INTRODUCTION TO FULL STACK DEVELOPMENT

FIRST EDITION

Dr. A. REVATHI
Assistant Professor
Department of Computer Science
Rathinam College of Arts and Science, Coimbatore.

Mrs. D. VIDHYA
Assistant Professor
Department of Computer Science and Engineering
Hindusthan Institute of Technology, Coimbatore.

Dr. B. AZHAGUSUNDARI
Associate Professor
Department of Computer Science
NGM College, Pollachi.

Mr. M. SATHISH KUMAR
Assistant Professor
Department of Computer Science and Engineering
Nehru Institute of Engineering and Technology, Coimbatore.

Mrs. R. LATHA
Assistant Professor
Department of Computer Science
Rathinam College of Arts and Science, Coimbatore.

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Phone : +91 96550 88824. Email: priyamprinting@gmail.com

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AUTHOR PROFILE

Dr. A. REVATHI, is currently working as an Assistant Professor in the School of Computer Science at Rathinam College of Arts and Science. She completed her Ph.D. in Computer Applications at Annamalai University. Her areas of interest include Networking, Artificial Intelligence and the Internet of Things. Dr. Revathi has published over eight research papers in international journals and more than five papers in international conferences.

Mrs. D. VIDHYA, currently working as Assistant Professor in Department of Computer Science and Engineering at Hindusthan Institute of Technology, Coimbatore. She holds Master of Engineering in Computer Science and Engineering from Anna University of Technology, Coimbatore and Bachelor of Engineering in Electrical and Electronics Engineering from Bharathiyar University. She is having more than 12 years of experience in academic. She got a Ellite in NBA Accreditation and Teaching and learning in Engineering (NATE)In NPTEL course. She published paper in IEEE International Conference. She is a life member of ISTE. Her research interest includes Machine Learning, Deep Learning.

Dr. B. AZHAGUSUNDARI has completed her Doctorate in Department of Computer Science with a specialization of Fuzzy Information system from Mother Teresa Women's University, Kodaikannal. At present she is working as an Associate Professor at NGM College Pollachi. She has gained more than a decade of experience in teaching and her area of interest includes Data Sciences, Machine Learning, and Artificial Intelligence. She He has Published Many Papers in both National, International Journals, Book Chapters Patent and Conference Proceedings indexed in scopus.

Mr. M. SATHISH KUMAR has completed his Master Degree with a specialization of Computer Science and Engineering from SVS College of Engineering, Coimbatore and Bachelor Degree in Computer Science and Engineering with Distinction from P.A College of Engineering and Technology, Pollachi. At present he is working as an Assistant Professor at Nehru Institute of Engineering and Technology, Coimbatore. With 10+ Years of Professional Experience and areas of interest includes Networking, Cyber Security, and Artificial Intelligence. He has Published Many Papers in both National, International Journals, Book Chapters and Conference Proceedings indexed in scopus.

AUTHOR PROFILE

Mrs. R. LATHA is an Assistant Professor in the Department of Computer Science at Rathinam College of Arts and Science, Coimbatore, with 10 years of teaching experience. Her areas of expertise include Cloud Computing and IoT. She has contributed extensively to academia through the publication of research papers in various international journals and conference proceedings, as well as authoring books. She has actively participated in numerous conferences, workshops, symposiums, FDPs, and seminars, enhancing her expertise and academic involvement.

PREFACE

The rapid evolution of the technology landscape has led to an increasing demand for developers who possess a wide-ranging skill set. In today's digital world, the ability to create seamless, responsive, and functional web applications requires expertise across multiple layers of development—front-end, back-end, and everything in between. This is where the concept of full stack development comes into play.

Introduction to Full Stack Development is designed to provide readers with a solid foundation in both the theoretical principles and practical techniques that form the core of full stack development. Whether you are a beginner aspiring to enter the world of software development, an experienced developer looking to expand your skills, or a tech enthusiast eager to understand how modern web applications are built, this book offers a comprehensive guide to mastering the full stack development process.

In this book, we explore the fundamental concepts and technologies involved in full stack development, including front-end frameworks, back-end server technologies, databases, version control, and cloud computing. From HTML, CSS, and JavaScript that power the front-end, to server-side languages such as Node.js, Python, or Java, this book equips you with the knowledge and practical skills needed to build dynamic, scalable, and user-friendly applications. Beyond the technical details, we emphasize the importance of understanding the full development lifecycle—from planning and design to testing and deployment—ensuring that readers are prepared to tackle real-world development challenges. The book also introduces best practices in code quality, collaboration tools, and project management, ensuring that aspiring developers are not only proficient in coding but also equipped to work effectively within a team. With a hands-on approach to learning, this book includes practical examples, exercises, and projects that encourage you to apply your skills in building complete applications from start to finish. These projects reflect the current industry trends and provide insight into building applications that meet the needs of modern users.

Full stack development is an exciting and highly sought-after skill in today's technology-driven world. By mastering both front-end and back-end technologies, you will be able to create end-to-end solutions, giving you the versatility to work on diverse projects and thrive in a variety of development environments. We hope this book serves as a valuable resource to guide you on your journey to becoming a proficient full stack developer, helping you unlock new career opportunities and contributing to the evolving world of web development.

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