CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY
CHANDUBHAI S PATEL INSTITUTE OF TECHNOLOGY
SMT KUNDANBEN DINSHA PATEL DEPARTMENT OF INFORMATION TECHNOLOGY
IT407: SOFTWARE PROJECT MAJOR

PROJECT SYNOPSIS

Project Title	:
Project description	: This project will be divided into separate components comprising of each department necessary for an organization. Informational Website – This web portal will be the medium through which the organization can provide the information about the products to the customers on the internet. There will be several divisions of the products and the customer will be able to surf efficiently through the website and choose their desired product and can inquire about the same. Authorized personnel will then receive the inquiry about the product and will contact the customer regarding the product. Centralized Modules - These allow employees to manage grouped tasks without switching applications or screens. All information needed for a certain operation should be housed in the same part of the system. ERP Database - ERP systems rely on a central database from which all applications retrieve information. This provides all users with a single source of truth, ensuring all departments and teams work with the same set of information. There is also a provision of backing up the database into the host system or via the email to prevent data-loss. ERP Administrator – An Admin will have the authority to give the priority and access to the other employees of various departments within an organization. Alongside, admin will have all rights to the system. Business Integration in ERP – Employees should be able to go from one part of the system to another without feeling completely lost or like it's a different application. This also means the applications should freely share information with one another in real time. ERPs work to eliminate redundancies in this system and provide up-to-the-minute information. Manufacturing – This module will help in managing the product development and its production. The requested product after getting approved for production will be manufactured under this department. To begin with, Manufacturing department will check for the raw materials of the product with the Inventory department. Then, if the material is available it will be brought to Manufacturing department for the production. If the material is not available in the Inventory, the request for the raw material will be sent to the Vendors. Thus, a product will be manufactured under the Manufacturing department. Accounting - Accounting tools support accounts receivable, accounts payable and general ledger functions to manage the organization's finances. Accounting department supports additional functions such as payroll, petty cash and time tracking.

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	Human Resources – This module covers all HR functions an employee goes through during their time with the company. One especially important function is applicant tracking. It enables the HR staff to search for the best candidates according to the criteria an organization sets. HR deals with functions such as training, payroll and performance management. Customer Relationship Management - A CRM as part of this system provides complete customer data in one place. It allows for quick user access when customer data is needed for shipping, billing or marketing purposes. Inventory Management - Inventory management solutions give users more control and visibility over stock. Inventory department exchanges data with manufacturing, sales and customer records. This gives greater visibility of the supply chain and helps employees predict issues, such as late delivery due to low inventory levels, with greater accuracy. Sales – Sales department will deal with sales and returns of the products manufactured by the organization. Also, it will manage the Service Level Agreements set by an organization.
Project Goal	: Designing a centralized management system dedicated to an organization for handling various departments such as Sales, Production, Vendor, HR, Inventory, Account and Purchase. Also, a website for the customer side in order to provide ease for checking the available products and inquiring about them.
Objectives	: The principle behind this web application is to streamline and improve the business operations of an organization by implementing the Enterprise Resource Planning System. It will help in eliminating redundancy in the data management system and provide transparency to the organization. Increasing the flexibility of operations and improving productivity. The website will act as an interface to the customer by showcasing different range of products produced and sold by the organization and provide an option for inquiring about the same.
Functional Requirements	: - System should contain numerous forms and as per the category of the user, admin can provide the rights to the user giving access to number of forms which are concerned to that user. - Admin should possess the entire right to system. - Every user according to their category should login and only access to the data which has been allowed by the admin.

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	- Various forms concerning to all the departments like vendor, sales, HR, etc should be available in the system. - All the data from scratch should be clearly visible from the system, including raw material, costing, manufacturing, sales, and customer inquiry handling. - There should be a dashboard, which would give an clear overview according to the relevant data for the logged in user.
Non Functional **Requirement**	**: -**The portal should load in less time. - It should be compatible with all the browsers. - Shifting the system to other server having whatsoever environment (OS/Hardware) should not cause any conflicts. - Login password should be strong enough to make it more secure. - Numerous users can access the system without any system failure.

Hardware specification	**:** Hard Drive: Minimum 20 GB
	  Dual core processor
	  Processor: Recommended 2GHz or more.
	  Memory (RAM): Minimum 4 GB

Software specification	: Web Browser : Microsoft Internet Explorer, Google Chrome, Mozilla.
	  XAMPP/WAMP server
	  Microsoft visual code studio/ Sublime Text Editor
	  Frontend technology: HTML,CSS,Bootstrap,Javascript
	  Backend platform: PHP (MVC Architecture) , MySQL/MS Access, Laravel (Framework).

Learning Outcome	: To gain an understanding of designing a feature loaded website to provide the customers an insight into the products of an organization. To be able to map business processes using ERP concepts along with classifying different processes of the organization and relationship among all processes. To gain knowledge about designing a system that can manage various departments of an organization, also to understand the business architecture among an organization and manage the data-flow between different departments of an organization.
Team Size	: 3

Team Members (Name)	: Harsh N. Patel (16IT073)
	  Rahul R. Brahmbhatt (16IT013)
	  Rahul B. Tiwari (16IT139)

Division of responsibility	: Module-wise division is not yet done by the external guide, modules will be assigned on the basis of tasks accomplished during the following

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	weeks.
References	: https://www.sap.com/india/products/what-is-erp.html?infl=948240e1-6d62-470e-b84c-a0caabec9d01 https://www.youtube.com/watch?v=lYCEQqSM08I
Limitation of Existing Projects	: - The ERP system is managed manually in existing projects which consumes a lot of employee's time. - Also, there is lack of co-ordination among the various departments of the organization resulting into less productivity and increased amount of time for production. - There are no arrangements for database backup which results into loss of data in case of system failure. - There is no proper search optimization technique to get required data among huge amount of data available in the system.
Innovativeness in Project	: - The loyal customers of the organization will be efficiently managed by the Customer Relationship Management department of the organization on providing lucrative discounts and gifts to the customers on their special events such as birthdays and anniversaries. -Automatic generation of barcode and invoice on successful manufacturing and selling of product with an option to print the same. -Different tasks can be distinguished on the basis of priority assigned to that particular task and category by using different colours for the notification panel in the dashboard of the application.

(For Office Use Only)

Project ID: PRJ/2020/IT/
Date of Approval:

Sign and approved by
Dr. Parth Shah
(Head of the Department)
CSPIT, IT