B.S. Abdur Rahman

Crescent
Institute of Science & Technology
Deemed to be University u/s 3 of the UGC Act, 1956
GST Road, Vandalur, Chennai 600 048

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

16.11.2018

REPORT ON

IBM TRAINING COURSE – ESSENTIALS OF OBJECT ORIENTED PROGRAMMING USING JAVA

The Department of Computer Science and Engineering is collaborated with IBM Career Education to offer industry designed courses for B.Tech Computer Science and Engineering students as a specialization in Big data analytics, AI & IOT. Till third semester, basic programming concepts is designed by IBM and handled by the IBM trainer in the institution campus.

Resource Person   **: Mr.Srikrishna, IBM Trainer, Hyderabad**

Audited by Institution Faculty: Ms.A.Radhika , Assistant Professor /CSE

IBM CE - CSE Joint programme coordinator : Ms.Subhashini,Assistant Professor/CSE

Students Batch   : 2017 – 2021

Semester   : 03

Class   : B.Tech CSE 'A'

No. of Students   : 58

Duration   : 45 hours

The report discusses about the following aspects with respect to the course

1. **Course Syllabus**

2. **Schedule of classes**

3. **Communications with IBM CE**

4. **Students list**

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1. Course Syllabus

CSC 2121	ESSENTIALS OF OBJECT ORIENTED PROGRAMMING USING JAVA	L	T	P	C
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OBJECTIVES :

- To introduce the concept of web applications and platforms.
- To understand the concept of Classes and Methods.
- To explore the inheritance and interface concepts.
- To impart the importance of exception handling in a code.
- To learn the roles of swings and applets in user interface.
- To introduce the markup language to design web pages along with Servlet concepts.

MODULE I   INTRODUCTION   07

History of Java – Java Architecture -- JVM – JRE – JVM –Java Development Environment -- Data types –Variables – Arrays – Operators – Control Statements – Looping Statements –Type Conversion -- Simple Java Program -- Object Oriented Programming Concepts – Objects – Classes – Methods.

MODULE II   CONSTRUCTORS, OVERLOADING, INHERITANCE   08

Constructors – Constructors – Default Constructor – Parameterized Constructors – Constructor with Default Argument –– Overloading – Overriding – Inheritance – Single Inheritance – Hybrid Inheritance – Multilevel Inheritance – Hierarchical Inheritance – Access Specifier.

MODULE III   PACKAGES, INTERFACE & ABSTRACTION   09

Packages – Defining – Creating – Importing and Accessing Packages –Keywords – This – Super – Final –Interface – Implementing Interface – Class vs Interface – Abstraction – Implementing Abstraction -- Abstraction vs Interface.

MODULE IV   STRINGS, EXCEPTION HANDLING   07

Introduction – Design Process – Design Concepts – Design Model – Software Architecture –Component Based Development: Introduction – User Interface Design – Pattern Based Design – WebApp Design.

MODULE V   APPLETS, SWINGS, THREAD   07

Multi-threading -- Lifecycle – Creating threads –Thread Priorities – Synchronizing Threads – Multitasking – Multithreading vs Multitasking – Thread Priorities – Thread Groups –Events – Event Listeners –Event Handling – Mouse Event – Keyboard Event – Applets—Life Cycle –Introduction to Swings – Buttons – Labels –Scrollbar –Radio Button -- Layout Manager Types – Border – Grid –Flow --Card and Grid Bag.

MODULE VI   HTML, JSP, SERVLET, SQL, JDBC CONNECTIVITY   07

Introduction to HTML – Tags – Forms – Post – Get –Introduction to JSP –Scripting Elements –Custom Tags – Directive Elements – Model View Controller in JSP -- Introduction to SQL – DDL – DML Commands --Introduction to Servlet – Life Cycle – Request – Response –Filters -- JDBC Connectivity – Validations -- Sample Web Application Project.

L – 45;   TOTAL HOURS – 45

REFERENCES :

1. J.Nino and F.A. Hosch , "An Introduction to programming and OO design using Java", John Wiley & Sons, 3rd Edition, ISBN: 8126523530, 2009.
2. Timothy Budd, "An Introduction to Object Oriented Programming", Pearson Education, 3rd Edition, ISBN: ISBN-10: 0201760312, 2008.
3. Y. Daniel Liang, "Introduction to Java Programming", Pearson Education, 10th Edition, ISBN-10: 0133761312, 2017.
4. Richard A. Johnson, "An introduction to Java Programming and Object Oriented Application Development, - Thomson Course Technology, 3rd Edition, ISBN: 9780619217464, 2007.
5. Herbet Schildt, "Java Complete Reference", McGraw Hill Professional, 9th Edition, ISBN: 978-0071808552, 2014.
6. Balaguruswamy, "Programming with Java – A Primer", Tata McGraw Hill, 3rd Edition, ISBN: 9789351343219, 2014.

*IBM Course ware provided

OUTCOMES :

Students who complete this course will be able to

- Write a flexible code that would run on any platform.
- Incorporate the various inheritance methodologies according to the problem.
- Include the various packages based on the need of an application.
- Handle run time errors caused by exceptions.
- Apply the applet and swing concepts in web page design.
- Integrate the web with enterprise backend systems using servlet concepts.

2. Schedule of classes

TIME TABLE

	1	2		3	4		5	6	7
	9-9.50	9.50-10.40		11-11.50	11.50-12.40		1.40-2.30	2.30-3.20	3.20-4.10
MON	SEM3	SEM3							
TUE								SEM3	
WED	SEM3	SEM3							
THUR								SEM3	
FRI									

		START DATE	END DATE
FIRST SLOT		2-Aug 2018	17-Aug 2018
SECOND SLOT		17-Sep 2018	5-Oct 2018

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3. Communication with IBM CE

Tentative calendar - Sem3 & Sem 1 course delivery @ Crescent

Subashini S <subashini@crescent.education>   Jul 26, 2018, 11:11 PM
to Sheetal, Naganandini, Pramod, hodcse ▾

Dear Madam,

A tentative calendar is prepared with the help of availability of resources,comfortableness of students ,timetable followed for the regular classes,etc..To overcome the difficulties faced by the students and trainers,this schedule has been made.The feedback and their request was given by the Sem-3 students as follows

S.No	Difficulties faced by students	Request by the students
1	Different trainers – 2 slots – for the same course – I & II semesters	Same trainer on various slots for the course. *Special request : Mr.Rohit Mittal should come back as trainer.* Alternative – similar trainer
2	Trainers were rushed up to complete the topics	Trainers should handle the course based on the understanding of the delivery with the students.
3	No trainer is available in the college campus to clear the doubts	Should not be long gap between the slots to lag the continuity of the course.

On considering the above points,a tentative schedule with timings and preferable slots can be checked in the attached document.

S.no	Slot	Start date	End date	No. of days
1	I	2-Aug (if possible)/ 6- Aug (preferred atleast)	17-Aug / 21-Aug(may be extended)	16
2	II	17-Sep	5-Oct	19

The dates and hours can be extended based on the students convenience and the trainer availability.

These two slots for Sem3 -java & Sem - C courses. In between these two slots ,may plan for Industry sessions.

Let me know how many days have been planned the availability of trainer in the college campus.Also ,how long it takes for Industry sessions. Based on this,I could make the changes in the schedule if required.

Note: In Excel sheet, Schedule should not be made during the assessment week.Yellow color - assessment. Long gaps of holidays and assessments leads break for the course.If not completed ,may plan for slot 3 or the date may be extended as feasible.

Kindly let me know the schedule and any changes required.

Thank You

With Regards,
Subashini.S
Assistant Professor /CSE
B.S Abdur Rahman Crescent Institute of Science and Technology,
Vandalur,Chennai

Figure 1: Confirmation of schedule mail to IBM

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4. Students list

S.No	RRN	NAME
1.	170071601001	ABDUR RASHEED .N
2.	170071601002	ABINANDA VRISHNAA K
3.	170071601003	ABIRAMI E.E
4.	170071601004	ABU TALHA .I
5.	170071601005	ADITHYA RAJ R
6.	170071601006	AHAMED IRSHAD S.H.
7.	170071601007	ASHIK MOHAMMED B
8.	170071601008	ASHWINKUMAR S
9.	170071601009	BALAGANAPATHY .V.S
10.	170071601010	CIBHI. B
11.	170071601011	ELAVEINEE A
12.	170071601012	EMMANUEL K GREGORY
13.	170071601013	FATEMA-TUS-SUGRA Z LOKAT
14.	170071601014	HANIF FEROZ.S
15.	170071601015	HARIHARAN .A
16.	170071601016	HASHIM IRFAN ALI M
17.	170071601017	JAFFAR BAIG M
18.	170071601019	KISHAN RAJ G
19.	170071601020	MALAV JAYDEVBHAI PATEL
20.	170071601021	MEKALA GIREESH NADH
21.	170071601022	MOHAMED ARSHAD S S
22.	170071601023	MOHAMED NASHEEN. K
23.	170071601024	MOHAMED SHAIK SULTAN M S
24.	170071601025	POOJA R
25.	170071601026	PRASANNA RAVI R
26.	170071601027	PRAVEEN KUMAR.S
27.	170071601028	PRAVEEN RAJ. J
28.	170071601029	PREETHI K
29.	170071601030	PURNIMA R S
30.	170071601031	RAEES AHMED P M
31.	170071601032	RAGHUL S
32.	170071601033	ROOBESH B
33.	170071601034	SAMUEL V

34.	170071601035	SAMYUKTHA P
35.	170071601036	SANTHOSH KUMAR T.
36.	170071601037	SATHYA RUPAN.T
37.	170071601039	SHAIK YASEEN BASHA
38.	170071601040	SHARON RENETA V
39.	170071601041	SHIVAMANI.A
40.	170071601042	SIDDHARTHA ROY
41.	170071601043	SURUTHIKASRI.M.K
42.	170071601044	SYED AZIMUDEEN G
43.	170071601046	SYED MULTHAZIM S J
44.	170071601047	VIGNESH P.
45.	170071601048	VIGNESH PRABHU KODENCHERI
46.	170071601049	VISHAAL S
47.	170071601059	ANTONY PERCY RAJ. T
48.	170071601070	MANASHRI RAJA
49.	170071601090	NAHID FATIMA .S
50.	170071601092	NARGEES NILOFER
51.	170071601094	NIVETHA.G
52.	170071601102	ATCHAYA.A
53.	170071601104	DIWAN MYDEEN .S
54.	170071601112	HALITH RADUVAN.M
55.	170071601135	SUDHA.M
56.	170071601148	JAYASURYA.J
57.	170071601149	MOHAMMED ASHRAF .F
58.	170071601150	SYED AWAIS AHAMED

SUBHASHINI.S

(IBM CE – CSE Joint Programme coordinator)