

As Per NEP Syllabus

M.Sc. : COMPUTER SCIENCE : SEMESTER-II

MOBILE APP DEVELOPMENT TECHNOLOGIES

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A Book Of

Mobile App Development Technologies

For M.Sc. (Computer Science) : Semester - II

[Course Code : CS-552-MJ : Credits-04]

CBCS Pattern

CBCS As Per New Syllabus (Under NEP), Effective from 2023-2024

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MOBILE APP DEVELOPMENT TECHNOLOGIES

ISBN 978-93-6109-085-1

First Edition : January 2024

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Published By :
NIRALI PRAKASHAN

Abhyudaya Pragati, 1312, Shivaji Nagar,
Off J.M. Road, Pune - 411005
Tel - (020) 25512336/37/39
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Polyplate

Printed By :
YOGIRAJ PRINTERS AND BINDERS

Survey No. 10/1A, Ghule Industrial Estate
Nanded Gaon Road
Nanded, Pune - 411041

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Preface ...

“Mobile App Development Technologies ” is a subject of Computer Science which is designed to become expertise in designing Mobile Applications in most efficient ways by considering various mobile operating systems. By learning this subject student can easily develop Android, iOS based application. Also student can develop platform independent applications using PhoneGap. It is our pleasure to present book on this subject for **M.Sc. (Computer Science): Semester -2 as per NEP syllabus at 2023 pattern.**

This book covers topics such as Introduction to Mobile Computing, Android Fundamentals, Android UI Design, Android Thread and Notification, Advanced Android Programming, PhoneGap Programming.

To make subject very interesting, there are alternative mobile operating system applications developed using Java, cordova and so on. In this subject according to updated syllabus Android operating system applications developed. Android is open source, and in a trend now. Each chapter contains simple language for explanation and short code or examples and also snapshots are given to know how it looks on mobile. This book covers main two types of languages Java and basic UI(HTML, JS, CSS in Cordova) .

At the end of each chapter Multiple Choice Questions, Short answer questions and Long answer questions are provided for practice. Also some executed programs are given with output which helps student to learn concepts very well.

I, Monica Dhotre, am so thankful from the bottom of my heart to **Parampujya Shree Sadguru Narayan Maharaj (Anna Maharaj) of Shree Kshetra Narayanpur**, Tal-Purandar, District-Pune for blessing me with more than I deserve.

I dedicate my work to my mother Mrs. Meera Deshmane, My husband Sagar Dhotre, my son Smaran, my whole family members, my friends, colleagues who are constant source of inspiration. Also special thanks to my sister and co-author for this book who has done all work collaboratively.

I express my sincere thanks to our former principal Dr. Ganesh Raut sir, Dr. Gulab Gugale sir (Chemistry dept H.V.Desai College Pune) for their support in writing book.

I Soniya Dhotre dedicate my work to my mother Mrs. Meera Deshmane, Husband Mr. Ravindra Dhotre, My brother Mr. Dheeraj Deshmane, my whole family members, my friends, colleagues who are constant source of inspiration. Also very special thanks to my dear sister Mrs. Monica Dhotre author of this book for her great support in writing book.

ABOUT THE AUTHORS



Asst. Prof. Monica Rajesh Deshmane (Monica Sagar Dhotre) has earned her MCS from Annasaheb Magar Mahavidyalaya under Savitribai Phule Pune University in 2011. She qualified for the UGC NET in June 2012 on her first attempt. She has worked in numerous reputable colleges under universities for a total of 12 years. She is currently working at the Haribhai V. Desai College of Arts, Commerce, and Science. She has undergraduate and post graduate-level academic experience. She has previously taught computer subjects to students majoring in MSc.(CS), BSc.(CS), MCA(Science), MCA(Commerce), BBA (CA), BCA (Science), and M.Sc.. (Computer Application). She has organized many activities, events, and

competitions at college level. Also she has published research paper on Fuzzy Logic Theory. She has participated many state, national and international level workshops, seminars, FDP, webinars, conferences etc. Currently, she is pursuing Ph.D. under KBCNMU.

Her Books-

M.Sc.(Computer Science) : Sem.-I

- Design and Analysis of an Algorithms (2019, 2023 pattern as per NEP)
- Paradigm of Programming Languages (2019 pattern)
- Principles of Programming Languages (2023 pattern as per NEP)
- Artificial Intelligence (2023 pattern as per NEP)

M.Sc. (Computer Science) : Sem. - II

- Mobile App Development Technologies (2019, 2023 pattern as per NEP)

M.Sc. (Computer Science) Sem. - III

- Web Frameworks (2019 pattern)

M.Sc. (Computer Applications) : Sem. - III

- Design and Analysis of Algorithms (2019 pattern)
- Mobile Application Development Using Android (2019 pattern)

MCA (Management) : Sem.-III

- Mobile Application Development (2019 pattern)



Asst. Prof. Soniya Ravindra Dhotre (Soniya Rajesh Deshmane) has completed her ME (Computer) Engineering from JSPM's College of Engineering, Hadapsar under Savitribai Phule Pune University at 2015. She has total 7.6 years of teaching experience in various reputed colleges. Currently she is working in JSPM's College of Engineering, Hadapsar in Information Technology Department. She has academic experience at under-graduation and post-graduation level. Till now, she has taught computer subjects to Computer Engineering, E&TC

Engineering, IT Engineering and Diploma students. She has organized many activities and events, competitions at college level. She has published research paper on Wireless Sensor Networks, Image Processing and Machine Learning. She has participated in many state, national and international level workshops, seminars, FDPs, webinars, conferences etc.

Books published:

M.Sc. Computer Science Sem- 2

- Mobile App Development Technologies (2019, 2023 pattern as per NEP)


M. Sc. Computer Applications Sem- 3


- Mobile Application Development Using Android (2019 pattern)

M. C.A. Management :

- Mobile Application Development (2019 Pattern)

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