

**A**  
**Project Report**  
**ON**  
**PAYROLL MANAGEMENT SYSTEM**  
**For**  
**The Partial Fulfillment Of Award Of Degree**  
**BCA**  
**(Session 2020-2021)**



**PROJECT REPORT SUBMITTED TO**  
**DEPARTMENT OF COMPUTER APPLICATION**  
**GOVT. COLLEGE HASOUD, JANJGIR-CHAMPA**  
**AFFILIATED WITH**  
**ATAL BIHARI VAJPAYEE UNIVERSITY BILASPUR (C.G.)**

**Project Reported Submitted**  
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This is to certify that "BHUNESHWAR PRASAD", Student of BCAIII at Govt. College Hasoud(C.G.) has carried out his project work as mentioned in this project entitled "PAYROLL MANAGEMENT SYSTEM" during his Third Year of studies in BCA as a part of the curriculum for obtaining the degree of BCA from Atal Bihari Vajpayee University Bilaspur, Chhattisgarh to which the institute is affiliated.

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The great help from our faculty members and my project guide that led the successful completion of the project. Besides that, I took the help of some books and websites to develop the project. They are:

- "ANSI C" by Bala Guruswami.
- IGNOU's study materials.
- Turbo C by Moolish Cooper.
- Let us "C" by Kanetkar.
- Working with "C" by Kanetkar.
- Programming in "C" by Hemant Goyal.

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4. [www.wikipedia.org](http://www.wikipedia.org)
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## INTRODUCTION

The project titled Library Management System is Library management software for monitoring and controlling the transactions in a library. The project "**Library Management System**" is developed in c language, which mainly focuses on basic operations in a library like adding new member, new books, and updating new information, searching books and members and facility to borrow and return books.

"Library Management System" is a windows application written for 32-bit Windows operating systems, designed to help users maintain and organize library. Our software is easy to use for both beginners and advanced users. It features a familiar and well thought-out, an attractive user interface, combined with strong searching Insertion and reporting capabilities. The report generation facility of library system helps to get a good idea of which are the books borrowed by the members. makes users possible to generate reports' hard copy.

The software Library Management System has four main modules.

- ✓ Insertion to Database Module – User friendly input screen
- ✓ Extracting from Database module – Attractive Output Screen
- ✓ Report Generation module – borrowed book list & Available book list
- ✓ Search Facility system – search for books and members

## SYSTEM ANALYSIS

### **EXISTING SYSTEM:**

System Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

During analysis, data collected on the various files, decision points and transactions handled by the present system. The commonly used tools in the system are Data Flow Diagram, interviews, etc. Training, experience and common sense are required for collection of relevant information needed to develop the system. The success of the system depends largely on how clearly the problem is defined, thoroughly investigated and properly carried out through the choice of solution. A good analysis model should provide not only the mechanisms of problem understanding but also the frame work of the solution. Thus it should be studied thoroughly by collecting data about the system. Then the proposed system should be analyzed thoroughly in accordance with the needs.

System analysis can be categorized into four parts.

- ✓ System planning and initial investigation
- ✓ Information Gathering
- ✓ Applying analysis tools for structured analysis
- ✓ Feasibility study
- ✓ Cost/ Benefit analysis.

In our existing system all the transaction of books are done manually. So taking more time for a transaction like borrowing a book or returning a book and also

### Summary

Hence after the completion of the project we got familiar with the C programming and its features.

A complete and useful library management can only be developed with lot of intensive effort and time. Due to lack of time and we are beginners in programming program that we expected can't be developed by us. Our library management may not be most useful for library in our college but it will be the most useful for study and programming practice using C.

As a whole, the project has been a good learning experience for us. We have gained knowledge about the various aspects of C programming. At the same time, we have developed a deep understanding about the file handling in C.

We still want to emphasize that the program is not complete by itself. There is still a lot of room for improvement. Graphics may be added to program to make it more attractive. The mouse cursor may be initialized in order to make the program even more interactive.

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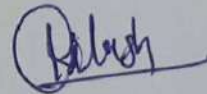
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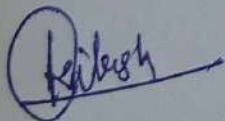
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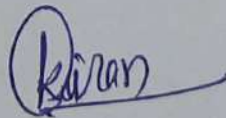
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## **Acceptance Testing:**

This testing is done to verify the readiness of the system for the implementation. Acceptance testing begins when the system is complete. Its purpose is to provide the end user with the confidence that the system is ready for use. It involves planning and execution of functional tests, performance tests and stress tests in order to demonstrate that the implemented system satisfies its requirements.

Tools of special importance during acceptance testing include:

Test coverage Analyzer – records the control paths followed for each test case.

Timing Analyzer – also called a profiler, reports the time spent in various regions of the code are areas to concentrate on to improve system performance.

Coding standards – static analyzers and standard checkers are used to inspect code for deviations from standards and guidelines.

## **Test Cases:**

Test cases are derived to ensure that all statements in the program have been executed at least once during testing and that all logical conditions have been executed.

Using White-Box testing methods, the software engineer can drive test cases that

- Guarantee that logical decisions on their true and false sides.
- Exercise all logical decisions on their true and false sides.
- Execute all loops at their boundaries and within their operational bounds.
- Exercise internal data structure to assure their validity.

The test case specification for system testing has to be submitted for review before system testing commences.



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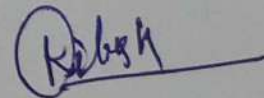
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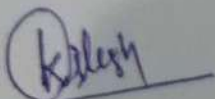
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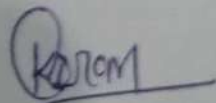
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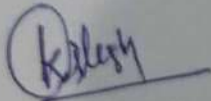
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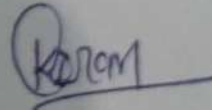
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## CERTIFICATE OF APPROVAL

This is to certify that project entitled "SUPER MARKET BILLING SYSTEM" carried out By "RAVIKUMAR", student of BCA Final year at Govt. College Hasoud, Janjgir- Champa (C.G.), is hereby approved after proper examination and evaluation as a creditable work for the partial fulfillment of the requirement for awarding the degree of BCA ABVV, Bilaspur (C.G.)



(Internal Examiner)



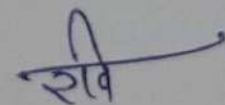
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Date:

## DECLARATION BY THE CANDIDATE

I, the undersigned solemnly declare that the project work entitled "SUPER MARKET BILLING SYSTEM" is based on my own work carried out during the final semester under the supervision of Mr. KAILASH KAIWARTYA . I assert that the software project document drawn is the outcome of my project work. I further declare that to the best of my knowledge and belief the report does not contain any part of any work which has been submitted for the award of BCA degree or any other degree/diploma/certificate in this University or any other University of India or Abroad.



Name: RAVI KUMAR

Roll no.: 232966

Enrollment no.: 2017033986

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- 5) ROGER S. PRESSMAN "SOFTWARE ENGINEERING A PRACTITIONER'S  
APPROACH".
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- 7) E.M. AWAD "SYSTEM ANALYSIS & DESIGN".

**A**  
**Project Report**  
**ON**  
**AIR TICKETRESERVATION**  
**For**  
**The Partial Fulfillment Of Award Of Degree**  
**BCA**

(Session 2020-2021)



**PROJECT REPORT SUBMITTED TO**  
**DEPARTMENT OF COMPUTER APPLICATION**  
**GOVT. COLLEGE HASOUD, JANJGIR-CHAMPA**  
**AFFILIATED WITH**  
**ATAL BIHARI VAJPAYEE UNIVERSITY BILASPUR (C.G.)**

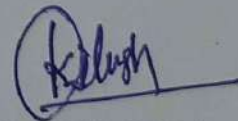
**Project Reported Submitted**  
**By**  
**NAVEEN PRAKASH SAHU**  
**ENROLLMENT NO - 2018021519**  
**ROLL NO - 232962**



**Forwarding By the Project Coordinator and Head of the Department**

This is to certify that "NAVEEN PRAKASH SAHU", Student of BCAIII at Govt. College Hasoud(C.G.), has carried out his project work as mentioned in this project entitled "AIR TICKET RESERVATION" during his Third Year of studies in BCA as a part of the curriculum for obtaining the degree of BCA from Atal Bihari Vajpayee University Bilaspur, Chhattisgarh to which the institute is affiliated.

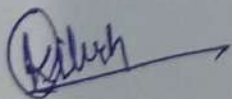
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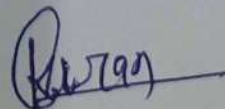
Mr. Kailash Kaiwartya  
Project Coordinator.  
Govt. College Hasoud,  
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India-495661

## CERTIFICATE OF APPROVAL

This is to certify that project entitled "AIR TICKET RESERVATION" carried out By "NAVEEN PRAKASH SAHU ", student of BCA Final year at Govt. College Hasoud, Janjgir-Champa (C.G.), is hereby approved after proper examination and evaluation as a creditable work for the partial fulfillment of the requirement for awarding the degree of BCA ABVV, Bilaspur (C.G.)



(Internal Examiner)



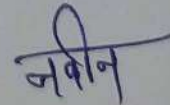
(External Examiner)

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Date:

## DECLARATION BY THE CANDIDATE

I, the undersigned solemnly declare that the project work entitled "AIR TICKET RESERVATION" is based on my own work carried out during the final semester under the supervision of Mr. KAILASH KAIWARTYA . I assert that the software project document drawn is the outcome of my project work. I further declare that to the best of my knowledge and belief the report does not contain any part of any work which has been submitted for the award of BCA degree or any other degree/diploma/certificate in this University or any other University of India or Abroad.



Name: NAVEEN PRAKASH SAHU

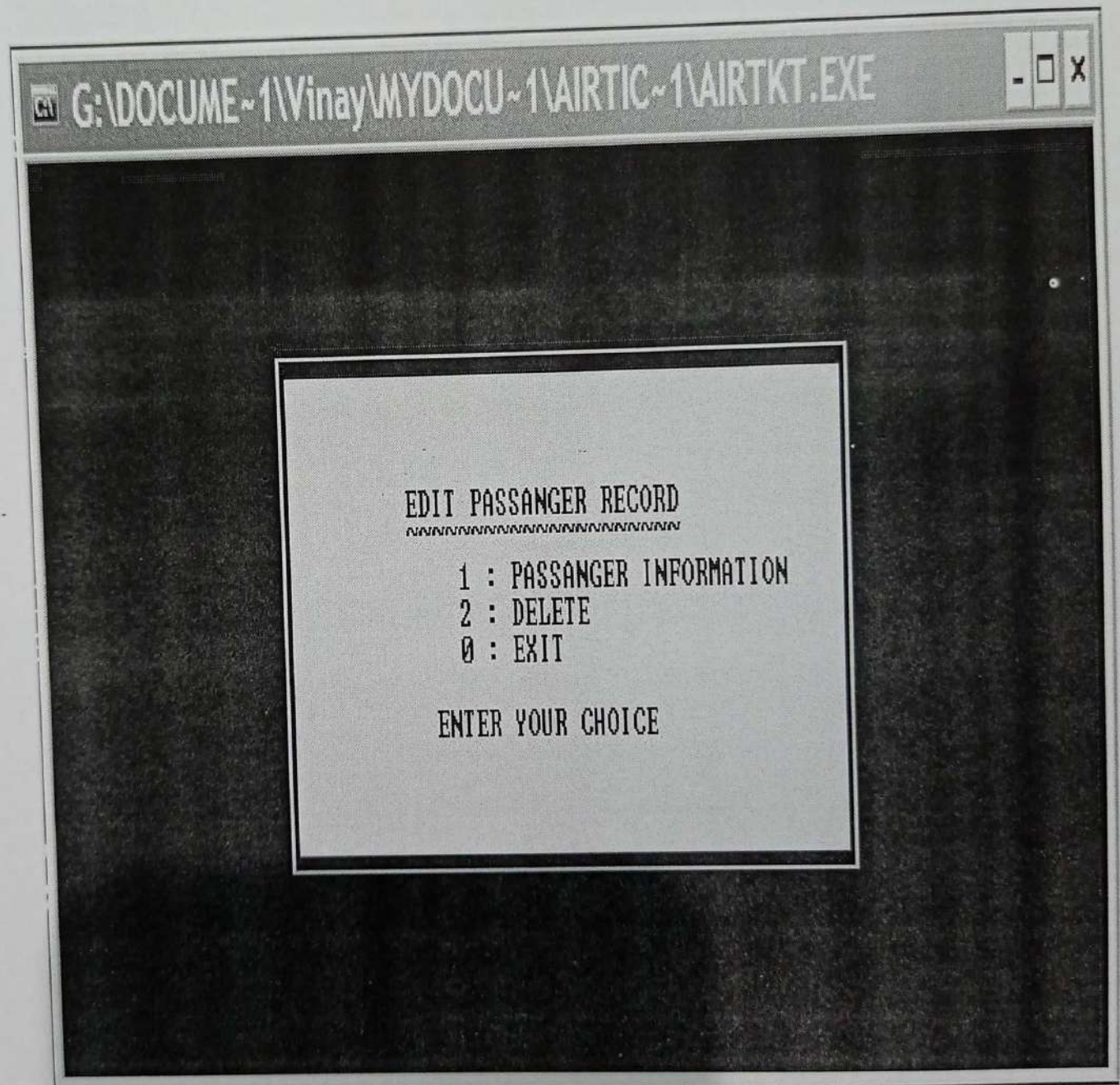
Roll no.: 232962

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## Edit Passenger Records



**A**  
**Project Report**  
**ON**  
**RAILWAY MANAGEMENT SYSTEM**  
**For**  
**The Partial Fulfillment Of Award Of Degree**  
**BCA**

(Session 2020-2021)



**PROJECT REPORT SUBMITTED TO**  
**DEPARTMENT OF COMPUTER APPLICATION**  
**GOVT. COLLEGE HASOUD, JANJGIR-CHAMPA**  
**AFFILIATED WITH**  
**ATAL BIHARI VAJPAYEE UNIVERSITY BILASPUR (C.G.)**

**Project Reported Submitted**  
**By**  
**BHANU PRATAP CHANDRA**  
**ENROLLMENT NO-2017033966**  
**ROLL NO - 232952**

**Forwarding By the Project Coordinator and Head of the Department**

This is to certify that “ **BHANU PRATAP CHANDRA** ”, Student of BCAIII at Govt. College Hasoud(C.G.), has carried out his project work as mentioned in this project entitled “**RAILWAYMANAGEMENT SYSTEM**” during his Third Year of studies in BCA as a part of the curriculum for obtaining the degree of BCA from Atal Bihari Vajpayee University Bilaspur, Chhattisgarh to which the institute is affiliated.

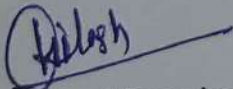
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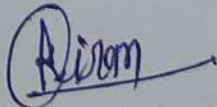
Mr. Kailash Kaiwartya  
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Govt. College Hasoud,  
Janjgir-Champa(C.G.)  
India-495661

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This is to certify that project entitled "**RAILWAYMANAGEMENTSYSTEM**" carried out By "**BHANUPRATAPCHANDRA**", student of BCA Final year at **Govt. College Hasoud, Janjgir-Champa (C.G.)**, is hereby approved after proper examination and evaluation as a creditable work for the partial fulfillment of the requirement for awarding the degree of BCA ABVV, Bilaspur (C.G.)

  
(Internal Examiner)

Date:

  
(External Examiner)

Date:



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भानु प्रताप चन्द्रा

Name: **BHANU PRATAP CHANDRA**

Roll no.: **232952**

Enrollment no.: **2017033966**

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- Problem Statement
- Software & hardware Requirement Specification
- Use case diagram
- Use case description
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- Collaboration Diagram
- E-R Diagram

## PROBLEM STATEMENT FOR RAILWAY RESERVATION SYSTEM

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