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APP DEVELOPMENT USING SALESFORCE

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Abstract-In the IT industry, salesforce is considered as the hottest cloud computing technology which is available on the cloud. There is no need to install any software as well as there are no hardware requirements. In the recent context, Salesforce.com is one of the best cloud providers available. Salesforce.com (SFDC) is number one on-demand CRM, which runs on force.com platform, moreover, CRM is a model which is used to run a different organization such as phone calls, emails, meeting and association with customers and also prospects penetrating to sales, marketing, and support. In the current state, attracting new customers as well as retaining existing customers plays a vital role in improving business, the main objective is to meet the customer requirements and expectations. The customer plays a dynamic role in the company's success. Here we will be discussing about app development using salesforce and different methodologies that can be opt for development of this and how it can be more user friendly in use.
Keywords: Salesforce.com, CRM, cloud computing

1. INTRODUCTION

Salesforce uses cloud computing by providing customer relationship management (CRM) and other application software solutions in the form of software as a service leased over the Internet, as opposed to software believed and installed on machines locally. Salesforce is a customer relationship management solution that helps the organization for managing their relationship and interactions with the new customers as well as existing customers, it helps in storing the data for customers.

To build and distribute custom software, salesforce provides the user with excessive customizability to fit their CRM and needs and for developers. As being a salesforce developer, we can able to help them by automating a few tasks and tracking system, so they can take benefit of that and use ahead to this.

Salesforce is the primary initiative offering within the Salesforce platform. It provides companies with an interface for case management and task management and a system for automatically directing and mounting important events. It's one integrated CRM platform that gives all your departments — including marketing, sales, commerce, and service — a single, shared view of every customer.

This is the foremost reason why we selected Salesforce for creating our application, as applications are more portable and user friendly.

2. LITERATURE SURVEY

This author has discussed [1] Cloud computing is a technique that accesses and stores data through the internet rather than in computer hard drive. Cloud is a metaphor for the internet, which provides more efficient computing by centralizing data processing and information measures. This cloud model is composed of some special functionality like Self-service, Resource pooling, Board access network. There is a service model Software as Services (SAS), Platform as Service (PAAS), Infrastructure as Service (IAS). Cloud computing models are divided into two categories they are mainly like the frontend, backend, and also each end connects to the network from internet.

[2] In this author shared about the salesforce, it is a cloud service provider. Salesforce provides customer relationship management. Salesforce provides different platforms, these platforms use for the developing software, application. Salesforce launched force.com in 2008 for development.Force.com is a deployment environment using salesforce SaaS server infrastructure and it is also a growing set of software engineering tools.

[3] In this author discussed the various platforms used

by salesforce. There are platforms like salesfoce.com, force.com and another one is Heroku. It is the platform which is supported by several programming languages and used as a web application development model.

3. METHODOLOGIES

A Salesforce application is a logical vessel of all the objects, tabs, processes, and services linked with a given business function. Custom app and service cloud console are the two types of salesforce applications.
For creating an app in Salesforce, you can use the following steps which are as follows:
i. Enter App in the Quick find box from the Setup in the home tab then select App Manager.
ii. Click the New Lightning App
iii. Walkthrough the Lighting App Wizard.
iv. Click Save and Finish
In Salesforce we have a variety of options for selecting images for an App. You simply click on 'Insert an Image' and take from the document. If required you can add more tabs to App, click on `Add` selected tabs will be moved to selected Tabs selection.
After creating the app in Salesforce, you can add objects, fields, and records in that app.
There are 2 types of objects in Salesforce:
Standard object- Those objects which are provided by the salesforce is called a standard object.
Custom Object- Those objects which are created by the user are called a custom object.
For creating a custom object-
i. Direct to Setup -> Build -> Create -> Object
ii. Click on New custom objects.
iii. Fill in the object Name and Description.
iv. Click on Save
For creating a custom field-
i. Direct to Setup -> Build -> Create -> Object
ii. Select the object which you want to Add.
iii. Scroll down to custom field and Relationships for the objects and click on new.
iv. Click Next
v. Select the page layout that should include this field.
vi. Click Save.

Steps for adding the records-
i. Click on the object for which you want to create a record.
ii. Click New.
iii. Select a record type.
iv. Enter values in the fields.
v. Click Save

3.1 TECHNIQUES USED FOR THE DEVELOPMENT OF SALESFORCE APP ARE AS FOLLOWS

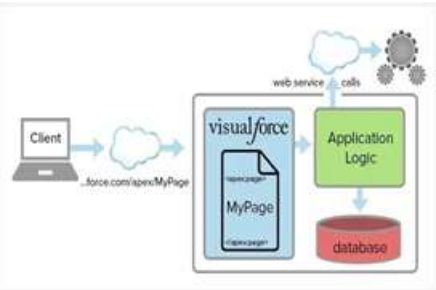
3.1.1 REPORTS AND DASHBOARDS:

Salesforce provides a sole technique to generate the reports and dashboards. Reports in different styles can be generated. For generating a report user has to drag and drop the field which is required in reports. The date arranged in the report is usually in the form of rows and columns. Clicking on a run button the report will be run. The dashboard is a graphical representation of data generated by a report. The relationship between a dashboard component (such as charts, tables) and a report is 1:1. Like reports, dashboards are stored in folders. Clicking on a run button the dashboard will be seen.

3.1.2 VISUALFORCE PAGE:

Visualforce is a mark-up language for developing pages in salesforce. It's the component-based user interface framework for the Force.com platform. The framework includes a tag-based mark-up language, like HTML designers, can use Visual force tags alongside standard HTML, JavaScript, Flash, or any other code that can execute within an HTML page on the platform.
User can create Visualforce pages that are shared between mobile and desktop, or pages that are exclusive to the mobile app. Developing for Salesforce gives you flexibility within the processes and tools you use utilize to customize your app.

For allowing a more animated and richer user interface visual force page can be integrated with any standard web technology or JavaScript framework. Each page is open by a different URL. Visualforce empowers developers to enlarge Salesforce's built-in features, substitute them with new functionality, and build completely new apps. Use strong built-in standard controller features, or write your custom business logic in Apex. User will be able to build functionality for your organization, or create apps for sale in the AppExchange.



3.1.3 RULES:

Validation Rule: Validation Rules help the user to impose data integrity conditions against the data. Validation rules in Salesforce are verified if the data is "True", the records are saved. If the data is invalid it displays an error message and the condition is "False".
Assignment Rule: Assignment rules automate user organization's lead generation and support processes. Irrespective of whether leads are created manually or generated from Web-To-Case lead assignment rules can be assigned further for case assignment rules whether created manually or automatically using Web-To- Case, case assignment rules can be assigned.
Workflow rules: To save time across your org. workflow lets a user automate standard internal procedures and processes. A set of workflow instructions is the main container for a workflow rule. These instructions can always be collected in an if/then statement.
Escalation Rule: Escalation rules are used to escalate cases automatically when they meet the criteria which are defined in a rule entry. We create rule entries where criteria are defined to escalate a case. Each time when an escalation rule is applied for a case, it checks whether the criteria met with the rule entry.

3.1.4 APEX INTEGRATION SERVICES:

Apex code is the concept of understanding the code properly, handles more than one record at a time. Apex code enables to integrate external service tightly. Apex could also be an object-oriented linguistic communication that allows developers to start flow and transaction control statements on Salesforce servers. Apex is a language developed by Salesforce.com. In this service, the user will integrate salesforce.com with the third-party website. Salesforce.com is providing APIs to make this integration possible. These APIs will be organized properly and at the successful configuration, salesforce.com users will get access to the third party limited resources. Apex is acquainted with define programmed functions during many processes on the world including custom buttons and links, event handlers on record insertion, update, or deletion, via scheduling, or via the custom controllers of Visualforce pages.

4. CONCLUSION

This application is a software as a service that works on the cloud-oriented platform. It will help to generate the many reports of the large data of any organization. This work also makes some suggestions for developing software in Software as a Service business environment. This tool can be of great help to management for upcoming productivity and getting huge results with a small budget. With mobile-friendly Salesforce applications, these reports would be allowed to use anywhere, anytime. The advantage to the larger organization in business growing, developing customer experiences, and bringing new products to new markets is much greater than the impact on the IT organization; just as digital information is more than an IT function.
Successful implementations require many efforts on the part of customers, cloud providers, and providers of services and products. Salesforce, as a known market leader, helps bring all the tables. The salesforce software projects to a "cloud" approach. Organizations on this journey need suppliers that may support all of them the way. The breadth and sort of cloud applications and development platforms available today mean that the majority of an organization's business processes and workflows will be migrated to the cloud.

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