

**A
PROJECT REPORT
ON**

RESTAURANT POS SYSTEM

Developed By:
Akshat Gandhi,
Kartik Patel,
Sukrut Modak.

Guide:
Mr. Upanish Doshi,
Director,
Samay Softwares,
Vadodara.

**For the Fulfillment of the Course of Master of Computer
Applications Through**



**FACULTY OF TECHNOLOGY AND ENGINEERING,
MAHARAJA SAYAJIRAO UNIVERSITY,
VADODARA.**

(January-April 2013)

CANDIDATE'S DECLARATION

We declare that 6th semester report entitled “**RESTAURANT POS**” is our own work conducted under the supervision of the guide **Mr. Upanish Doshi**.

We further declare that to the best of our knowledge the report for M.C.A. final year does not contain part of the work which has been submitted for the award of M.C.A. Degree either in this or any other university without proper citation.

(Candidate's Signature)

Name :

Student ID :

ACKNOWLEDGEMENT

It gives us immense pleasure and satisfaction in presenting this report of the Project undertaken during the 6th semester of M.C.A. As it is the first step into our Professional Life, we would like to take this opportunity to express our sincere thanks to several people, without whose help and encouragement, it would have been impossible for us to carry out the desired work.

We would like to express our sincere thanks to our **Project Guide Mr. Upanish Doshi** from the bottom of our heart, who gave us an opportunity to undertake such a great challenging and innovative work. We are grateful to him for his guidance, encouragement, understanding and insightful support in the development process.

We would like to thank all faculty members of our college, our friends and our family members for providing their support and continuous encouragement throughout the project.

COLLEGE PROFILE

ABOUT THE UNIVERSITY



The Maharaja Sayajirao University of Baroda came into existence on 29th April 1949. Before 1949 it was known as Baroda College. This University has a global name. The Maharaja Sayajirao University of Baroda was founded by Late His Highness Shrimant Maharaja Sayajirao Gaekwad of Baroda in the year 1881. Although Shrimant Sayajirao Gaekwad conceived this University at Baroda, it became a reality only during the rule of Late His Highness Shrimant Pratapsinhrao Gaekwad.

From humble beginnings, with six faculties, about 2962 students, it has seen phenomenal growth in the last 50 years. Today this University is a prestigious University in the Western India with whopping strength of the 35,000 students, 1,200 teachers covering 13 faculties and more than 90 department/institutions and 1900 administrative staff. The faculties include Arts, Commerce, Education and Psychology, Fine arts, Home Science, Journalism and Communications, Medicine, Performing Arts, Science, Social works, Technology and Engineering. Besides these 13 faculties the university also administers a Polytechnic, Sanskrit Mahavidyala. M.K.Amin arts and Science College and College of Commerce, Padra and Smt.Surajben Godhanbhai Patel Commerce and Arts College for girls.

The academic achievements of the University are reflected in the fact that the UGC has selected one department for location of a 'Center of advanced Studies' (CASE), nine Departments as 'Departments for Strengthening Infrastructure in Science and Technology' (COSIST's).

With the formation of the university, The Silver Jubilee Science Institute, a part of the Baroda College, was reconstituted as the Faculty of Science. Since 1949, The Faculty has made significant strides in various disciplines of science that attracts students from all over India and other countries and is a cosmopolitan center of education.

The Faculty of Technology & Engineering

The Faculty of Technology and Engineering as it stands today formed along with the establishment of the Maharaja Sayajirao University in 1949 is an outgrowth of what was popularly known as the "Kala Bhavan Technical Institute" (KBTI) established in June 1890 by his late Highness The Maharaja Sayajirao Gaekwad III of Baroda state. In May 1990, it completed 100 years of glorious services for the cause of Technical Education.

The Kala Bhavan started its activity in 1890 with the modest but novel objective of producing skilled artisans and apprentices by imparting instruction in local language in the following fields: Civil, Mechanical, and Electrical Engineering, Drawing and Printing, Architecture and Photo engraving, Textile Chemistry including Dyeing, Bleaching, Sizing & Printing, oil and Soap making etc, With the assistance of German experts and foreign trained teacher under the able stewardship of Principal T. K. Gajjar. Other courses on Textile Technology (weaving), Furniture making and Fine Arts were started later. Principal C. H. Vora consolidated these pioneering efforts into a Polytechnic by starting a variety of Diploma and Certificate courses in the above major disciplines, with the additional staff, laboratories and buildings. The Polytechnic status with steady development continued until 1949 when the Kalabhavan was converted into the Faculty of Technology and Engineering (with the establishment of The Maharaja Sayajirao University of Baroda, following generous donation by the Gaekwads for the University and the New Building of the Institute). From this stage onwards, the Institute developed rapidly recognizing no bounds.

These hectic developments resulting in creation of 15 departments, a workshop, a library and several buildings were possible due to the financial support mainly from UGC and aided by UNDP, USAID and Government agencies and also due to the dedicated efforts by the Institute, Deans and Teachers. Faculty laboratories and departments received massive aid of \$1,050,000 for development from the United Nations Development Program (UNDP). The aid was given to develop infrastructure facilities in the area of Fracture Mechanics, Water Resources and Environmental Engineering, Turbojet propulsion and Microprocessor Applications. In 1986, Post Graduate courses on

(i) Fracture Mechanics (ii) Irrigation Water Management (iii) Turbojet Propulsion and (iv) Microprocessor Applications were introduced.

The reputed faculty members leave profound influence by their expertise at the major national & international conferences, seminars and refresher courses and help shape the future trends in technical education. That our Alumni have performed excellently in higher education and in challenging jobs in India and abroad (particularly USA) and have achieved higher key positions, bears testimony to the quality of education imparted. The Institute is always a preferred choice for a student to become an engineer and for the employer to grab its competent engineers for jobs. Thus, it has taken more than a century of dedicated efforts of a few pioneers and visionaries to raise the old KALA BHAVAN to the stature of a mighty technical institute in the forefront of technical education in the service of the nation.

The Computer Science Department

The Department of Computer Science was started in the early 80's with the first B.E. being awarded in '84 and first MCA being awarded in the year '86. The department was formally recognized and inaugurated in the year 1988.

It is a three-year Program leading to the degree “Master of Computer Applications” (MCA). The course is aimed at developing the computer professionals in the wide range of application areas such as business sector, government sectors, scientific research, medical science, social sciences, management, communication and various other fields of the IT boom.

They give their students a platform to develop their software development skills practically as well as through research and frequent project works.

THE COMPANY PROFILE

SAMAY SOFTWARES

We are experts in all aspects of information technology & software development.

In today's dynamic and ever evolving business universe Samay Software's steadfast commitment is to provide and deliver the full value to our clients regardless of circumstances and empower them to succeed. In our culture we strongly believe that our success is completely tied with success of our clients.

Business Philosophy

Our belief in customer's success as our success has propelled our growth and helped us build an affable relationship with our clients spread across the globe. In today's dynamic and ever evolving business universe Samay Software's steadfast commitment is to provide and deliver the full value to our clients regardless of circumstances and empower them to succeed. In our culture we strongly believe that our success is completely tied with success of our clients.

At Samay, your technology management functions are completely taken over by us leaving you free to focus on your core business functions. Our philosophy is driven by excellence in our pursuits and the achievement of mutually fulfilling goals. The corner stone of our success is our belief in the global culture of respectability to ideas, innovation, trust and innate respect for the value of our customers, which enables our people to create world class products and services.

The Bright Future

Today, thanks in part to our expanding sales and marketing efforts, Samay Software enjoys a growing reputation for innovation, technology leadership, and above all outstanding products and services.

Despite our success, we remain on a journey: to create better products, to develop more rewarding partnerships with our customers, to better nurture the talents of our employees, and to help our customers win more in the marketplace. Whether you're a prospective employee, partner or a customer, we invite you to join us.

Vission & Mission

Fast is fine, but accuracy is everything.

More than building applications, our services are about achieving real business results on behalf of our clients. With our IT services, business solutions and outsourcing we will bring in our domain and technology expertise building requirements that meet your business objectives and are delivered in budget, on time with high quality.

Services and Solutions

- Offshore Software Development
- Web Application Development
- Website Design
- e-commerce Solutions
- SEO
- Logo Design
- Software Maintenance
- Software Integration & Migration
- Desktop Application
- Network Application
- Product Development
- Product Consultancy
- SaaS App Development

Products

- Computer Network Monitoring Software
A software to monitor and operate a network of computers
- Real Estate Pro:
A software for Real Estate Brokers and Consultants
- Online Product Catalogue
Online Web Module to display catalogue and allow e-shopping

Technology

- Microsoft
- Java
- PHP
- Android
- i-phone

TABLE OF CONTENTS

Abstract.....	i
Chapter 1:Introduction	1
1.1 Project Summary.....	1
1.2 Purpose.....	1
1.3 Scope.....	2
1.4 Objective	2
1.5 Technology and Literature Review	3
Chapter 2:Project Management	7
2.1 Project Planning	7
2.1.1 Project Development Approach and Justification(SDLC MODEL)	7
2.1.2 Project Plan	8
2.1.3 Roles and Responsibilities	9
2.1.4 Group Dependencies	9
2.1.5 Work Breakdown Structure	10
2.2 Feasibility Study	11
2.2.1 Operational Feasibility	11
2.2.2 Technical Feasibility	12
2.2.3 Schedule Feasibility	12
2.2.4 Economic Feasibility	13
2.3 Project Schedule.....	14
2.4 Risk Management	15
2.4.1 Risk Identification	15
2.4.2 Risk Analysis	16
2.4.3 Risk Abatement Procedure/Planning	17
Chapter 3:System Analysis	18
3.1 Study of Current System	18
3.2 Problem and Weaknesses of Current System	18
3.3 Requirements of New System.....	19
3.3.1 User Requirements.....	19
3.3.2 Hardware and Software Requirements	19
3.4 Functional Modules of the Current System	20

3.5 Features Of New System	23
Chapter 4: System Design	24
4.1 Use Case Diagram	24
4.2 Class Diagram	30
4.3 Activity Diagram	33
4.4 Sequence Diagram	35
4.5 State Diagram	38
4.6 E-R Diagram	39
4.7 Data Dictionary	40
Chapter 5: Implementation	44
5.1 System Architecture	44
5.2 Coding Standards	45
5.3 Screen Shots	51
Chapter 6: Testing	78
6.1 Testing Plan	78
6.2 Testing Strategy	80
6.3 Testing Methods	82
6.3.1 Acceptance Testing	83
6.3.2 Feature Level Testing	83
6.3.3 Configuration and Compatibility Testing	85
6.4 Test Cases	86
Chapter 7: Limitation and Future Enhancement	94
7.1 Limitations	94
7.2 Future Enhancements	95
References	96
Experience	97