qwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmrtyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnmqwertyuiopasdfghjklzxcvbnm

|  |
| --- |
| SRS – PART(1)  **Chishti Builders Assingment #1**  10/21/2012 |

**Group Members**

* **Captain Jamal Ahmed**
* **Captain Sumeer Riaz**
* **PC Sundus Asim**

**NoTe :-**

* **All the effort in this project is based on reality**
* **The project in being made for an construction company in Lahore**
* **The project was taken about three weeks back and work on its development has already started.**
* **The under mentioned company / owner may be approached for necessary verification.**

**1. Introduction**

Chishti Brothers are a well renowned construction company. Due to their ever increasing business in the market and increasing number of customers, maintaining the record of customers on registers and files started becoming difficult for them. Purpose is to design a system for them in order to reduce their work overhead for maintaining the record of the customers. Presently all the customer’s data is maintained by the clerks on registers, files and company correspondence pads.

**2. Problem Analysis**

**2.1 DOCUMENT THE PROBLEM BY GAINING AGREEMENT**

We had an informal conversation with them on telephone in which the problems being faced by them were discussed. Initially the problems being faced by them are stated as under:-

**2.1.1 Problem 1**

|  |  |
| --- | --- |
| **Poblem Description** | **Slow data entry of new customers** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | A lot of time was required to create a new page of, add columns and take input from the customers and write them manually on registers and files. In addition if some customer’s record has to be searched then it takes a lot of time to get the required register and open the relevant page. Customers had to wait a lot and work burden increases on the clerks, which ultimately affects the supervisor and the business of construction company. |
| **Benefits** | The office automation system provided by our new software will provide **quick data entry** of the customers, since the forms will be automatically generated by the software system and searching a particular record is only a click away. |

**2.1.1 Problem 2**

|  |  |
| --- | --- |
| **Poblem Description** | **Extra time consumed in Updating a Customers data that involves unnecessary duplication.** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | A lot of time was required to update a customer’s data as it involved duplicating the complete record with updated credentials on a new register page. This process is very slow and involves unnecessary paper wastage, destruction of old record (as it’s not of any use). Work overload increases on clerks and it’s difficult for managers to sort and manage the database. |
| **Benefits** | The system will update the record of customer with a single click and replace the old data with the new details entered. A relatively extremely fast process. No unnecessary paper / printer wastage |

**2.1.3 Problem 3**

|  |  |
| --- | --- |
| **Poblem Description** | **No backup of the customers data** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | Company was not maintaining any backup as it was quite a lot difficult for them to duplicate the existing registers and files. It would almost double the workload on the clerks and would be difficult for the managers to manage the expenditures on duplicating the data. Both company and Customers will be affected if any of the data is lost. In addition it is humanly not possible to update the original and backup data if held by the company. |
| **Benefits** | In The office automation system provided by our new software Backup of the customers data will be created both in the encrypted form (not visible to anybody, only readable by software) and in the visible form. So, even if one computer crashes the database will be maintained on the server and other computers can easily access it. |

**2.1.1 Problem 4**

|  |  |
| --- | --- |
| **Poblem Description** | **Delay in project management as any register or file cannot be used concurrently by more than one clerk.** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | Processing the contract is very slow as data of a customer cannot be accessed by multiple clerks/ managers / supervisors at one time since it is stored in one file. This makes the processing very slow and becomes a stumbling block in the way of quick and efficient record handling. |
| **Benefits** | Our system is designed to keep the database on the central server and master computer. All the computers will have the access to that data. However the rights provided will be limited as per the authority and rank of the user. |

**2.1.5 Problem 5**

|  |  |
| --- | --- |
| **Poblem Description** | **No authorized access i-e anybody can get hold of files and see personal record of customers.** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | Since the record keeping is presently done on files and supervisors had to access the files through clerks, therefore there was no element of privacy of the customer’s data. Any record could be mishandled by anybody. |
| **Benefits** | Our system will provide limited rights to the users according to their appointment in the office, every user cannot delete / update / view all the records of the customers. |

**2.1.6 Problem 6**

|  |  |
| --- | --- |
| **Poblem Description** | **No verification of the Customers data /address according to CNIC.** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | Company had to face a lot of problems in getting the verification of the address/ name and CNIC of a particular customer which was quite time consuming (In property and construction buisness **CNIC verification** is an important issue and cannot be neglected) . |
| **Benefits** | Our system will provide automated online verification through the NADRA website regarding the credentials of any new customer |

**2.1.7 Problem 7**

|  |  |
| --- | --- |
| **Poblem Description** | **No reminders to help users remember important tasks and meetings.** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | Clerks, managers and supervisor faced the problem of at times forgetting the important tasks, meetings and events due to which the company had to face a lot of problems. There was no mechanism which can remind them of the important events. |
| **Benefits** | Our system will give the additional facility of adding reminders on different dates and users can view the daily **To-Do tasks** on their computer Desktop. This will increase the efficiency to a great extent |

**2.1.1 Problem 8**

|  |  |
| --- | --- |
| **Poblem Description** | **A lot of paper and printer wastage in getting drafts finalized.** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | Company had to bear the overhead of the expenses of the pages and printers to get the drafts finalized. |
| **Benefits** | The drafts will be finalized on the computers by marking them to the required appointment and will be printed only once the document is finalized by the competent authority. This will reduce the paper and printer‘s cost overhead to a great extent. |

**2.2 Understand The Root Cause.** There were many important issues with the company like not maintaining backup, laziness on the end of clerks to process a case and tending to forget the important events and tasks. However after analyzing all the problem and their effects on the business activity the root cause was found to be that they were still using old methods of record keeping and data storage.

|  |  |  |
| --- | --- | --- |
| **S.No** | **Causes** | **Percentage Affecting Company** |
| 1. | Not maintaining backup of cutomers record | 20 % |
| 2. | Laziness of Clerks | 15% |
| 3. | Negligence and forgetting tasks | 5% |
| **4.** | **Using Old Method Of Record Keeping (on papers)** | **60%** |

**2.2.1 Root Cause :-**

|  |  |
| --- | --- |
| **Poblem Description** | **Using Old Method Of Record Keeping on papers.** |
| **Affects** | Clerks, Managers, Supervisors, Customers, company |
| **Results** | It effected the business routine of the organization as under :-   1. More time required for data entry, extra employees needed to be hired 2. No duplication/backup, the company will be at loss in case of any file damage /loss. 3. Customers had to wait a lot and hence they get irritated thus results in customer dissatisfaction 4. More efforts required to update / amend any customer’s record. 5. File destruction was the only method of deleting unnecessary customer’s data. 6. Customers get a bad impression about the work environment of the company 7. More expenditure on papers, printers and additional employees hence decreased profitability. |
| **Benefits** | 1. Our proposed system will allow a fully automated system for customer’s record keeping. 2. Searching, updating and record entry will be a click away. 3. Much efficient and faster system that will allow backup and information security. 4. System will give reminders and to-do list of every day to help the users remember important meetings and tasks. 5. Customers will not have to wait much and they will be satisfied with the services of the company. |

**Identifying the Stake Holders**

|  |  |
| --- | --- |
| **Users** | **Other Stakeholders** |
| Doctors | Software Design Engineer |
| Clerks | Development team |
| Doctors PA’s | Production manager |
| Receptionist | General Manager of the hospital |
| Laboratory Assistants | Patients |
| Cashier |  |
|  |  |

**Vision Statement**

* + **For: The software is intended for hospital management.**
  + **What: For a better and well managed patients management system.**
  + **Name: HM&PCS (Hospital Management and Patient Care System).**
  + **Is: DBMS (Database Management System).**
  + **That: Facilitate patient and hospital staff. Effective tool for hospital managing.**
  + **Unlike: Manual data management system that exists.**
  + **Our product: Best available hospital management system in the market for private hospitals.**

**Project Scope**

**identifies what portion of the ultimate long-term product vision the current project will address**

**System Vision**

**Now coming to the part of Vision of the Car Infotainment System, We shall discuss the main points that are involved in the Vision of the system.**

* **For Whom  
  The CISwill be generally developed for the customer who will ultimately drive the car. But if we talk about the customers categorically, then the main category that pops up is the car manufactures and engineers who embed the system in the car.   
  The initial and most important users, as stated, are the Manufacturers. If they don’t like the system, they may reject it and contact a new company to develop an infotainment system.  
  The other secondary (and most important) category is the driver of the car – the one who will actually use the system on a daily basis. Thus it’s important to make the system more and more user friendly and provide a simple and flexible interface.**
* **What is the need  
  The Basic need of the system will be to provide an interface for entertainment and information control that is easy to use while still being flexible and highly advanced.  
  The System will be used in cars for infotainment control. The system will provide and interface that extremely simplified and easy to use by making use of HCI rules. This systemwill use as less buttons as possible to lower the risk of confusion in the driver.**
* **Product Name  
  The product will be named Car Infotainment System (CIS).**
* **Product Category  
  The category of the product is Car Entertainment.**
* **Benefits of the Product  
  The main benefit of the product would be simplified interface. The new and advanced technology helps the user to perform easy tasks with no difficulty whatsoever.   
  The customers will buy this system because of the use of HCI rules that helps the user to perform tasks with very less difficulty.**
* **Primary competitive alternative  
  One of the main problem with the existing infotainment systems is the complexity. The available systems are so complex that it becomes difficult and even frustrating for a user to perform different tasks.   
  The existing systems use an array of buttons – each having a different purpose. This is, by far, the main drawback of the existing infotainment system. How? Well, a person driving a car has to concentrate on the road. If he looks away for more than 2 seconds, a disaster may occur. The vast variety of buttons makes it difficult to perform a task in less time.   
  The Proposed CIS uses very less buttons. Each button is used for a different purpose. Thus the driver can perform the task without even looking at the system.**
* **Our Product  
  CIS is the easiest and most intuitive way to control entertainment, information, communication and navigation functions. The goal is to separate display and steering.   
  The system mainly comprises the** [**Control Display**](javascript:self.location.href=buildValidServerRelativeUrl('/com/en/insights/technology/technology_guide/articles/control_display.html?content_type=&source=/com/en/insights/technology/technology_guide/articles/idrive.html&article=control_display')) **and the** [**Controller**](javascript:self.location.href=buildValidServerRelativeUrl('/com/en/insights/technology/technology_guide/articles/controller.html?content_type=&source=/com/en/insights/technology/technology_guide/articles/idrive.html&article=controller')) **in the central console.  
  The height and width of the** [**Control Display**](javascript:self.location.href=buildValidServerRelativeUrl('/com/en/insights/technology/technology_guide/articles/control_display.html?content_type=&source=/com/en/insights/technology/technology_guide/articles/idrive.html&article=control_display')) **are optimally positioned to suit the driver. All the information is displayed in the glare-free, high-resolution screen above the central console. The menu navigation follows the standard method used in computing and can thus be used intuitively. Animations and other visual aids quickly make using CISa pleasant everyday activity.**

**Now that we have an idea of the vision of the system, we shall formally elaborate the vision of the system .**

* + - **Vision statement   
      The CIS gives the driver complete control over many of the vehicle’s functions while allowing him to concentrate on the road.  
      The main vision of CIS is to make the car flexible enough to perform any task easily. CIS allows user to control entertainment media and information much more easily and safely. Thus allowing the user the user to concentrate more on the road and less on the multimedia system.**
    - **Major features  
      CD/DVD player.  
      Mp3 Player.  
      iPOD Dock.  
      Car climate control.  
      GPS navigation.  
      Engine information.  
      Mobile communication. And much more……**
    - **Assumptions   
      The assumptions that were made while developing the CISare as follows:  
      The system shall be operate able in any sedan manufactured after 2005.  
      The system shall concentrate more on ease of use and flexibility.  
      The system shall be able to provide an interface that relies more on recognition than memorization.  
      The system shall incorporate new technologies like GPS navigation, touch screen, Bluetooth connectivity etc. in such a way that that the user won’t get confused in the pool of vast features. The user shall fell more comfortable and utilize the features every feature with much ease and confidence.**

**Major dependencies to external factors outside of the project’s control  
the system is dependent on several external factors.  
For secondary hardware like microprocessor chip, touchscreen glass, memory integration, the project has to rely on other companies that manufacture or develop these products.  
The operating system of the CIS is developed on a platform that is open-source. Nut for other features like database integration and graphics rendering, the system has to use other development platforms.  
The System must follow ethical codes and HCI rules for the interface.  
The system must also incorporate the features that help disabled people to use the system with less difficulty.  
Another major factor that affects the system in the compatibility of CISwith cars. Due to hardware design, the car must have slots available where CIS shall be fitted into.**

## Intended Audience and Document Overview

The intended audiences of stakeholders for this specification of the BAFCMS include:

**1.3.1 BAFCMS Employees:**

* Administrator
* Managers
* Employees
* Customer Representatives, who must approve it.
* Accountants, who will perform accounting functions using the Software.
* User Support Agents, who will provide a human interface for the GPM to the users.

**1.3.2 MCS Approved Installer Consulting Employees** (especially members of the Project Team):

* Project Managers
* Architects, whose overall architecture must meet the requirements specified in this SRS.
* Designers, whose design must meet the requirements specified in this SRS.
* Hardware Engineers, whose hardware components must implement the requirements specified in this SRS.
* Programmers, whose software components must implement the requirements specified in this SRS.
* Quality Engineers, who must ensure the quality of its quality requirements.
* Testers, who must ensure that the requirements are validatable and whose tests must validate the requirements.
* Usability Engineers, who must ensure that the user interfaces, fulfill the usability requirements.

**1.3.3 Users**, who is actually going to use this system, basically the BAFCMS employees.

**Identifying Constraints**

|  |  |
| --- | --- |
| **Source** | **Consideration** |
| **Economic** | **Financial or budget constraints** |
|  | * **Budget of 25,000 Rs is allotted for project.** * **5000 Rs for Misc expenditures** |
| **Political** | **Inter-departmental problems** |
|  | * **Application will be installed/running in multiple machines in a building** * **System will be requiring LAN or Wi-Fi connections for networking.** * **Need at least 1xserver machine for the database maintenance.** |
| **Technical** | **Restriction in choice of technology** |
|  | * **currently running/installed windows components are**   + - **Windows XP, Win-7**     - **.NET Framework 3.5**     - **AutoCAD 2008** |
| **System** |  |
|  | **Windows needs to be installed are:-**   * **Windows server 2008” will be required for “server database maintenance”.** * **Windows XP or Win-7 for the rest of the computers**   **High Level Languages used**   * **Application server software shall be written in “Visual Studio 2008, C#”, supports “.NET Framework 3.5”** * **Employee client software shall be written in “Visual Studio 2008, C#”, supports “.NET Framework 3.5”** * **User client software shall be written in DHTML, CSS, and JavaScript WebPages (if necessary).**   **Databases**   * **Where practical, data shall be defined and documented using “SQL server 2008”.**   **Hardware Constraints**   * **Printer any (Laser or dot matrix) latest model attached to every system is necessary.** |
| **Environmental** | **Environmental or regulatory constraints** |
|  |  |
|  | * **This Application Is Purpose Full Only For Civil Engineers, Construction/Building Sites.** * **No Security Constraint Because Admin and other users will have their passwords** |
| **Schedule and Resources** |  |
|  | **Schedule**   * **Project will be Tested and deployed within the time frame of two month.** * **Only three Computers will be available for the testing and validation in the domain area.** * **If complete domain setup is to be used, then it will only be available on off days(Saturday, sunday)** |
|  | **Can resources be expanded? Temporary? Permanent?** |