Governors State University
OPUS Open Portal to University Scholarship

Fall 2016

Sales Management Portal

Chamanth Kumar Guduru
Governors State University

Abdul Baseer Mohammed
Governors State University

Venkata Sai Krishna Pentyala
Governors State University

Sai Naveen Sare
Governors State University

Follow this and additional works at: http://opus.govst.edu/capstones
Part of the Computer Sciences Commons

Recommended Citation
Guduru, Chamanth Kumar; Mohammed, Abdul Baseer; Pentyala, Venkata Sai Krishna; and Sare, Sai Naveen, "Sales Management Portal" (2016). All Capstone Projects. 274.
http://opus.govst.edu/capstones/274

For more information about the academic degree, extended learning, and certificate programs of Governors State University, go to http://www.govst.edu/Academics/Degree_Programs_and_Certifications/

Visit the Governors State Computer Science Department
This Project Summary is brought to you for free and open access by the Student Capstone Projects at OPUS Open Portal to University Scholarship. It has been accepted for inclusion in All Capstone Projects by an authorized administrator of OPUS Open Portal to University Scholarship. For more information, please contact opus@govst.edu.
ABSTRACT

- This helps to create a fully integrated software application to design for a company’s sales pipeline database portal, at which sales staffs enter clients’ information into pipeline by keeping logs of contacts and activities, opportunities and proposals, and eventually projects. The portal enables management to oversee works and track progresses, and in the meantime to interact with and provide guidance to sales staff time.
# Table of Content

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Description</td>
<td>1</td>
</tr>
<tr>
<td>1 Project Technical Description</td>
<td>2</td>
</tr>
<tr>
<td>1.1 Project Application Architecture</td>
<td>2</td>
</tr>
<tr>
<td>1.2 Project Application Information flows</td>
<td>4</td>
</tr>
<tr>
<td>1.3 Interactions with other Projects</td>
<td>5</td>
</tr>
<tr>
<td>1.4 Risk Assessment and Management</td>
<td>5</td>
</tr>
<tr>
<td>1.5 Capabilities</td>
<td>5</td>
</tr>
<tr>
<td>1.6 Assumptions and Dependencies</td>
<td>6</td>
</tr>
<tr>
<td>2 Project Requirements</td>
<td>6</td>
</tr>
<tr>
<td>2.1 Identification of Requirements</td>
<td>6</td>
</tr>
<tr>
<td>2.2 Operations, Administration, Maintenance and Provisioning (OAM&amp;P)</td>
<td>7</td>
</tr>
<tr>
<td>2.3 Security and Fraud Prevention</td>
<td>7</td>
</tr>
<tr>
<td>3 Project Design Description</td>
<td>9</td>
</tr>
<tr>
<td>4 External Interface Impacts and Specification</td>
<td>10</td>
</tr>
<tr>
<td>5 Design Units Impacts</td>
<td>10</td>
</tr>
<tr>
<td>5.1.1 Impacts</td>
<td>10</td>
</tr>
<tr>
<td>5.1.2 Requirements</td>
<td>10</td>
</tr>
<tr>
<td>6 Acknowledgements</td>
<td>11</td>
</tr>
<tr>
<td>7 Open Issues</td>
<td>9</td>
</tr>
<tr>
<td>8 References</td>
<td>9</td>
</tr>
</tbody>
</table>
Project Description

• This portal should have a responsive design so it will adjust to diverse resolutions, making it easy for users to navigate the portal on their own devices.
• Sales management portal is designed to offer time-saving services.

Search: Allows users and staff to find clients by names, either on complete or partial match

• A filter for browsing: can shorten list and separate prospects from current clients.
• A sign-in form
• Manager console: Managers can create user accounts, view and update entries, leave comments on entries, and send messages to staff, etc.
• Pipeline reports: Managers should also be able to run various reports such as lists of prospects, reports of opportunities or proposals by dates, sales projections by month or by salesperson, project tracking, etc.

Gathering requirements from the customer:
We need to gather at least requirements from the customer. The requirements must be specific, measureable, achievable, realistic and time-related. This task will be completed by our developers.

Present requirements to the customer:
After we have gathered all the requirements and have gotten the necessary approvals from the project manager and all stake holders, we will then present our requirements to management.

Create design specification:
Our design specification will detail the relationships between our tables and how our database will operate.

Build database: Once we have our requirements and design finalized our database developers will begin building the database.

Product Presentation: Our project manager and technical team will demo the final product.
1 Project Technical Description

In here we are going to discuss all the technical aspects involved in the project which include the architecture, the information flows and all the factors which play a important role in our project.

1.1 Project Application Architecture

The model contains the business logic and interact with the persistence storage to store, retrieve and manipulate data.

The view is responsible for displaying the results back to the user. In Struts the view layer is implemented using JSP.

The controller handles all the request from the user and selects the appropriate view to return. In Struts the controller's job is done by the Action Servlet.

The project schedule thus is a living project document which keeps changing over the course of the project whereas the schedule baseline is a part of the frozen project plan not subjected to alterations and incapable of accommodating delays and back-logs. The request for any changes in the project plan may sometimes thrive to the development of the project. Such changes are not decided by the individual working on the project or the project manager or the team leader. Firstly, the need for any changes in the plan corresponding to the areas like the scope, time schedules and cost are to be considered along with the impacts on their change. A request for change (RC) is then made and forwarded to the senior project manager.

Any individual or the team member may submit the RC and then forwarded to the Senior PM, who analyses and collects the information leading to the flaws and successes of the RC along with the data is being forwarded to the BCCM, comprising of the stake holders in one of the seats and after discussions and analysis with the committee the decision may be made
The following events happen when the Client browser issues an HTTP request.

- The Action Servlet receives the request.
- The `struts-config.xml` file contains the details regarding the Actions, Action Forms, Action Mappings and Action Forwards.
- During the startup the Action Servlet reads the `struts-config.xml` file and creates a database of configuration objects. Later while processing the request the Action Servlet makes decision by referring to this object.

When the Action Servlet receives the request it does the following tasks.

- Bundles all the request values into a JavaBean class which extends Struts Action Form class.
- Decides which action class to invoke to process the request.
- Validate the data entered by the user.
- The action class process the request with the help of the model component. The model interacts with the database and process the request.
- After completing the request processing the Action class returns an Action Forward to the controller.
- Based on the Action Forward the controller will invoke the appropriate view.
• The HTTP response is rendered back to the user by the view component.

In addition to dividing the application into three kinds of components, the MVC design defines the interactions between them.

- A controller can send commands to its associated view to change the view's presentation of the model (e.g., by scrolling through a document). It can send commands to the model to update the model's state (e.g., editing a document).
- A model notifies its associated views and controllers when there has been a change in its state. This notification allows the views to produce updated output, and the controllers to change the available set of commands. A passive implementation of MVC omits these notifications, because the application does not require them or the software platform does not support them.

A view requests from the model the information that it needs to generate an output representation.

1.2 Project Application Information flows

Provide the steps of the user process/usage for this project.

- Start up Sales users
  - Clients managing add/update/delete
  - Contacts managing add/update/delete
  - Notes managing add/update/delete
  - Opportunities managing add/update/delete
  - Proposals managing add/update/delete
  - Projects managing add/update/delete
  - Search
  - Forgot password
- Startup Manager users
  - Users managing users add/update/delete
  - Sending messages to users
  - Reports
  - Forgot password
1.3 Interactions with other Projects

Our Project is a private project and it does not interact with any other projects.

1.4 Risk Assessment and Management

There are no Risks in this project. In this project we did not implement external resources. This project may have got risks from Database if there is not enough space on the computer or lot of database connections created in connection pool.

A failure to assess the risks involved in Sales Management can be disastrous as a result of:

- Loss of reputation
- Loss of equipment
- Damage to facilities
- Financial loss
- Over-stressed

The risk management team ensures that a risk, which may cause a negative effect on project’s objective, should be altered/eliminated. In order to do so, the approach used is “Risk Identification-Risk Analysis-Risk control” strategy.

This approach ensures proper monitoring of risk and different ways to avoid the risk to occur. Some risks are unavoidable and so, a proper risk control strategy is defined and documented.

Separately qualitative and quantitative risk analysis is also performed with their respective impacts (high, medium etc.). After analysis, risk mitigating, avoiding and transfer strategies are set.

1.5 Capabilities

The Capabilities of our project is our project we have a database connecting to our website so that we can store all the details of our clients dynamically when entering in the website.
1.6 Assumptions and Dependencies

- The workability of the user modules such as those dealing with addition of clients and with their scheduling policies provided by the Manager is assumed.
- A basic module of Client accounting and project considerations will be provided, as they are not the focus of the Manager.
- Users are assumed to have a fair estimate of job execution times, so that the decision to accept or reject a job is facilitated.

2 Project Requirements

Here we are going to discuss all the main factors that are responsible for the project to implement without any interferences and to function to the maximum level.

2.1 Identification of Requirements

< GSU-1 User-Capability-000001>

The project must allow new users to be added, updated, or deleted by the application.

Implementation: Mandatory

GSU Sales Management portal allows users to maintain their tasks.

< GSU-2 Clients-Capability-000002>

The project must allow new clients to be added, updated, or deleted by the application.

Implementation: Mandatory

GSU Sales Management portal allows users to maintain clients by sales users.

< GSU-3 Clients-Capability-000003>

The project must allow new contacts to be added, updated, or deleted by the application.

Implementation: Mandatory
2.2 Operations, Administration, Maintenance and Provisioning (OAM&P)

GSU Sales Management portal gives any backup data and fault tolerant issues and routine maintenances. In future, we need to develop data backup using CD/DVD or Excel or XML files to store all the Sales Management portal users or pipelines data. In the event acquisition gets the opportunity to be essential, the manager will be accountable for managing any picked dealer or outside resource. The manager will similarly gauge execution as it relates to the dealer giving key stock and/or advantages and pass on this to the obtaining and contracts packs. In order to ensure that the tasks are completed before deadlines, a direct approach is taken to create an effective project schedule. The factor of most importance is the resources owing to the fact that the appropriate options of resources guarantees task completion. Providing alternative resource, grant days and proper budget would also effect eventually.

Schedule milestones usually consist of single or multiple tasks which constitute a major step towards project completion. Setting up project milestones has helped in identifying the importance of minor as well as major tasks. A few project milestones are:

- Deriving requirements, scope of project and developing respective WBS.
- Finance, resource and budget Approval and finalization.
- Project design and development start
- Completion of database design, schema and their relationships
- Completion and implementation of database.
- Testing in different environments
- Deployment

2.3 Security and Fraud Prevention

In this project to provide the security we implemented the must require validators so that no one can access the portal with spam details. We also added the forget password option so we can retrieve our forgotten password and save a lot of time. While easygoing correspondence is a bit of every assignment and is essential for powerful undertaking satisfaction, any issues, concerns, or upgrades that rise up out of easygoing talk between associates must be conferred to the Project Manager so the best possible move might be made. The cost included in the plan is for the sole purpose of the database maintenance and the salaries are not to be concerned as the venture is running on the volunteers. The only cost needed for the plan is for the maintenance update of the database system.
2.4 Release and Transition Plan

We are planning to deliver the website in a very user friendly manner so that there will be no difficulties for the users who are using should not face any difficulties. We are implementing it in such a way that each and every details of the client will be stored like for instance after clicking the add client button we will get a option that says general information about the client and also we developed a notes page so that a particular user can individually react with the client in his own perspective so that the knowledge can be transferred among different persons.

- Assist program clients to test their eligibility for supports.
- Assist eligible clients to access supports.
- Provide program services to participants during the development phase.

The database will need to add/update/delete information about the following: donors, donations, must be accessible by the public website and internal interface for information storage and retrieval. The website and internal interface will be written in Java and developed by GSU Multimedia Company. The database must have a weekly maintenance run to fix and correct any DB issues. Daily backup of the database must also occur. Expected traffic to the website is about 50,000 visits per week for the first 6 months.

The staffing management involves estimation and selection of human resource with a skill set required to complete the project in an efficient way. The staffing management team sets the responsibilities to be taken and skills required initially. Moreover, staff estimates are done as to number of developers, designers, testers etc. is required and respective time involvement.
3  Project Design Description
4 External Interface Impacts and Specification

So the interface begins with the login page where the respective person logs in with his given credentials and adds the required client details in all the required fields. Not all the individuals can do this interface process it is limited and the individual with the valid credentials can do this.

5 Design Units Impacts

In the design we have a number of classes like the clients, contacts, users, notes and all the remaining classes. In this design the main action factors are the user id and the client id. Basing upon the request or the action of these two factors all the design units are impacted.

5.1.1 Impacts

By implementing this project, we can add the client’s information like the company name, telephone, fax, and many other useful details. We can also add the project details which we are working like the duration of the project, the people who are working with us on the project. So we have a complete idea of what is going on in the project from time to time.

5.1.2 Requirements

In this segment we are going to discuss all the software and hardware requirements that we need to implement the project.

Software Requirements

Operating System : Window7, Windows Server 2008 R2 (Service Pack2)
Software/Tools/IDE/Workbench : Java Runtime Environment, Java software, Development Kit 1.5+, Java Eclipse IDE, Eclipse SDK / Wtp.
Programming Language : J2EE (STRUTS), Core Java, Hibernate, JSP, JSTL, Servlets, Html, D Html, JQuery, Ajax, Java script, CSS.
Databases Server : MS-Sql Server 2005, My Sql 5.0
Web Servers : Tomcat 5.x / Tomcat 6+
Hardware Requirements

Processor : Pentium IV
Hard Disk : 40 GB
RAM : 1 GB or more

6 Acknowledgements

We would like to thank all the board members especially our handler Mr. D Yong Park for giving us this wonderful opportunity to implement this project, which helped us to improve our knowledge in various kinds of aspects. And last but not least to my team members without them it would not be possible all their hard work and dedication has payed of and the project has been implemented successfully.

7 Open Issues

The portal will allow all of the clients in this process to work together in a seamless and paperless fashion so that everyone can see the progress on each customer sales order at any time. It makes the entire Sales Management process so much easier. Offering much greater control, Visibility, and security for management. The Sales Management Portal makes the sales process so much easier. Your entire sales process will become streamlined, connected and automated. It makes life much easier for users and management.
8 References


Five critical things to consider when creating an online portal

https://bloomfire.com/blog/5-critical-things-to-consider-when-creating-an-online-portal-for-your-partners/