### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi-560014, Karnataka



PROJECT REPORT ON

### "CI PIPELINE AND IT AUTOMATION USING DEVOPS"

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE PROJECT

# BACHELOR OF ENGINEERING IN COMPUTER SCIENCE & ENGINEERING

#### **Submitted By**

ASHRITH P [1SV19CS011] BHAGYASHREE G [1SV19CS015] BHOOMIKA J N [1SV19CS020] DISHAN M [1SV19CS027]

Under the guidance of

Dr. Dinesha H A B.E., M. Tech., PhD

Associate Professor, Dept. of CSE.SIET, Tumakuru.





Department of Computer Science and Engineering

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY (Affiliated To Visvesvaraya Technological University)
Sira Road, Tumakuru – 572106, Karnataka.
2022-2023

Sri Shridevi Charitable Trust (R.)



### SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Sira Road, Tumkur - 572 106, Karnataka, India.

Phone: 0816 - 2212629 | Principal: 0816 - 2212627, 9686114899 | Telefax: 0816 - 2212628

Email: info@shrideviengineering.org, principal@shrideviengineering.org | Website: www.shrideviengineering.org

(Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)



### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### **CERTIFICATE**

This is to certify that, project entitled "CI PIPELINE AND IT AUTOMATION USING DEVOPS" has been successfully carried out by ASHRITH P[1SV19CS011], BHAGYASHREE G[1SV19CS015], BHOOMIKA J N [1SV19CS020], DISHAN M[1SV19CS027] in partial fulfillment for the project report of Bachelor of Engineering in Computer Science & Engineering of the Visvesvaraya Technological University, Belagavi during the academic year 2022-23. It is certified that all the corrections/suggestions indicated for internal assessments have been incorporated in the report. The Project report has been approved as it certifies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Signature of Guide
Dr. Dinesha H A B.E., M.Tech.,PhD

Assistant Professor, Dept. of CSE, SIET, Tumakuru. 25/5/23

Signature of H.O.D Dr Basavesha D B.E., M,Tech., PhD,

Associate Professor & HOD Dept. of CSE, SIET, Tumakuru.

Signature of Principal

PRINCIPAL SILT. TUMKUR.

Dr. Narendra Viswanath M.E., Ph.D., MIE, MISTE, MIWS., FIV.,

Principal, SIET, Tumakuru\_

**External Viva** 

Name of the Examiners

Dr. Basavesha D

Wasim Uddin

Signature with date

We 125127

Sri Shridevi Charitable Trust (R.)



### SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Sira Road, Tumkur - 572 106, Karnataka, India.

Phone: 0816 - 2212629 | Principal: 0816 - 2212627, 9686114899 | Telefax: 0816 - 2212628

SHRIDEVI Phone: 0816 - 2212029 | Frincipal 0616 - 2212029 | Frincipal 0616

(Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### **DECLARATION**

We, ASHRITH P [1SV19CS011], BHAGYASHREE G [1SV19CS015], BHOOMIKA J N [ISV19CS020], DISHAN M[ISV19CS027] student of VIII semester B.E in Computer Science & Engineering, at Shridevi Institute of Engineering & Technology, Tumakuru, hereby declare that, the Project work-II entitled "CI PIPELINE AND IT AUTOMATION USING DEVOPS", embodies the report of our Project work carried out under the guidance of Dr. Dinesha H A, Associate Professor, Department of CSE, SIET, Tumakuru as partial fulfillment of requirements for the Project report in Bachelor of Engineering in Computer Science& Engineering of Visvesvaraya Technological University, Belagavi, during the academic year 2022-23. The Project has been approved as it satisfies the academic requirements in respect to the Project work.

Shell

Place: Tumakuru

Date: 26/05/2023

Student Name & Signature

BHAGYASHREE G [1SV19CS011] Blaggaluel
BHOOMIKA J N [1SV19CS0201 DISHAN M

[1SV19CS027]

## ShriTEK Innovations

Skill & Career Development Centre, Room No. 3, Ground Floor, SIET Campus, Sira Road, Tumakuru - 572 106. Karnataka.

NS

c: 0816-2211642

: www.shritek.com

: shritekinnovations@gmail.com

Date: 23/05/2023

## TO WHOM SO EVER IT MAY CONCERN

his is to certify that Mr. ASHRITH P bearing USN SV19CS011 Student of Shridevi Institute of Engineering nd Technology has successfully completed his Project Work tled "CI Pipeline and IT Automation Using DevOps".

We wish every success in his career.

or ShriTEK Innovations

PRINCIPAL SIET. TUMKUR.

Authorized Signature



 Skill & Career Development Centre, Room No. 3, Ground Floor, SIET Campus, Sira Road, Tumakuru - 572 106. Karnataka.

NS

c: 0816-2211642

: www.shritek.com

: shritekinnovations@gmail.com

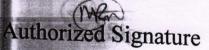
Date: 23/05/2023

### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. BHAGYSHREE G bearing USN SV19CS015 Student of Shridevi Institute of Engineering and Technology has successfully completed her Project Work itled "CI Pipeline and IT Automation Using DevOps".

We wish every success in her career.

or ShriTEK Innovations





PRINCIPAL SIET. TUMKUR.

## **IEK** Innovations

 Skill & Career Development Centre, Room No. 3, Ground Floor, SIET Campus, Sira Road, Tumakuru - 572 106. Karnataka. c: 0816-2211642

: www.shritek.com

: shritekinnovations@gmail.com

Date: 23/05/2023

### TO WHOM SO EVER IT MAY CONCERN

This is to certify that Ms. BHOOMIKA J N bearing USN SV19CS020 Student of Shridevi Institute of Engineering and Technology has successfully completed her Project Work itled "CI Pipeline and IT Automation Using DevOps".

We wish every success in her career.

or ShriTEK Innovations

or ShriTF

Authorized Signature



Mande Demyster
PRINCIPAL
S.L. TUMKUR.

## **EK Innovations**

 Skill & Career Development Centre, Room No. 3, Ground Floor, SIET Campus, Sira Road, Tumakuru - 572 106. Karnataka. c: 0816-2211642

: www.shritek.com

: shritekinnovations@gmail.com

Date: 23/05/2023

## TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. DISHAN M bearing USN SV19CS027 Student of Shridevi Institute of Engineering & Technology has successfully completed his Project Work titled 'CI Pipeline and IT Automation Using DEVOPS".

We wish every success in his career.

or ShriTEK Innovations

Authorized Signature



PRINCIPAL SIET. TUMKUR.

#### **ABSTRACT**

DevOps is a software development method that collaborates both development and operations teamsto increase the quality of software delivered. It helps development teams with continuous planning, continuous integration continuous deployment and continuous feedback. For example, In IT companies each one in the team works on a single feature and then combines their work to make it a complete application. After the development of an individual feature, it becomes a very tedious job to integrate all of their code and it takes much time. So, DevOps comes with an idea of integrating team code after at regular intervals thus making final application development easier and faster, continuous deployment, planning and feedback also achieved. This paper explains the various tools available in the market to make software development easier, DevOps architecture, and its benefits.

PRINCIPAL SIET, TUMKUR.

Marches Demoster