GMR Institute of Technology An Autonomous Institute Affiliated to JNTUK, Kakinada



COURSE HANDOUT B.Tech-VI Semester

Course Title : OBJECT ORIENTED ANALYSIS AND DESIGN LAB Date: 22-11-2017

Course Code : IT 5221 Course Structure : 0-0-3

Course coordinator: Mrs.K.Srividya

Instructor(s) : Mrs.N.Lakshmi devi, Mr.P.Nagaraju, P.Srihari

Course Objectives: This lab course is intended to:

• Students should be familiar with the practical issues of the different OOAD concepts explained in the course.

• To inculcate object oriented software analysis design.

• To learn to carry out the analysis and design of a system in an object oriented way.

• They will do the analysis and design for any project/ case study.

Course Outcomes: After undergoing the course students will be able to:

- Analyze and design an application in an object oriented style tools like Rational Rose.
- Gather the requirements and represent in use case diagrams
- Identify the classes, relationships, and interfaces and draw the class diagrams
- Draw the object diagrams, sequence, collaboration, activity, component and deployment diagrams
- Forward and Reverse engineer using UML.

List of Experiments

The student should take up the case study of Unified Library application which is mentioned in the theory, and Model it in different views i.e. Use case view, logical view, component view, Deployment view, Database design, forward and Reverse Engineering, and Generation of documentation of the Project.

2.Student has to take up another case study of his/her own interest and do the same whatever mentioned in first problem. Some of the ideas regarding case studies are given in reference books which were mentioned in theory syllabus can be referred for some idea.

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Lab S.NO	Learning objectives To analyze and design and development of Library management system. Case study on ATM System	Topics to be Covered
1	Learn to work with UML software	Overview of UML and rational rose software
2	Familiar with UML diagrams view of the system	UML Diagrams at Glance
3	Learn the use case view	Design of usecase and activity diagrams of LMS
4	Analyze the logical view of the interaction between the component of the system	Design Interaction Diagrams (Sequence and collaboration diagrams)
5	Analyze Logical view by observing the data flow in the system between the classes	Class and state chart diagrams of LMS
6	Know the Component and deployment view of the system	Design of Component and Deployment Diagrams
7	To familiar with forward and reverse engineering	Implement Forward and Reverse Engineering Of LMS
8	Learn the use case view	Design of usecase and activity Diagram of ATM
9	Learn the the view of interactions	Design Interaction Diagrams of ATM(Sequence and collaboration diagrams)
10	Analyze Logical view by observing the data flow in the system between the classes	Class and state chart diagrams of ATM
11	Know the Component and deployment view of the system	Design of Component and Deployment Diagrams of ATM
12	To familiar with forward and reverse engineering	Implement Forward and Reverse Engineering Of ATM

Component	Particular	Marks	Date & Time
Lab regularity	No of Experiments completed and recorded	10+5	As per Timetable
			02-04-2018
Internal Examination	180 minutes	25	To 07-04-2018
External Examination	180 minutes	50	09-04-2018 To 14-04-2018
	Total	75	

N.Lakshmi Devi,P.Naga Raju, P.Srihari **Signature of the Instructor**

Mrs.K.Srividya

 ${\bf Signature\ of\ the\ course-Coordinator}$