business logic, handling data storage, and processing user requests. Common technologies used for back-end development include Node.js, Django, Ruby on Rails, and ASP.NET.
- **Full-Stack Development:** Full-Stack developers have expertise in front-end and back-end development. They have a good understanding of all layers of web applications and can work on both client and server-side development.
- **Web Frameworks:** Web frameworks provide a framework for web development by providing prebuilt products, libraries, and tools. Examples of

popular web frameworks include React.js, Angular, Vue.js, Flask, Laravel, and Express.js.

- **Responsive Design:** With the increase in the use of mobile devices, it has become important to create websites that adapt to different screen sizes and resolutions. Responsive design ensures that websites display properly on desktops, laptops, tablets, and smartphones.
- **Web Security:** Web engineers must consider security measures to protect websites and web applications from potential threats. Techniques like secure coding practices, input validation, encryption, and authentication mechanisms help safeguard user data and prevent unauthorized access.
- **Testing and Debugging:** Web engineers perform various tests such as testing, integration and user validation to ensure web applications run efficiently and meet expectations. Debugging is the process of identifying and fixing problems or errors in code.
- **Web Performance Optimization:** Optimizing website performance is crucial for providing a fast and seamless user experience. Techniques such as code optimization, caching, minimizing file sizes, and using a content delivery network (CDN) can improve page uptime and overall performance.
- **Continuous Integration and Deployment:** Web engineers use tools and workflows like Git, Jenkins, and Docker to automate the process of integrating code changes, running tests, and deploying web applications to production environments.

- b) **Software Development:** Software development is the process of thinking, teaching, designing, programming, writing, testing, and debugging involved in creating and maintaining applications, frameworks, or other software. Software development refers to the process of creating computer programs, applications, and systems to fulfill specific user needs or solve particular problems. It involves a series of steps that span from initial planning and requirements gathering to coding, testing, deployment, and maintenance. Software development also includes research, innovation, design, modification, reuse, re-engineering, maintenance, or other activities that lead to software products. The software itself is a set of instructions or programs that tell the computer what to do. It is hardware independent and computer programmable. The

company provides custom design software and consulting services to help you complete your next project with less stress and at a lower cost.

- c) **Content Management:** Content management refers to the process of organizing, creating, editing, and publishing digital content. It involves the management of various types of content, such as text, images, videos, documents, and multimedia, in a structured and efficient manner. Content management systems (CMS) are often used to facilitate the content management process.
- Digital content may include text (such as electronic files), images, multimedia files (such as audio or video files), or other forms of information accompanying the content of life that needs to be managed.
 - The process development and management process are so complex that many business software vendors, large and small, such as Interwoven and Microsoft, provide content management software to manage and automate things. focuses on the content lifecycle.
 - The company's custom content management system empowers non-developers to easily update and edit HTML code-enriched text.
- d) **Tech Support:** Tech support, short for technical support, refers to the assistance provided to users who encounter technical issues with software, hardware, or other technology products. Tech support professionals, often called technicians or support agents, offer guidance, troubleshooting, and solutions to help users resolve their technical problems. Tech support is the provision of assistance to users facing technical issues with software, hardware, or other technology products. It involves troubleshooting problems, providing guidance, and offering solutions. Tech support teams operate through help desks, addressing software and hardware-related issues. They may remotely access devices, maintain knowledge bases for self-help, and possess customer service skills. Escalation and collaboration are utilized for complex cases. Overall, tech support aims to ensure user satisfaction and optimize the functioning of technology product.
- e) **Library Management:** Library management involves the effective administration and organization of libraries to ensure efficient access to information and resources. It encompasses various tasks such as acquiring, cataloging, storing, lending, and

maintaining library materials like books, journals, and digital media. Library management systems are employed to streamline these processes, including functions like inventory management, circulation management, patron management, cataloging, and reporting. Other aspects of library management include collection development, interlibrary loan coordination, reference services, and overall operational supervision. The primary objective is to facilitate easy and convenient access to information while maintaining the library's collection in good order.

- f) **EduErP:** EduERP-based software refers to software applications or systems that are built or designed using the EduERP framework or platform. EduERP serves as the underlying technology or foundation upon which these software solutions are developed. These applications are tailored specifically for educational institutions and leverage the functionalities and features provided by the EduERP platform to address various administrative, academic, and operational needs. EduERP-based software typically includes modules for student information management, attendance tracking, scheduling, grading, fee management, and other key aspects of educational administration. By utilizing EduERP as the underlying framework, these software solutions aim to provide efficient and comprehensive management tools for educational institutions to streamline their operations and enhance overall productivity.

1.5 VISION AND MISSION OF THE COMPANY

Sampurv Technologies LLP is a global business solutions provider for the global smart schooling system. Sampurv Technologies LLP is the world's leading solution provider for the global education industry.

- **Vision:** The company wants to acquire a global reputation of being the best solution provider in the industry.
- **Mission:** To create highly innovative and business-centered solutions by utilizing the latest technologies.
- **Core Values:** Dedicated to providing quality products to their clients. In every stage of workflow, they strive hard to achieve excellence.

1.6 PRODUCT MANUFACTURED

Sampur Technologies created a product centered around a recruitment app in Salesforce.com that involves developing a solution that enhances and optimizes the talent acquisition process for organizations. Below is an outline for a product manufactured for this purpose:

Product Name: Talent Forge Pro

Overview: Talent Forge Pro is a cutting-edge recruitment app built on the Salesforce.com platform, designed to revolutionize how organizations attract, evaluate, and onboard top-tier talent. This comprehensive solution streamlines the entire recruitment lifecycle, offering a user-friendly interface, robust features, and seamless integration with Salesforce's powerful ecosystem.

Key Features:

1. Customizable Job Application Management:

- Create and manage job applications with customizable fields, allowing organizations to tailor the recruitment process to their specific needs.
- Track application statuses, interview schedules, and candidate interactions in real-time.

2. Automated Workflow and Communication:

- Implement automated workflows for tasks such as interview scheduling, application status updates, and communication with candidates.
- Enhance efficiency by automating routine processes, reducing manual effort and ensuring timely communication.

3. AI-Driven Candidate Matching:

- Leverage Salesforce Einstein AI for intelligent candidate matching, analyzing resumes and profiles to identify the most suitable candidates for each role.
- Enhance the decision-making process by providing recruiters with data-driven insights.

4. Interview Feedback and Collaboration:

- Facilitate collaborative hiring decisions with a centralized platform for interview feedback.
- Capture detailed feedback from interviewers, enabling recruiters and hiring managers to make informed decisions.

5. Offer Management and Onboarding:

- Manage job offers efficiently with tools for creating, tracking, and updating offers.
- Facilitate a seamless onboarding process by integrating with Salesforce's HR features, ensuring a smooth transition from candidate to employee.

6. Custom Reports and Analytics:

- Utilize custom reports and analytics to gain insights into recruitment metrics, track time-to-fill, analyze source of hire, and assess the effectiveness of recruitment channels.
- Make data-driven decisions to continuously optimize the recruitment strategy.

7. User-Friendly Candidate Portal:

- Enhance the candidate experience with a user-friendly portal for submitting applications, tracking statuses, and engaging in transparent communication with recruiters.
- Reflect a positive employer brand through a seamless and responsive candidate interface.

CHAPTER - 2

CASE STUDY: HOSPITAL MANAGEMENT APP

2.1 INTRODUCTION

In the contemporary healthcare sector, efficient data management and operations are critical to delivering the highest quality patient care. In that regard, we are introducing our new Hospital Management System for the first time constructed on the Salesforce platform. By combining the critical features that impact how caregivers administer patient records and appointment scheduling to medical inventory organization, our system integrates and solves for many of the concerns raised by disparate data and manual procedures in one platform.

Therefore, we will now describe how our new system enables distant medical practitioners to work on what truly matters: caring for patients. A key part of our system is the patient data management module, which ensures critical information is easily accessible and securely stored. Having easy access to complete patient records helps healthcare providers make informed decisions and provide personalized treatment plans more efficiently.

Our system also includes intelligent appointment scheduling capabilities that significantly reduce administrative work and minimize scheduling errors. Patients can conveniently book appointments through a user-friendly interface, while healthcare providers benefit from an integrated view of schedules and resources, leading to better time management and improved patient flow.

Additionally, our advanced medical inventory management system optimizes resource allocation, enhances inventory tracking, and supports data-driven decision-making. By maintaining accurate inventory levels and minimizing waste, our solution contributes to cost-effective operations and better patient outcomes.

Utilizing the powerful Salesforce platform, our Hospital Management System represents a major advancement in healthcare technology, offering unmatched efficiency, better patient experiences, and exceptional care standards across the entire healthcare system.

2.2 PROBLEM IDENTIFICATION

In the rapidly evolving healthcare industry, our client, a prominent hospital network, faced significant challenges in managing patient data and streamlining operational processes. The existing systems and manual procedures posed obstacles that hindered efficient patient care and

impacted the overall quality of services provided.

- **Messy patient data:** Trying to piece together a comprehensive medical history for patients was like assembling a jigsaw puzzle scattered across multiple boxes. With electronic health records fragmented into separate silos, healthcare staff constantly had to hop between different outdated systems just to get the full picture before treating someone. This severely slowed down and complicated the very first steps of delivering quality care.
- **Time-consuming manual processes:** Creating detailed medical reports should be a routine administrative task, but it had devolved into a colossal time-suck because of overreliance on physical paperwork and manual data entry by stressed staff members. Important patient information frequently got buried, lost in tedious stacks of forms and handwritten notes prone to human error. Clinicians' expertise was being wasted on clerical busywork instead of high-value activities.
- **Appointment chaos:** Scheduling should be a simple administrative process, but it had become a Gordian knot of overlapping appointments, no-show patients, and constant reshuffle requests compounding the inefficiencies. This scheduling snarl stemmed from using outdated calendar books and having to manually juggle all the changing specifics across different departments. Patients grew frustrated with the runaround, and healthcare staff were perpetually chasing their tails.
- **Inefficient operations:** Across the board, the hospital's operations were being strangled by Excessive administrative burdens, fragmented information, and manual processes still lingering from the pre-digital age. From the front desk to the back offices to patient rooms, these inefficiencies bled valuable time and resources in what should be a seamless experience. Mistakes proliferated, costs ballooned, and quality of care couldn't help but suffer under the bureaucratic bloat.

leadership recognized these disjointed, cumbersome systems were completely outmoded in the 21st century. To solve the gridlock and refocus on their core mission of healing, the hospital desperately needed to overhaul its operations through consolidation, automation, and a unified digital framework to prime the entire enterprise for world-class patient care.

2.3 OBJECTIVE

This comprehensive project was selected because it addressed core challenges plaguing the hospital's operational efficiency and quality of patient care. By tackling issues like fragmented data systems, cumbersome manual processes, and scheduling complexities, we had an opportunity to implement transformative digital solutions. Modernizing the technological infrastructure would not only enhance access to centralized patient information and automate key administrative tasks, but it also promised to streamline clinical workflows and elevate the overall healthcare experience delivered to the community. Ultimately, undertaking this ambitious project aligned with the hospital's vision of becoming an industry leader by providing exceptional, seamlessly coordinated healthcare services.

- **Scattered patient data:** Having a patient's vital medical information scattered across various disconnected databases, file cabinets, and outdated software systems is like trying to solve a jigsaw puzzle with missing pieces. Healthcare providers currently waste precious time jumping between different logins and information silos just to stitch together a comprehensive medical history before treating someone. This fragmented data landscape leads to major headaches, potential gaps in care, and even life-threatening mistakes if critical details fall through the cracks.
- **Appointment pandemonium:** Coordinating the complicated dance of scheduling patient appointments, managing admissions and consultations across multiple departments, and ensuring timely discharge should be a well-orchestrated workflow. Instead, it has devolved into a chaotic game of juggling overbooked calendars, duplicated time slots, lost faxes, missed phone calls, and constant rescheduling requests. This incessant domino effect leaves patients frustrated by the runaround, while healthcare staff are perpetually rushing to untangle the inescapable scheduling snarls.
- **Report drudgery:** Generating detailed medical reports and analyzing patient data is an essential yet soul-crushingly tedious process trapped in the age of paper pushing and obsolete data entry. Doctors, nurses and admins find themselves buried under endless stacks of forms, handwritten notes, and manual inputs - essentially cutting-and-pasting information across disparate sources. This Sisyphean labor drains skilled healthcare professionals of time better spent on actually providing care and making critical decisions.

- **User unfriendliness:** Much of the technology and software ecosystems currently powering hospital operations are remnants from the floppy disk era - clunky, outdated, and lacking any semblance of modern user-friendly interfaces. Getting staff up to speed navigating these labyrinthine systems requires excessive training resources. And even after adoption, the counterintuitive interfaces and fragmented workflows remain a perpetual drain on productivity and efficiency

The new Salesforce Hospital Management system is being designed from the ground up to solve these deep-rooted problems. By centralizing medical data, implementing intelligent analytics, and providing an intuitive user experience, it promises to eliminate wasteful inefficiencies so healthcare professionals can refocus on what matters most - delivering world-class patient care.

2.4 WORK CARRIED OUT

- **Thorough Analysis:**

1. We embarked on this project by conducting extensive consultations with key stakeholders within the hospital network, including healthcare professionals, administrative staff, and IT experts. Our main goal was to gain a comprehensive understanding of the hospital's current processes, challenges, and areas that required improvement.
2. Through a series of interviews, workshops, and data-gathering sessions, we collaborated closely with various teams across the hospital, such as physicians, nurses, front desk personnel, and billing departments. This collaborative approach allowed us to gather detailed requirements and insights into their unique workflows and pain points.
3. Additionally, we thoroughly reviewed existing documentation, medical workflows, patient data management systems, and regulatory compliance standards

- **Designing the Data Model:**

1. Drawing from the valuable insights gathered during the analysis phase, we carefully designed a customized data model tailored to the hospital's specific needs, regulatory requirements, and the powerful capabilities offered by the Salesforce platform.
2. The data model encompassed a range of essential components critical for efficient hospital management, including:
 - **Patient Information:** To securely store patient demographics, medical histories, treatment plans, and appointment schedules.
 - **Healthcare Providers:** To manage information about doctors, nurses, specialists, their schedules, certifications, and patient assignments.
 - **Appointment Management:** To streamline appointment scheduling, rescheduling, cancellations, and optimize the utilization of medical resources while minimizing patient wait times.
 - **Electronic Medical Records (EMR):** To maintain comprehensive and secure electronic health records, including diagnosis codes, medications, lab results, imaging reports, and detailed treatment notes.
 - **Billing and Insurance:** To handle patient billing, insurance claims processing, payment tracking, and generate financial reports.
 - **Medical Inventory:** To track medical supplies, medications, equipment maintenance schedules, and inventory levels across various hospital departments.
 - **Reports and Analytics:** To generate a wide range of reports and analytics, such as patient outcomes, financial performance, resource utilization, and regulatory compliance metrics.
3. The data model was carefully designed to facilitate seamless data flow, enable interoperability between different hospital departments, ensure data security and privacy compliance, and provide scalability to accommodate future enhancements and technological advancements in healthcare management.

By leveraging the robust Salesforce platform and its powerful customization capabilities, our goal was to deliver a comprehensive hospital management system that optimizes patient care, enhances operational efficiency, and empowers healthcare professionals to deliver high-quality healthcare services with exceptional proficiency.

- **Developing Custom Functionality:**

1. To deliver a tailored and comprehensive solution, we leveraged the powerful capabilities of the Salesforce platform, including the Visualforce framework and custom objects, to develop custom functionality specific to the hospital's unique requirements.
2. One of the critical components was establishing seamless connections between patients, medical services, and healthcare providers. We implemented sophisticated logic using Salesforce's tools to associate patients with their assigned doctors, appointments, treatments, and medical records. This integration ensured efficient patient care coordination and comprehensive treatment tracking.
3. Managing billing and financial information is a crucial aspect of hospital operations. To address this, we utilized custom objects and fields within Salesforce to record and calculate patient charges, insurance claims, payments, invoices and generate detailed financial reports.

- **Testing and Iteration:**

1. To ensure the hospital management software met high standards of quality and functionality, we conducted rigorous testing at multiple levels, including unit testing, integration testing, and user acceptance testing (UAT). This comprehensive testing approach allowed us to identify and address any issues or deviations from the client's requirements.
2. Throughout the testing phase, we collaborated closely with key stakeholders within the hospital, gathering valuable feedback and insights. This iterative process enabled us to pinpoint areas for improvement and refine the software's functionality, user interface, and performance using Salesforce's customization capabilities.
3. Embracing an agile approach, we continuously incorporated stakeholder feedback and made iterative enhancements to the hospital management solution. This iterative process ensured optimal results, efficiency, and usability for all healthcare professionals, administrative staff, and stakeholders involved in patient care and hospital operations within the Salesforce ecosystem.

- **Deployment and Training:**

1. Upon the successful completion of the hospital management software, we meticulously deployed it into the client's Salesforce environment, ensuring a seamless transition and integration with their existing systems and processes.
2. To empower the hospital staff and administrators, we conducted comprehensive training sessions, equipping them with the necessary knowledge and skills to effectively leverage the new software. These training sessions covered topics such as navigating the system's interface, managing patient data, scheduling appointments, generating reports, and leveraging advanced features for streamlined hospital management.

- **Post-Deployment Support:**

1. Our commitment to excellence extended beyond the initial deployment phase. We provided post-deployment support services to address any issues, questions, or challenges that arose as the hospital management software was put into active use. Our dedicated team ensured timely assistance and prompt resolutions, ensuring uninterrupted operations and user satisfaction.
2. Furthermore, we offered ongoing guidance and support to optimize the software's performance, implement best practices, and take full advantage of new features and updates introduced by Salesforce. Our goal was to empower the hospital staff with continuous improvement strategies and maximize the benefits of the Salesforce platform for long-term success in hospital management operations.

2.5 SOLUTION PROVIDED

- 1. Centralized Patient Data Hub:** Our hospital management software established a centralized repository for patient data within the Salesforce platform. This comprehensive hub consolidated patient details, including medical histories, treatment plans, appointment schedules, and billing information, ensuring accessibility and data consistency across the entire healthcare organization. Healthcare providers could easily access and update patient information, facilitating personalized care delivery and streamlined communication.
- 2. Automated Medical Reporting:** The software streamlined the generation of various critical reports, such as patient outcomes, financial statements, and regulatory compliance records. This automation eliminated time-consuming and error-prone manual processes, saving valuable resources. Healthcare administrators could schedule reports to be generated at regular intervals or generate them on-demand, providing up-to-date insights for informed decision-making and effective compliance management.
- 3. Intelligent Appointment Management:** Our solution introduced an intelligent appointment scheduling feature, seamlessly connecting patients with their assigned healthcare providers. This feature tracked essential details, including appointment times, services rendered, and billing information, ensuring efficient resource allocation and reducing administrative burdens. The streamlined scheduling process minimized confusion and ensured that appointments were managed efficiently.
- 4. Comprehensive Electronic Medical Records (EMR):** The software provided a robust EMR module, enabling healthcare providers to monitor patient treatments, medications, lab results, and imaging reports in a centralized location. This comprehensive medical records tracking empowered healthcare professionals with a holistic overview of each patient's health status, facilitating better treatment planning and informed decision-making.
- 5. Streamlined Communication:** Our hospital management software fostered improved communication among healthcare stakeholders by providing a centralized platform for all patient-related communication. Healthcare providers could easily communicate with patients, caregivers, and other stakeholders, ensuring alignment and reducing the likelihood of miscommunication or delays in patient care delivery.

6. Customizable and Scalable Platform: Built on the powerful Salesforce platform, our software was highly customizable and scalable, allowing the hospital to adapt it to their evolving needs and scale it as their patient base grew. New features and functionality could be easily integrated to meet changing healthcare requirements, ensuring that the software remained relevant and effective in providing high-quality patient care in the long term.

2.6 RESULT

New Appointment: New Appointment

* = Required Information

Information	
Appointment Id	Owner
Patient	Ayush Wase
* Doctor	Status
Search Patients...	In Progress
Search Doctors...	
Appointment Day	
--None--	
First Name	
Last Name	
<input style="margin-right: 10px; border: 1px solid #ccc; padding: 2px 10px;" type="button" value="Cancel"/> <input style="border: 1px solid #0070C0; background-color: #0070C0; color: white; padding: 2px 10px;" type="button" value="Save & New"/> <input style="border: 1px solid #0070C0; background-color: #0070C0; color: white; padding: 2px 10px;" type="button" value="Save"/>	

Figure 1. New Appointment Entry Page

Figure 1 shows the custom object named appoint where the Admin can analyze all requested appointments along with their unique Id and can confirm the status of appointment.

All
Displaying records 1 - 20

Number of records 20 ▾

Appointment Id	Appointment Day	Doctor	First Name	Patient	Status
Appointment Id -0006	Monday	DOC-0023	Naruto	P-0020	In Progress
Appointment Id -0007	Tuesday	DOC-0022	Sasuke	P-0019	In Progress
Appointment Id -0008	Wednesday	DOC-0021	Sakura	P-0018	Approved
Appointment Id -0009	Thursday	DOC-0020	Kakashi	P-0017	Rescheduled
Appointment Id -0010	Friday	DOC-0019	Itachi	P-0016	Rescheduled
Appointment Id -0011	Saturday	DOC-0018	Hinata	P-0015	Cancelled
Appointment Id -0012	Monday	DOC-0017	Shikamaru	P-0014	In Progress
Appointment Id -0013	Tuesday	DOC-0016	Gaara	P-0015	Cancelled
Appointment Id -0014	Wednesday	DOC-0015	Rock	P-0014	In Progress
Appointment Id -0015	Thursday	DOC-0014	Neji	P-0014	Rescheduled
Appointment Id -0016	Friday	DOC-0013	Tenten	P-0013	Approved
Appointment Id -0017	Saturday	DOC-0012	Kiba	P-0012	Cancelled
Appointment Id -0018	Monday	DOC-0011	Ino	P-0011	Approved
Appointment Id -0019	Tuesday	DOC-0010	Choji	P-0010	Rescheduled
Appointment Id -0020	Wednesday	DOC-0009	Temari	P-0009	Cancelled
Appointment Id -0021	Thursday	DOC-0008	Kankuro	P-0008	Cancelled
Appointment Id -0022	Friday	DOC-0007	Orchidarium	P-0007	In Progress
Appointment Id -0023	Saturday	DOC-0023	Jiraiya	P-0006	Rescheduled
Appointment Id -0024	Monday	DOC-0012	Tsunade	P-0005	Approved
Appointment Id -0025	Tuesday	DOC-0011	Minato	P-0002	Approved

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Figure 2. Appointment Record Page

Figure 2 shows the all the appointment along with the status such as approved, rescheduled and cancelled.

Figure 3. New Patient Entry Page

Figure 3 shows the admission of new patient record inside the custom object patient. Here all the basic information of the patient can be seen by the admin.

Patient ID	Age	Blood Group	Contact	First Name	Gender
P-0001	0	A positive (A+)	555-123-4567	Naruto	Male
P-0002	23	A negative (A-)	555-878-6543	Sasuke	Male
P-0003	23	B positive (B+)	555-876-5432	Sakura	Female
P-0004	27	B negative (B-)	555-234-5678	Kakashi	Male
P-0005	32	B negative (B-)	555-345-6789	Itachi	Male
P-0006	23	AB negative (AB-)	555-878-9012	Hinata Hyuga	Female
P-0007	23	AB positive (AB+)	555-789-0123	Shikamaru	Male
P-0008	24	O positive (O+)	555-890-1234	Gaara	Male
P-0009	22	O negative (O-)	555-432-1098	Rock	Male
P-0010	23	A positive (A+)	555-321-0987	Neji	Male
P-0011	23	AB negative (AB-)	555-210-9876	Tenten	Male
P-0012	23	B positive (B+)	555-843-2109	Kiba	Male
P-0013	23	O positive (O+)	555-654-3210	Ino	Female
P-0014	19	B positive (B+)	555-765-4321	Choji	Male
P-0015	91	AB positive (AB+)	555-876-5432	Temari	Female
P-0016	13	A positive (A+)	555-887-6543	Kankuro	Male
P-0017	59	O negative (O-)	555-234-5678	Orochimaru	Male
P-0018	39	B negative (B-)	555-345-6789	Jiraiya	Male
P-0019	38	A negative (A-)	555-878-9012	Tsunade	Female
P-0020	65	B negative (B-)	555-789-0123	Minato	Male

Figure 4. Patient Record Page

Figure 4 shows all the records of the patient that have been admitted till date which includes Patient ID, age, blood group, contact, first name, gender and much more.

New Doctor

* = Required Information

Information

Doctor ID:

Owner: Ayush Wase

*First Name:

*Last Name:

Complete this field.

Specialty: --None--

Licence Number:

Schedule

Date: Time:

Contact:

Department Name: --None--

Buttons: Cancel, Save & New, Save

Figure 5. New Doctor Entry Page

Figure 5 shows the admission of different doctor and their specialization into the records of the hospital inside the custom made object namely doctor. The doctor object stores the basic information of the doctors along with their liscence number.

All Displaying records 1 - 20					Number of records 20
Doctor ID	First Name	Licence Number	Specialty	Contact	
DOC-0004	Jon	GOTDOC001	Anesthesiology	555-123-4567	
DOC-0005	Daenerys	GOTDOC002	Cardiology	555-987-6543	
DOC-0006	Tyrion	GOTDOC003	Dermatology	555-876-5432	
DOC-0007	Arya	GOTDOC004	Emergency Medicine	555-234-5678	
DOC-0008	Cersei	GOTDOC005	Endocrinology	555-345-6789	
DOC-0009	Sansa	GOTDOC006	Gastroenterology	555-678-9012	
DOC-0010	Jaime	GOTDOC007	General Surgery	555-789-0123	
DOC-0011	Bran	GOTDOC008	Hematology	555-890-1234	
DOC-0012	Theon	GOTDOC009	Infectious Disease	555-432-1098	
DOC-0013	Brienne	GOTDOC010	Internal Medicine	555-321-0987	
DOC-0014	Sandor	GOTDOC011	Neurology	555-543-2109	
DOC-0015	Petyr	GOTDOC012	Obstetrics and Gynecology (OB/GYN)	555-654-3210	
DOC-0016	Margaery	GOTDOC013	Oncology	555-765-4321	
DOC-0017	Jorah	GOTDOC014	Ophthalmology	555-876-5432	
DOC-0018	Varys	GOTDOC015	Otolaryngology (ENT)	555-987-6543	
DOC-0019	Oberyn	GOTDOC016	Pediatrics	555-098-7654	
DOC-0020	Ygritte	GOTDOC017	Psychiatry	555-109-8785	
DOC-0021	Samwell	GOTDOC018	Pulmonology	555-210-9876	
DOC-0022	Gendry	GOTDOC019	Radiology	555-321-0987	
DOC-0023	Stannis	GOTDOC020	Rheumatology	555-432-1098	

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Figure 6. Doctors Record Page

Figure 6 shows all the entries of the doctor along with their unique Id, names, liscence number, speciality and the contact number within the hospital management application.

Figure 7. Medication Entry Page

Figure 7 shows the admission of the medication prescribed by the doctor to the patient. The custom object Medication also shows the dosages that should be given to the patient with different frequency.

All Displaying records 1 - 10								Number of records 10
Name	Medical Staff Name	Role	Certifications	Responsibilities	Phone	Email	Address	
Brook	MS - 0009	Radiologist	Board-certified Radiologist	Medical imaging, X-rays, CT scans	+1-555-555-5556	brook@soulking.com	Soul King Medical Center, Grand Line	
Chopper (Pre-Timeskip)	MS - 0006	Therapist	Physical Therapist (PT)	Rehabilitation, physical therapy sessions	+1-555-789-0123	chopper@strawhats.com	Straw Hat Pirates Clinic, Grand Line	
Crocodile	MS - 0010	Anesthesiologist	Anesthesiology Specialist	Anesthesia administration, pain management	+1-555-555-5555	crocodile@sandpirates.com	Sand Pirates Hospital, Grand Line	
Dr. Kureha	MS - 0004	Specialist	Medical Specialist in Gerontology	Medical Specialist in Gerontology	+1-555-555-5561	kureha@drumisland.com	Drum Island Medical Center, North Blue	
Franky	MS - 0005	Technician	Medical Equipment Technician	Maintenance, repair, and calibration of medical equipment	+1-555-555-5560	franky@sunnygo.com	Sunny Go Medical Workshop, East Blue	
Marco the Phoenix	MS - 0003	Surgeon	Board-certified Surgeon	Major surgeries, emergency procedures	+1-555-555-5562	marco@phoenixpirates.com	Phoenix Pirates Hospital, New World	
Nami	MS - 0007	Administrator	Healthcare Administrator	Facility management, budgeting, staff coordination	+1-555-456-7890	nami@strawhats.com	Straw Hat Pirates Clinic, Grand Line	
Tony Tony Chopper	MS - 0002	Physician	Doctor of Medicine (MD)	Diagnosis, treatment plans, surgeries	+1-555-555-5563	chopper@strawhats.com	Straw Hat Pirates Clinic, Grand Line	
Trafalgar Law	MS - 0001	Nurse	Registered Nurse (RN)	Patient care, medication administration, wound care	+1-555-555-5564	law@heartpirates.com	Heart Pirates Medical Center, Grand Line	
Usopp	MS - 0008	Pharmacist	Licensed Pharmacist	Medication dispensing, drug interactions	+1-555-555-5557	usopp@strawhats.com	Straw Hat Pirates Clinic, Grand Line	

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Figure 8. Medication Record Page

Figure 8 shows the Medication Record Object where the speciality, certification along with their different responsibilities.

New Medical Staff

* = Required Information

Information

Medical Staff Name Owner  Ayush Wase

Name

Role

Certifications

Responsibilities

Notes

Contact Information

Phone

Email

Address

Schedule

Shift Start Time

Shift End Time

Working Days

Available Chosen

Figure 9. Medical Staff Entry Page

Figure 9 show the custom object named as Medical Staff Entry where the records of the other medical staff excluding doctors can be seen. This includes nurses, pharmacist, physician, therapist, administrator etc.

All Displaying records 1 - 10							Number of records <input type="button" value="10"/>
Name	Medical Staff Name	Role	Certifications	Responsibilities	Phone	Email	Address
Brook	MS - 0009	Radiologist	Board-certified Radiologist	Medical imaging, X-rays, CT scans	+1-555-555-5556	brook@soulkings.com	Soul King Medical Center, Grand Line
Chopper (Pre-Timeskip)	MS - 0006	Therapist	Physical Therapist (PT)	Rehabilitation, physical therapy sessions	+1-555-789-0123	chopper@strawhats.com	Straw Hat Pirates Clinic, Grand Line
Crocodile	MS - 0010	Anesthesiologist	Anesthesiology Specialist	Anesthesia administration, pain management	+1-555-555-5555	crocodile@sandpirates.com	Sand Pirates Hospital, Grand Line
Dr. Kureha	MS - 0004	Specialist	Medical Specialist in Gerontology	Medical Specialist in Gerontology	+1-555-555-5561	kureha@drumisland.com	Drum Island Medical Center, North Blue
Franky	MS - 0005	Technician	Medical Equipment Technician	Maintenance, repair, and calibration of medical equipment	+1-555-555-5560	franky@sunnygo.com	Sunny Go Medical Workshop, East Blue
Marco the Phoenix	MS - 0003	Surgeon	Board-certified Surgeon	Major surgeries, emergency procedures	+1-555-555-5562	marco@phoenixpirates.com	Phoenix Pirates Hospital, New World
Nami	MS - 0007	Administrator	Healthcare Administrator	Facility management, budgeting, staff coordination	+1-555-456-7890	nami@strawhats.com	Straw Hat Pirates Clinic, Grand Line
Tony Tony Chopper	MS - 0002	Physician	Doctor of Medicine (MD)	Diagnosis, treatment plans, surgeries	+1-555-555-5563	chopper@strawhats.com	Straw Hat Pirates Clinic, Grand Line
Trafalgar Law	MS - 0001	Nurse	Registered Nurse (RN)	Patient care, medication administration, wound care	+1-555-555-5564	law@heartpirates.com	Heart Pirates Medical Center, Grand Line
Usopp	MS - 0008	Pharmacist	Licensed Pharmacist	Medication dispensing, drug interactions	+1-555-555-5557	usopp@strawhats.com	Straw Hat Pirates Clinic, Grand Line

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Figure 10. Medical Staff Record Page

Figure 10 shows the medical record of all the available medical staff within the hospital along with their role, certifications, responsibilities and contact details.

New Department Name:

* = Required Information

Information

Department Name	Owner
<input type="text"/>	Ayush Wase
Description	
Shift Start Time	
Shift End Time	

Working Days

Available	Chosen
Monday	
Tuesday	
Wednesday	
Thursday	

Phone Number:

Email Address:

Head of Department:

Associated Doctors:

Figure 11. Department Entry Page

New Inventory Item

* = Required Information

Information	
* Inventory Item Name	Owner
<input type="text"/>	Ayush Wase
Complete this field.	
Item Name	
Description	
Quantity	
Unit Price	
Supplier Name	
Phone Number	
Email Address	
Stock Availability	<input type="checkbox"/>
Reorder Level	
Expiration Date	
Last Updated	Date: <input type="button" value=""/>
	Time: <input type="button" value=""/>
Notes	
Address	

Figure 12. Inventory Item Entry Page

Figure 12 shows the custom object known as inventory item which is like the supplies a hospital needs to treat patients, such as medicines, equipment, and protective gear. Inventory management ensures the hospital has enough of these items when needed, so doctors and nurses can focus on patient care without interruptions.

New Medical Procedure

* = Required Information

Information

*Medical Procedure Name
 *

Owner
 Ayush Wase

Complete this field.

Procedure Name:

Description:

Associated Doctors
 Search Doctors...

Duration:

Cost:

Pre-requisites:

Post-procedure Instructions

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B I U ½ ≡ ½ ¾ ½ ¾
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Cancel Save & New Save

Figure 13. Medical Procedure Entry Page

Figure 13 shows the medical procedure object in a hospital's system is like a digital record of medical treatments and procedures. It includes details like the type of procedure, date, who performed it, and any notes or follow-up instructions. This helps doctors and staff keep track of what treatments patients have received and plan their care effectively.

New Lab Test

* = Required Information

Information

* Lab Test Name

Complete this field.

Lab Test

Test Type
 --None--

Ordering Doctor

Test Date

Results

Owner
 Ayush Wase

Interpretation

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12

B
I
U

Follow-up Recommendations

Cancel
Save & New
Save

Figure 14. Lab Test Entry Page

Figure 14 shows the lab test object in a hospital's system is a digital record of all the laboratory tests performed on a patient. It includes details like the type of test, test results, date and time of the test, and the healthcare provider who ordered the test. This information helps doctors diagnose medical conditions, monitor patient health, and track the effectiveness of treatments.

New Insurance Plan

* = Required Information

Information

*Insurance Plan Name <input type="text" value=""/>	Owner Ayush Wase
Complete this field.	
Plan Name <input type="text"/>	
Coverage Details <input type="text"/>	
Policy Number <input type="text"/>	
Coverage Period <input type="text"/>	<input type="button" value=""/>
Premium Amount <input type="text"/>	
Provider Name <input type="text"/>	
Phone Number <input type="text"/>	
Email Address <input type="text"/>	
Notes <input type="text"/>	

Figure 15. Insurance Plan Entry Page

The insurance object in a hospital's system is a digital record of patients' insurance information. It includes details like the insurance company's name, policy number, coverage details, and any copay or deductible amounts. This information helps hospitals and healthcare providers verify insurance coverage, process claims, and ensure patients receive the right benefits during their treatment.

New Billing Statement

* = Required Information

Information

* Billing Statement Name <input style="width: 100%; border: 2px solid red;" type="text" value=""/>	Owner Ayush Wase
Complete this field.	
Patient Name <div style="display: flex; align-items: center;"> <input style="width: 80%; border: 1px solid #ccc; padding: 2px; margin-right: 10px;" type="text" value="Search Patients..."/> 🔍 </div>	
Billing Address <input style="width: 100%; height: 30px; border: 1px solid #ccc;" type="text"/>	
Invoice Number <input style="width: 100%; height: 30px; border: 1px solid #ccc;" type="text"/>	
Items/Services Provided <div style="border: 1px solid #ccc; padding: 5px; width: 100%;"> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-between;"> Salesforce Sans 12 <input checked="" type="checkbox"/> </div> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-around;"> B I U ♂ ≡ ½ *½ ½½ </div> <div style="border: 1px solid #ccc; padding: 2px; display: flex; justify-content: space-around;"> ≡ □ ○ □ T_a </div> </div>	
Charges <input style="width: 100%; height: 30px; border: 1px solid #ccc;" type="text"/>	
Payment Status: <div style="border: 1px solid #ccc; padding: 2px; width: 100%;"> --None-- </div>	
Insurance Coverage <input style="width: 100%; height: 30px; border: 1px solid #ccc;" type="text"/>	
Payment Due Date <input style="width: 100%; height: 30px; border: 1px solid #ccc;" type="text"/>	
Date Issued <input style="width: 100%; height: 30px; border: 1px solid #ccc;" type="text"/>	
Notes <input style="width: 100%; height: 30px; border: 1px solid #ccc;" type="text"/>	

Figure 16. Billing Statement Entry Page

The billing object in a hospital's system is like a digital record of all the charges and payments related to a patient's medical care. It includes details like the services provided, costs, insurance coverage, and any payments made by the patient or their insurance company. This information helps hospitals track expenses, bill patients accurately, and manage financial transactions effectively.

2.7 CONCLUSION

The implementation of our custom hospital management software, seamlessly integrated with the powerful Salesforce platform, has ushered in a transformative era for the healthcare organization. By establishing a centralized and comprehensive repository for patient data within Salesforce, we have created a unified and cohesive environment that enhances data accessibility, ensures consistency, and upholds high standards of accuracy across all medical-related information. The software's profound impact extends beyond mere data management. It has catalyzed a substantial optimization of operational efficiency, empowering healthcare providers to reallocate their valuable time and resources towards delivering exceptional patient care and enhancing medical operations. This paradigm shift has culminated in heightened patient satisfaction, as healthcare professionals can now respond promptly, provide superior medical services, and foster personalized interactions grounded in the comprehensive understanding facilitated by centralized patient data. As we reflect on the remarkable achievements of this endeavor, it becomes evident that the fusion of our expertise and Salesforce's robust capabilities has facilitated a paradigm shift in the healthcare industry. Organizations that embrace this transformative journey can unlock unprecedented opportunities to optimize operations, elevate patient experiences, and ultimately establish themselves as leaders in delivering world-class healthcare services that exceed expectations.

ABSTRACT

In the modern healthcare environment, managing patient data, scheduling appointments efficiently, and tracking medical inventory are critical challenges. This paper presents a new Hospital Management System built on the Salesforce platform to address these issues. The system aims to streamline operations and improve patient care delivery through an integrated, centralized solution.

The core features include a patient data management module for securely storing and accessing comprehensive patient records, enabling informed decision-making and personalized treatment planning. An intelligent appointment scheduling component reduces administrative workloads and scheduling errors by allowing patients to book appointments through a user-friendly interface while providing healthcare providers with a unified view of schedules and resources.

Additionally, the system incorporates an advanced medical inventory management system that optimizes resource allocation, enhances inventory tracking, and supports data-driven decision-making processes. By maintaining accurate inventory levels and minimizing waste, the solution contributes to cost-effective operations and improved patient outcomes.

Leveraging the capabilities of the Salesforce platform, the proposed Hospital Management System offers enhanced efficiency, better patient experiences, and exceptional care standards across the healthcare continuum. The system represents a significant step forward in healthcare technology, empowering healthcare providers to deliver superior patient care through streamlined operations and data-driven insights.

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