



University of Engineering & Management, Kolkata
Department of Computer Science & Engineering

Paper Name: Software Engineering Laboratory
Paper Code: PCCCSE692

Assignment list

Week 1:

Design a simple PHP page (including html, CSS and JS) and build the connectivity with database & host the same using XAMPP or WAMP Server.

Week 2:

Understanding of different modules for different systems (e.g. library management system) and develop the display, insert, update and deletion operation with the help of PHP and MySQL.

Week 3:

- (i) Design Software Requirement Specification for Library Management System
- (ii) Capture the requirement of Library Management System using:
 - 1. Decision Tree
 - 2. Decision Table

Week 4:

- 1. Plot the curve of the Development Time vs. Size of the software project in COCOMO model.
- 2. Given required activity timings, plot the activity network and then calculate the timing parameters to show the critical path available for the project completion.

Week 5:

Draw the Structure Chart and Use Case diagram for the following systems

- (i) Library Management System.
- (ii) Inventory Management System.
- (iii) Shopping Management System.
- (iv) Courier / Package Delivery Management System.

Week 6:

Draw the Class Diagram and Object Diagram for the following systems

- (i) Movie Ticket Booking System.
- (ii) Hospital Management System.
- (iii) Loan Management System.
- (iv) University Examination Management System.

Week 7:

Draw the Activity Diagram, Sequence Diagram and respective collaboration diagram for the following systems

- (i) Railway Reservation System.
- (ii) Medical Store Management System.
- (iii) Student Admission System.

Week 8:

1. Draw the State Chart Diagram for an order Online Shopping System for fulfilling an order.
2. Design the Data Flow Diagram(DFD) for a Super Market Prize Automation System. (PAS) and indicate the respective levels of the designed DFDs up to level 2.

Week 9:

1. Design the test cases, test suite and Control Flow Graph for the following snippet:

```
Int gcd( int x, int y)
```

- ```
1. { while(x!=y)
2. { if(x>y)
3. x=x-y;
4. else y=y-x; 5. }
6. return(x);
}
```

2. From the Control Flow Graph find Mc Cabe's Cyclomatic Complexity for the above code snippet.

**Week 10-12:**

1. Design a complete project using Servlet-JSP with JDBC Connectivity and host the project.
2. Prepare the complete SRS document for the same project.

**\*\* All the UML diagrams must be drawn using Star UML software.**

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