Acknowledgement

I am on cloud nine today as I am writing the most important part of this most important assignment of my life so far. The day I decided to go for research, I was very fickle minded because I knew about the tough roads of this journey but had no clue how to walk on. All it was as clear as mud for me. Finally, my iron-will encouraged me to face the challenges and to do something productive. But, what was that element behind my iron-will, what that ineffable energy which kept me charge was and what was that invincible power which made me complete this piece of work without failing. Well... Words are insufficient to express my emotions towards that element, energy, invincible power or that omnipresent and omnipotent almighty... I don’t know how to thank GOD because it’s only he who has completed this work and has chosen me as a medium. I thank GOD for creating a shield of grace around me and blessed me that I could work on this useful and meaningful subject. Thank You GOD...

As it is correctly said that GOD cannot be present everywhere so he created mother... I wish to add something more to it. GOD cannot come to us every time so he created mother and the mentor. I convey my sincere gratitude towards my supervisor Dr. (Mrs.) Maya Ingle, Professor and Senior System Analyst, School of Computer Science and Information Technology, DAVV who not only is my supervisor for this research work but also a strong emotional support for me throughout. She has handled me with care and made me wake up and smell the coffee while required. She is an institution of knowledge, full of enthusiasm for research and development and amazingly passionate for work. She is and will be a great source of endless motivation and inspiration for me forever... I realise this six letter word “Thanks”, is like a drop in the ocean in view of her unmatchable determination of supervising my work round the clock. Despite of her extremely busy days and evenings, she never refused me to speak or meet to clear my doubts and guided me while I was chasing my tail. I am fortunate enough to have her as a supervisor indeed. While, I was working with
her eventually I came across of her Utopia of this domain. I could not resist myself to notice that she always dot all the i’s and cross all the t’s and expect same from us for our betterment only. Dear Madam... I am obliged for your holding arms during about to fall situations and on the tough surface of this road map.

I owe my thanks to Late Dr. A. K. Ramani. It was his gracious presence and overwhelming aura while I was registered for Ph. D. I am obliged for each and every support provided by him. The overall learning from him will be highly lucid and useful in my whole life.

I extend my sincere thanks for Dr. S. Tanwani, Professor and Head, School of Computer Science and Information Technology, DAVV, for his absolutely favourable gesture towards this research work. By providing excellent resources as most effective weapons, he made this challenge easier for me indeed.

I gratefully acknowledge Sanghvi Institute of Management and Science, for the support during the initial and most crucial phase of this journey. I see eye to eye that, every long journey starts with a single small step or a good beginning is the key to successful end. Let me admit that if I would not have got the positive and co-operative environment here at SIMS, I could not have reached to this state to write this work. Thank you SIMS... for providing me such an incredible support, all desired facilities and essential elbow room to inspire me. I sincerely thankful to Medicaps Institute of Technology and Management for creating favourable and comfortable platform for me to keep going towards my greatest achievement so far. I am extremely thankful to Dr. Shamsher Singh, Chief Executive Director, MITM, for his firm interest in research and science which enhanced confidence in me.

I am indebted to Dr. (Mrs.) Kshama Paithankar, Head, Shri Vaishnav Institute of Management, and Dr. (Mrs.) Shilpa Bhalerao, Head, Acropolis Institute of Technology and Research, Indore. Their knowledge and experience played a vital role in this research work. Technical discussions with them have
facilitated my yen to be fulfilled. In the absence of their encouraging association, my level of enthusiasm would have gone down... way back.

And then I thank my colleague at MITM, **Ms. Abhilasha Prasad**, whose enriching advices are unforgettable and praiseworthy. I remember how regularly I used to bother her and she used to be bright and breezy all the time. I am thankful to my ex-colleague at SIMS, **Mrs. Preeti Gupta**, who, by providing her togetherness from the very beginning has really obliged me.

I am grateful to my **In Laws** for the support and encouragement they have provided me to complete my study in spite that I could not spare time for them. I don’t have words to thank my adorable parents, without their kind and cordial blessings my dream could not be a came true story. Thanking you **Aai, Baba** for your unseen but most effective and productive best wishes. I am indebted to your ever supportive encouraging and empowering shower of words.

I appreciate my younger brother **Ajinkya Kulkarni** for his commendable endeavour. Despite of his own crucial time of studies, he never denied to assist me any ways. Whenever I needed him, he always before me with a boosting smile. Also, I thank my sister **Rupali Kulkarni** whose distant but worthy adhesion played a role of a booster this entire period of research work.

And, a big thanks to my dear husband **Mr. Vishwas Sharma**, whose sprightliness, exceptional patience, emotional support and upholding alone all societal relations empowered my efforts. His inspirational assertions worked as a catalyst to elicit my allegiance and potential kept me in positivism. However, there were few moments in past three years which turned me to panic but his optimistic words used to keep relaxing me.

I am delighted to thank all my friends and well wishers whose name I am missing to mention here and who directly or indirectly walked along with me throughout. Their best wishes were the most effective tool during this period. Thanking you all...

Shilpa Sharma