

ECOMMERCE

Project Report

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Bachelor of Technology

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By

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CERTIFICATE

This is to certify that Project Report entitled “ECommerce” which is submitted by “Kshitij Gautam” in partial fulfillment of the requirement for the award of degree B.Tech. CSE, is an authentic record of the candidate’s own work carried out by him under our supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree.

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ABSTRACT

This project is a cross-platform web and mobile based application. A desktop website with a database on the server-side and a mobile app as an E-Commerce framework have been developed. Various technologies related to web and mobile application development have been implemented to accomplish this objective.

Following are the various sections provided:

1. A Products section with detailed product view and cart facility.
2. A User Accounts section to enable management of user information and product orders.
3. An Administration Section for the administrators to manage product orders and update products database.

The desktop website features the administration section to perform various administration related activities of the entire E-Commerce framework.

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GLOSSARY

<i>accessibility</i>	Easy to use GUI
<i>account creation</i>	Create new user or seller accounts
<i>accounts</i>	Used to store information of users
<i>ACID-compliance</i>	Presence of atomicity, consistency, isolation and durability
<i>administration</i>	management
<i>analytics</i>	Computational analysis of data
<i>Apache Cordova</i>	Mobile Applications Development Framework
<i>API</i>	Application Programming Interface
<i>app</i>	See mobile app.
<i>app-portability</i>	Cross-platform app able to run on any mobile platform
<i>app-server configurations</i>	Network settings and connections between app and server
<i>ASP.NET</i>	Server-side web application framework
<i>back-end</i>	Coded program in HLL running on server which responds to queries and request
<i>battery life</i>	Power capacity of mobile device
<i>build</i>	Version of a compiled software
<i>business model</i>	Plan for successful operation of business
<i>cancelled orders</i>	Orders canceled before shipment
<i>candidate systems</i>	Systems qualifying for approval
<i>cart</i>	Order payment area.
<i>checkout</i>	Payment of products.
<i>client</i>	Computers or devices requesting information from server
<i>cloud</i>	Online platform
<i>cloud storage</i>	Storage provided online
<i>completed orders</i>	Orders with processed payments and shipments
<i>configurations</i>	settings
<i>confirm payments</i>	Confirmation of online payment of products and successful transactions
<i>consistency</i>	Lacking redundancies

counterfeit payments Fake transactions concluding in payments and order completion

cross-platform Multi-platform, able to run on any device

CSS Cascading Style Sheets

database Structured set of data

data manipulation Process of changing data

data security Protection of digital data from data breach

data theft Illegal transfer of confidential information

data warehousing Systems used for data analysis

database Structured set of data

debugging Identifying and removing hardware and software errors

denial of service (DoS) Interruption of user access

deploy Executing and running the software

dispatch orders Send bought products for shipment

DOM Document Object Model

Dropbox File hosting service

ECommerce Online shopping

embedded systems Embedded computer with a dedicated function and real-time computing constraints

front-end Presentation layer (GUI)

GHz Giga Hertz

GitHub Web based hosting service for version control with git

graphical user interface (GUI) Presentation layer of application

Heroku Cloud platform as a service

hosting Deployment of website online

HTML Hypertext Markup Language

IDE Integrated Development Environment

identification theft Online impersonation

IntelliJ Java IDE
invoice Order receipt

Java General purpose programming language
Java EE Java Enterprise Edition, Extension of Java SE with enterprise features
Java SE Java Standard Edition
JavaBeans Java classes encapsulating multiple objects into single object
JavaScript High-level interpreted programming language
JDBC Java Database Connectivity
JDK Java Development Kit
JSP Java Server Pages
JVM Java Virtual Machine

logistics Organization and implementation of operation information

memory RAM usage
consumption

mobile app Portable mobile application run on mobile devices

Modules Programming constructs

MVC Modal View Controller

net present value Value in present

network security Secure networks to discourage system penetration

NFC Near-Field Communication

Node.js Javascript runtime

ODBC Open Database Connectivity

OLTP Online Transaction Processing

online hosting Services which provide hosting for websites
services

open-source Software with openly shared source code

Operating Interface software between user and computer hardware
System

oracle Oracle Corporation

OutputStream Accepts output bytes and sends them to a sink

PaaS Platform as a Service

<i>payback analysis</i>	Calculating length of time required to recover cost of investment
<i>phishing</i>	Attempt to obtain sensitive information by disguising as a trustworthy entity
<i>Phonegap</i>	Mobile Application Development Framework
<i>PHP</i>	Hypertext Preprocessor, server-side scripting language
<i>power consumption</i>	Electrical energy consumed by mobile device during app runtime
<i>product approval</i>	Approval of products for online sale
<i>product deals</i>	Product promotions, discounts and offers
<i>product promotion</i>	See product deals.
<i>product return requests</i>	Requests to administrator to return misplaced or damaged goods
<i>Python</i>	Interpreted high-level programming language
<i>qualitative measures</i>	Non-numerical measures
<i>quantitative measures</i>	Statistical measures
<i>queries</i>	Sql commands
<i>query resolution</i>	Information clarification
<i>RAM</i>	Random Access Memory
<i>RDBMS</i>	Relational Database Management System
<i>redundancy</i>	Presence of useless data
<i>responsive</i>	reactive
<i>Return on investments</i>	Ratio between net profit and cost of investment
<i>returned products</i>	Returned misplaced or damaged goods
<i>reusable code</i>	Use of existing software to build new software
<i>Ruby</i>	Dynamic general purpose open source programming language
<i>run-time environment</i>	Program in execution environment
<i>Scala</i>	General purpose programming language
<i>scalability</i>	Change in size or scale
<i>scrutiny</i>	Critical examination
<i>SDK</i>	Software Development Kit

seller account approval Approval of new seller accounts to upload products
servlet Java program to extend capabilities of a server
session management Web user information and access control
site-server configurations Network connections and settings between site and server
software development life cycle SDLC Application development process
space constraints Limited disk space
SVG Scalable Vector Graphics

target systems Systems on which application executes
technical support service Assistance to users regarding technology
testing Investigation of software quality
threat to privacy Information breach
time constraints Limited computing power
tomcat Apache Tomcat server

URL Uniform Resource Locator

validation Checking and proving validity of

web browser Software used for retrieving, presenting and traversing information on internet
Web-Socket Computer communications protocol

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