RAJARAMBAPU INSTITUTE OF TECHNOLOGY, RAJARAMNAGAR

(AN AUTONOMOUS INSTITUTE)



A

PROJECT REPORT

ON

Design and Development of Kickstart Server Configuration Tool Using Glade UI Builder

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SUBMITTED BY

Sr No	Name	Exam Seat No.
1	Ajay Rathod	1303025
2	Yadnyawalkya Tale	1303052
3	Ankit Ghute	1303053
4	Akshay Kulat	1303054
5	Ajay Paratmandali	1303057

Under the Guidance of

Prof. Shivananda R. Poojara

Year

2014-2015

CERTIFICATE

This is to certify that the project report entitled

Design and Development of Kickstart Server Configuration Tool Using Glade UI Builder

Submitted To

COMPUTER SCIENCE AND ENGINEERING DEPARTMENT, RAJARAMBAPUINSTITUTE OF TECHNOLOGY, RAJARAMNAGAR

has been completed under my guidance and supervision. To the best of my knowledge and belief, the matter presented in this project report is original and has not been submitted elsewhere for any other purpose.

Submitted by

Sr No	Name	Exam Seat No.	
1	Ajay Rathod	1303025	
2	Yadnyawalkya Tale	1303052	
3	Ankit Ghute	1303053	
4	Akshay Kulat	1303054	
5	Ajay Paratmandali	1303057	

Prof. Shivananda R. Poojara Dr. N. V. Dharwadkar

Asst. Professor RIT, Rajaramnagar Head of Department RIT, Rajaramnagar

External Examiner(s)	Sign
1	
2	

ACKNOWLEGEMENT

It is our foremost duty to express our deep sense of gratitude and respect to the guide **Prof. Shivananda R. Poojara** for his uplifting tendency and inspiring us for taking up this project work successful.

We are also grateful to **Dr. N. V. Dharwadkar** (Head of Department of Computer Science & Engineering) for providing all necessary facilities to carry out the project work and whose encouraging part has been a perpetual source of information.

We are highly indebted to **Dr. Mrs. S. S. Kulkarni** for their guidance and constant supervision as well as for providing necessary information regarding the project & also for their support in completing the project.

We are indebted to the library personnel's for offering all the help in completing the project work. Last but not only the least we are thankful to our colleagues and those helped us directly or indirectly throughout this project work.

DECLARATION

We, the undersigned, hereby declare that the project report entitled "Design and Development of Kickstart Server Configuration Tool Using Glade UI Builder" written and submitted by us to Computer Science and Engineering department, under the guidance of Prof. Shivananda R. Poojara is our original work. The empirical results in this project report are based on the data collected by us.

Sr No	Name	Exam Seat No.
1	Ajay Rathod	1303025
2	Yadnyawalkya Tale	1303052
3	Ankit Ghute	1303053
4	Akshay Kulat	1303054
5	Ajay Paratmandali	1303057

ABSTRACT

This project aims to deliver a software product which fulfill the need of Kickstart server user. The software product will provide the efficient and easy way of writing configuration for a Kickstart server. Kickstart server is the software which automate the installation of operating system (OS) also called as unattended installation develop by Redhat. The OS installation process is complex one and contain number of steps. For example the step include setting basic configuration such system language, keyboard, time zone, and root password in this way there are some steps that required to setup a system for user. The use of a system is vary according to user and his need. Many times the system user need to configure his system or systems again and again. In this case to save user time we need to automate the system installation that is user don't need to attend it. This is what Kickstart dose. Kickstart need an input file called as a configuration file. Writing this file by hand means writing command by own by remembering them is a complex task possible to some user only. To increase the use of Kickstart we need to remove this configuration file writing complexity. This project product software will remove this complexity and indirectly increase the Kickstart Server user. The implementation of this project is a part of open source development.

INDEX

Sr.	Title	Page
No.		No.
01	Introduction	01
	1.1. Problem Statement	01
	1.2. Objectives	01
02	Literature Survey	02
03	Software and Hardware requirements	03
	3.1. Software Requirements	03
	3.2. Hardware Requirements	03
04	Software Requirement Analysis	04
	4.1 Product Perspective	04
	4.2 Product Functionality	04
	4.3 Users and Characteristics	05
	4.4 Operating Environment	05
	4.5 Design and Implementation Constraints	06
	4.6 User Documentation	06
	4.7 Assumptions and Dependencies	06
	4.8 External Interface Requirements	07
	4.8.1 User Interfaces	07
	4.9 Functional Requirements	13
	4.9.1 Basic Configuration	13
	4.9.2 Installation Method	14
	4.9.3 Boot Loader Options	15
	4.9.4 Network Configuration	17
	4.9.5 Partition Information	17
	4.9.6 Firewall Configuration	18
	4.9.7 Pre-Script Configuration	19
	4.9.8 Post-Installation Script	19

	4.10 Behavior Requirements	20
	4.11 Performance Requirements	21
	4.12 Safety and Security Requirements	21
	4.12.1 Encryption Standards	21
	4.13 Software Quality Attributes	22
05	Coding /Code Templates	23
06	Applications	25
07	Conclusion	25
08	Future Work	25
09	Bibliography / References	25
10	Appendix A:Glossary [Define terms, acronyms, and abbreviations used]	26

LIST OF FIGURES

Sr. No.	Figure Name	Page No
Fig. 3.1	Gartner Hype Cycle for Open Source Software.	02
Fig.	Working of Product (Product User, Host System on which	04
4.1.1	product is running).	
Fig.	Use Case Showing Major functionality of the Product.	04
4.2.1		
Fig.	GTK + and its Libraries.	05
4.4.1		
Fig.	Style Guide Toolkit of User Interface	07
4.8.1.1		
Fig.	Assumed Layout Constraints.	08
4.8.1.2		
Fig.	Assumed Prototype.	09
4.8.1.3		
Fig.	Earlier attended installation process.	10
4.8.1.4		
Fig.	Proposed unattended installation process.	11
4.8.1.5		
Fig.	Software Interface.	12
4.8.1.6		
Fig.	Software Repository Uploaded via HTTP interface.	13
4.8.1.7		
Fig.	Installation Method.	15
4.9.2.1		
Fig.	Boot Loader Configuration.	16
4.9.3.1		
Fig.	Network Configuration Flow.	17
4.9.4.1		
Fig.	Firewall Configuration.	19
4.9.6.1		

Fig.	Use Case Diagram (Configuration Parameter).	20
4.10.1		
Fig.	Encryption Standards.	21
4.12.1.1		