VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belgaum - 590014, Karnataka



Full Stack Web Developemnt PROJECT REPORT

On

"SKILL-IT"

Submitted by

EDGAR ALLAN POE (1BMXXYYZZZZ) SHERLOCK HOLMES (1BMXXYYZZZZ) ALEXANDER GRAHAM BELL (1BMXXYYZZZZ) HERCULE POIROT (1BMXXYYZZZZ)

Under the Guidance of GUIDE NAME Designation

in partial fulfillment for the award of the degree of

 $\begin{array}{c} \textbf{BACHELOR OF ENGINEERING} \\ \\ \textbf{in} \\ \textbf{COMPUTER SCIENCE AND ENGINEERING} \end{array}$



B.M.S. COLLEGE OF ENGINEERING

(Autonomous Institution under VTU) BENGALURU-560019 2024-2025

B. M. S. College of Engineering, Bull Temple Road, Bengaluru 560019

(Affiliated To Visvesvaraya Technological University, Belgaum)

Department of Computer Science and Engineering



CERTIFICATE

This is to certify that the project work entitled "SKILL-IT", carried out by EDGAR ALLAN POE (1BMXXYYZZZZ), SHERLOCK HOLMES (1BMXXYYZZZZ), ALEXANDER GRAHAM BELL (1BMXXYYZZZZ), HERCULE POIROT (1BMXXYYZZZZ), bonafide students of B. M. S. College of Engineering, is in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belgaum during the year 2024 and satisfies the academic requirements of the course Full Stack Web Developemnt(23CS3AEFWD) prescribed for the said degree.

GUIDE NAME	Dr. Bheemsha Arya	Name of HOD
Designation	Principal, BMSCE	Professor and Head
		Department of CSE

Name of the Examiner

Signature with Date

1.

2.

B. M. S. College of Engineering, Department of Computer Science and Engineering



Declaration

We, EDGAR ALLAN POE (1BMXXYYZZZZ), SHERLOCK HOLMES (1BMXXYYZZZZ), ALEXANDER GRAHAM BELL (1BMXXYYZZZZ), HERCULE POIROT (1BMXXYYZZZZ), students of 3rd Semester, B.E, Department of Computer Science and Engineering, BMS College of Engineering, Bengaluru, hereby declare that this Full Stack Web Developement project entitled "SKILL-IT" has been carried out by us under the guidance of GUIDE NAME, Designation, Department of CSE, B.M.S College of Engineering, Bangalore, during the academic semester Sept 2024 - Jan 2025.

We also declare that, to the best of our knowledge and belief, the development reported here is not a part of any other report by any other students.

Signatures

EDGAR ALLAN POE (1BMXXYYZZZZ)

SHERLOCK HOLMES (1BMXXYYZZZZ)

ALEXANDER GRAHAM BELL (1BMXXYYZZZZ)

HERCULE POIROT (1BMXXYYZZZZ)

ACKNOWLEDGEMENT

Write about people you	would acknowledge	for their contri	ibution to your	project.
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ABSTRACT

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Table of Contents

1	Introduction to Quantum Computing	1
	1.1 The Foundation of Quantum Computing	1
2	The Architecture of Quantum Computing	3

List of Figures

	2.1	My Image																																						4	1
--	-----	----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	---

List of Tables

2.1 Caption $\{\# tbl: tabRef\}$			3
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Chapter 1

Introduction to Quantum Computing

Quantum computing is an advanced area of computation that relies on the principles of quantum mechanics to process information in fundamentally different ways than classical computers. Traditional computers represent data as binary digits (bits), which can exist in one of two states: 0 or 1. Quantum computers, on the other hand, use quantum bits (qubits), which can exist in multiple states simultaneously due to the phenomena of superposition and entanglement.

This ability allows quantum computers to solve specific types of problems much faster than classical computers. Problems involving large datasets, complex simulations (such as molecular chemistry), optimization, and machine learning could see major improvements in speed and accuracy with the use of quantum algorithms.

As Peter Shor said:

In the near future, quantum computers may be able to break widely used encryption systems, but they will also create new, far stronger encryption methods.

1.1 The Foundation of Quantum Computing

As referenced in Introduction above, Quantum computing is based on the fundamental principles of quantum mechanics, the branch of physics that describes the behavior of particles at the subatomic level. Three key concepts from quantum mechanics form the

foundation of quantum computing:

1. Superposition: A quantum system can exist in a linear combination (or superposition) of multiple states at once. For instance, whereas a classical bit can only be in the

state 0 or 1, a qubit can be in a state that is a combination of both 0 and 1. This enables quantum computers to process a vast amount of information in parallel.

2. Entanglement: When two qubits are entangled, their states become interconnected,

meaning that changing one qubit will instantly affect the other, regardless of the

distance between them. This phenomenon can be used to create highly parallelized

computational processes, accelerating problem-solving in quantum algorithms.

3. Quantum Interference: Quantum algorithms make use of interference to amplify the

probability of correct answers and cancel out wrong ones. By manipulating the phase

of the quantum state, quantum computers enhance the likelihood of achieving the

s =

correct solution while eliminating errors. Some random Code python

"HI" if s == "HI": print(s)

Qubit: A qubit (short for quantum bit) is the basic unit of information in quantum

computing. Unlike a classical bit, which can only represent one of two possible

states, 0 or 1, a qubit can represent both 0 and 1 simultaneously due to a property

called superposition.

Pandoc supports task lists, using the syntax of GitHub-Flavored Markdown.

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Chapter 2

The Architecture of Quantum Computing

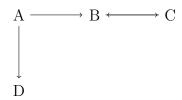


Table 2.1: Caption $\{\#tbl:tabRef\}$

ID	Name	Age	Country
1	Alice	24	USA
2	Bob	30	Canada
3	Charlie	22	UK
4	David	28	Australia
5	Emma	35	Germany
6	Frank	27	France

$$x^2 + y^2 = c^2$$

Above equation given by [Ein05].

This is a citation to the work of Smith et al. [SD21].



Figure 2.1: My Image

Bibliography

- [Ein05] Albert Einstein. "On the Electrodynamics of Moving Bodies". In: *Annalen der Physik* 17 (1905), pp. 891–921.
- [SD21] John Smith and Jane Doe. "An Example Paper". In: *Journal of Examples* 42.1 (2021), pp. 12–34.