DECLARATION

We hereby declare that this submission is our own work and that, to the best of our knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

Jasmeet Kaur

(01313202712/CSE1)

Gurpreet Singh

(04013202712/CSE1)

Simran Kaur

(04313202712/CSE1)

Saloni Verma

(13213202712/CSE1)

CERTIFICATE

This is to certify that dissertation entitled "Heal Helping Hand", which is submitted by Ms. Jasmeet Kaur, Mr. Gurpreet Singh, Ms. Simran Kaur, and Ms. Saloni Verma in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science & Engineering, Guru Tegh Bahadur Institute of Technology, New Delhi is an authentic record of the candidate's own work carried out by them under our guidance.

The matter embodied in this project report is original and has not been submitted for the award of any other degree.

Ms.Taranjot Kaur

Ms. Gurpreet Kaur

(Project Guide)

(Head of Department,

Computer Science & Engineering)

ACKNOWLEDGEMENTS

We would like to express our gratitude towards **Ms. Taranjot Kaur**, for being our mentor and granting us the opportunity to work under her guidance and for offering her invaluable support and suggestions. Without her help, we would not have been able to present this dissertation up to its present standard.

We would also like to thank our supervisors, **Mr. Amritpal Singh** and **Ms. Debleena Srivastava** who have assessed and analyzed our work.

We would also like to take this opportunity to give thanks to all our friends, teachers and family, who have given us the support for the project or have helped in other aspects of our study at our esteemed college, Guru Tegh Bahadur Institute of Technology, Rajouri Garden, Delhi.

ABSTRACT

Heal Helping Hand is a consumer-oriented website that provides information on how well hospitals provide recommended care to their patients. This information can help consumers make informed decisions about health care. Health Test Compare allows consumers to select hospitals, dispensary, path labs and directly compare performance measure and cost factor.

This gives a unified platform to a common man to choose the best of all the options available around him. The usefulness of this website does not end here the patient can now have their reports online on their email and even on the website. The support to doctors and employees of hospitals/dispensary/Path Labs is also provided. The proper procedure of authentication will be provided for patients, doctors, employees, administrator(website).

Graphical representation is provided on each panel of the website so as to have the comparison ratios of each vital particulars of the modules. Sharing information about health gives a clearer picture of health and sickness across entire populations, and this knowledge can help prevent the spread of disease and improve the health of individuals. Smarter ways of gathering, analysing and using health information lead to better decisions and better spending, and make it easier to track and confront threats to world health. Informed decisions are better decisions.

The Heal Helping Hand (HHH) helps individuals to improve the availability and use of accurate health information, to improve health locally and globally. To do this HHH, has developed a framework that provides a comprehensive approach to improving health information.

LEARN App, an app for autistic children that aids in conveying their thoughts and messages is also being developed. Language Education for Autistics with Responsive sound and Notes with simple sentence formations, speech using basic English vocabulary will be a special feature of the project, available for free download that will specifically cater to children with learning, or speech disabilities.

A globally-accepted standard in HHH is a foundation for a strong health care system. Intelligently designed systems, targeting the needs and resources of individuals, provide access to the wealth of information collected locally and globally.

CONTENTS

C	Chapter	Page No.
Ti	tle Page	i
De	eclaration	ii
Сє	ertificate	iii
Ac	cknowledgements	iv
Abstract		v
Contents		vi
List of Figures		ix
List of Tables xi		xi
1. Introduction		
	1.1 Heal Helping Hand	2
	1.2 Mission	3
	1.3 Features	3
	1.4 Remarkable Attributes	4
	1.5 Trademark HHH Features	4
2.	Literature Review	
	2.1. Conformance	6
	2.2. Focus Skills	7
	2.3. Top reasons to chose HHH	8
	2.4. Case Study	10
	2.5. The Idea Behind HHH	11

Chapter	Page No.
	_

3.	Requirement Analysis	
	3.1 Purpose	13
	3.2 System Requirements	13
	3.3 Security Requirements	14
	3.4 User Privacy Policy	15
	3.5 System Features	15
	3.6 Other Requirements	15
	3.7 Application Analysis	16
	3.7.1 Introduction	16
	3.7.2 Economic Feasibility	18
	3.7.3 Technical Feasibility	18
	3.7.4 Behavioral Feasibility	19
	3.7.5 Introductory Investigation	19
	3.7.6 Proposed System	20
	3.8 Platform Used	21
	3.9 Functional Overview	21
	3.10 Software Quality Attributes	22
	3.11 Non-Functional Requirements	22
	3.11.1 Performance Requirements	22
	3.11.2 Safety Requirements	23
	3.11.3 Security Requirements	23
	3.12 Use Case Diagrams	24
	3.13 Data Flow Diagram (DFDs)	28
	3.14 Entity Relationship Diagram (ERs)	30
4.	System Design	
	4.1 Software Design In Context	36
	4.2 Methodology	36
	4.3 Design Stakeholders	38
	4.4 Why Heal Helping Hand	39
	4.5 Design Rationale	40

5. Process Description	
5.1 Objective	44
5.2 Architecture	44
5.3 Authentications	45
5.4 Site Navigation	45
5.5 Terms of Use	47
6. Modules	
6.1 Admin Panel	52
6.2 Doctor Panel	53
6.3 Patient Panel	54
6.4 Employee Panel	55
6.5 Front End	56
6.6 LEARN App	56

Page No.

57

58

59

60

69

Chapter

7. Results

9. References

10. Appendix A

11. Appendix B

8. Summary and Conclusions

LIST OF FIGURES

Fig No. Figure Name	Page No.
Figure 2.1: The Heal Helping Hand process with a case study	6
Figure 3.1: The HHH Healing Procedure	16
Figure 3.2 : Waterfall Model of Software Development	17
Figure 3.3: Process Overview of HHH (Responsibilities & Tasks)	21
Figure 3.4: Growing Consumer Confidence Observed	22
Figure 3.5 Use Case of Hospital and Super Admin	24
Figure 3.6: Use Case of First User And Medical Agents	25
Figure 3.7: Use Case (Doctor And Veterinarian)	26
Figure 3.8: Use Case (Patients And Owner Of Ill Animals)	27
Figure 3.9: 0-Level DFD for Heal Helping Hand	28
Figure. 3.10: 1-Level Data Flow Diagram (DFD)	29
Figure 3.11: ER for Heal Helping Hand	30
Figure 3.12: ER for Doctor	31
Figure 3.13: ER for Patient	32
Figure 3.14: ER for Hospital	33
Figure 3.15: ER for Admin	34
Figure 4.1: Heal Helping Hand Logo	39
Figure 4.2 : Various Authentications Used for extra security	40
Figure 4.3: Front Panel Functionality	40
Figure 4.4: Doctor Panel Design	41
Figure 4.5: Patient Panel	41

Fig No. Figure Name (Contd)	Page No.
Figure 4.6: Hospital Panel	42
Figure 4.7: Super Admin Panel	42
Figure 5.1 : Client-Server Architecture of the HHH system	44
Figure 6.1 : Modules of Heal Helping Hand	51
Figure A.1: The first look of Heal Helping Hand	60
Figure A.2: Sample test report obtained for results uploaded on HHH website	60
Figure A.3: Patient Panel Test Reports presented as graphs	61
Figure A.4: Patient Panel complete details, list of reports and chat feature bottom ri	ght 61
Figure A.5: Doctor Panel showing credentials, patients, bookings, etc	62
Figure A.6: QR code scanner accessed through app for doctor login	62
Figure A.7: Hospital login via Android app and speech recognition	63
Figure A.8: The diagnostic centers displayed with their full details	63
Figure A.9: Admin panel extensive graphs for site-wide data.	64
Figure A.10: The Heal Helping Hand website with customizable content	64
Figure A.11: The list of doctors, and a list of medical quotes for emotional wellbein	ng 65
Figure A.12: The HHH WordPress blog provides daily health articles	65
Figure A.13: Tips, recipes and lesser-known facts about health and healing of all so	orts 66
Figure A.14: LEARN App for Autistic Children.	66
Figure A.15: A complete guide for each user with autistic children	67
Figure A.16: App shows Main Menu comprising Basic, Advanced, Core, Quick Wo	ords 67
Figure A.17: Each user's likes and dislikes will be saved and the choice is remember	ered 68
Figure A.18: The App graphically teaches about emotions, and frequently used wor	ds. 68

LIST OF TABLES

Table No.	Table Name	Page No.
Table 4.1	List of HHH Stakeholders	38
Table 5.1	Unique Authentications for each Module user	45