



|| ಶ್ರದ್ಧಾಹಿ ಪರಮಾ ಗತಿ: ||

THE NATIONAL COLLEGE
Autonomous
Jayanagar, Bangalore-560070

PROJECT REPORT
ON
HYPERLEDGER FABRIC BLOCKCHAIN BASED
FABLAND APPLICATION

BY

MANOJ C R

19NCJB419

Under the guidance of

Prof. VARADARAJ.R

FabLand project report submitted in partial fulfilment of the
requirements of

VI Semester BCA, THE NATIONAL COLLEGE JAYANAGAR

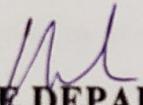


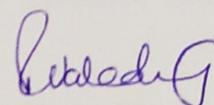
|| ಶ್ರದ್ಧಾ಼ ಪರಮಾ ಗತಿಃ ||

THE NATIONAL COLLEGE
Autonomous
Jayanagar, Bangalore-560070

CERTIFICATE

This is to certify the project report titled "FabLand Application" is a work done by Manoj c r(19NCJB419) of THE NATIONAL COLLEGE, Jayanagar, Bengaluru, in partial fulfilment of the requirements of VI Semester BCA during the year 2021-2022.


HEAD OF THE DEPARTMENT


PROJECT GUIDE

Examiners:

Examination Center

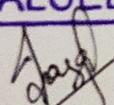
Dept. Of Comp. Science

VALUED

Examiner

(1) 2.

(2)


19/9/22
Authorised Signatory

**The National College,
Jayanagar.**

Date of Examination:

ACKNOWLEDGEMENT

FabLand Application is the project of many hands from the team. Our tribute for the successful completion of the project goes to all those who helped through their constant guidance and encouragement. The satisfaction that accompanies the success would be incomplete without thanking the person who made it.

We are thankful to our beloved Principal Dr.KAMALA YC, who encourages us to come with new and innovative ideas and for providing the environment with all facilities for completing the project.

We are also grateful to our Head of the Department Prof. SHALINI C Department of computer science for her valuable guidance and constant support during our project development.

We are also grateful to our project guide Prof. VARADARAJ R, lecturer Department of computer science for his valuable guidance and constant support during our project development.

A special thanks to MUTHURAM GOVINDARASU CEO and Founder of Indigeneous Tech Private Limited, Bangalore-32 with 10 years of experience in Blockchain for his valuable guidance and technical support for our project.

We extend our thanks to all our teaching staffs of the department of computer science. Finally, we thank one and all who helped us directly and indirectly for the completion of our project.

TABLE OF CONTENTS

1) Introduction	01
2) Project Goal	02
3) Solution Proposed	03
4) Input data and Verification	05
5) Project/ Solution (FabLand) Design	06
6) Tools/ Technologies Used	08
7) Project Team Members	08
8) Referenced Documents	08
9) Project / Solution Setup	09
1) Account and EC2 Instance creation and connection	
2) Download the required pre-requisite tools and Software into the EC2 Instance, transfer the “FabLand” Project files from Windows System to EC2 Instance using “FileZilla” and setup the project in the EC2 Instance.	
10) Project / Solution Execution	10
1) In the “FabLand” directory, execute the command “./StartFabLand.sh” command and verify that the Blockchain Network is up and deployed	
2) Execute the command “node enrollAdmin.js” and verify that the “Admin” is enrolled successfully	
3) Execute the command “node registerUser.js” and verify that the “user1” is registered and enrolled successfully	
4) Execute the command “node query-All-LANDs.js” and verify that the all the LAND data stored inside the blockchain are read and displayed successfully	
5) Execute the command “node query-LAND5.js” and verify that the LAND5 details are read from the blockchain and displayed successfully	
6) Execute the command “node invoke-LAND10.js” and check that the LAND10 has got stored into the blockchain successfully	
7) Execute the command “node query-LAND10.js” and check that the LAND10 data is read from the blockchain and displayed successfully	
11) Setup and loading of “FabLand Frontend”	15

**12) Interaction with the FabLand Blockchain Network using
FabLand Frontend from Windows System Browser 22**

- 1) Click on “QUERY ALL” option and then “SEARCH ALL” button
- 2) Click on QUERY, enter LAND5 and then click on “SEARCH” button
- 3) Click on CREATE option, enter the new LAND details and then Click on “CREATE” button
- 4) Click on QUERY option, enter LAND10 and click on “SEARCH” button
- 5) Click on TRANSFER option, enter LAND10 for LAND ID and Prakash for New Owner and then click on “TRANSFER” Button
- 6) Click on QUERY option, enter LAND10 and click on “search” Button

13) Closing of “FabLand” Project 25

14) Project Summary 27